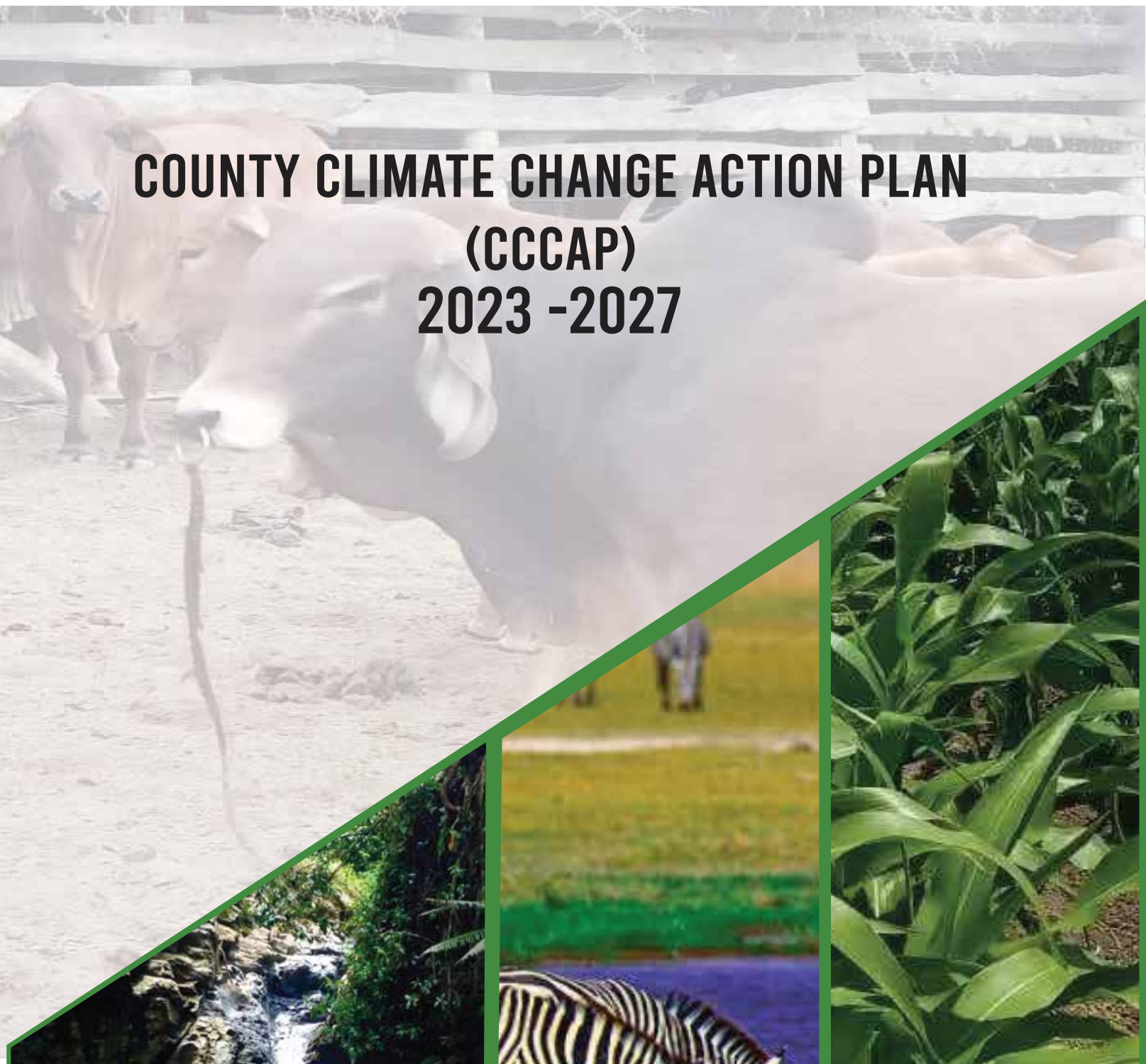




**COUNTY GOVERNMENT OF KAJIADO**  
 DEPARTMENT OF ENVIRONMENT, NATURAL RESOURCES  
 AND CLIMATE CHANGE



**COUNTY CLIMATE CHANGE ACTION PLAN  
 (CCCAP)  
 2023 -2027**



## **FORWARD**

I am pleased to present the Kajiado County Climate Change Action Plan (CCAP), the culmination of our collective efforts in undertaking the Participatory Climate Risk Assessment (PCRA) process. As the Governor of Kajiado County, I am proud to witness the outcomes of this comprehensive assessment, which has provided us with invaluable insights into the climate risks facing our county and guided us in developing a robust plan for action. The PCRA process has been a truly collaborative endeavor, bringing together experts, stakeholders, communities, and government agencies to collectively analyze and understand the climate risks and vulnerabilities in our county. Through extensive consultations, community engagement, and the sharing of knowledge, we have gained a deeper understanding of the challenges we face and the opportunities for building resilience and sustainability.

The Kajiado County Climate Change Action Plan represents our commitment to addressing these climate risks head-on. It serves as a roadmap that will guide us in adapting to the impacts of climate change, reducing our greenhouse gas emissions, and creating a more sustainable and resilient future for our county. This plan is rooted in the aspirations and needs of our communities. It incorporates their valuable input and ensures that their voices are heard and considered. By actively involving our citizens in the PCRA process, we have empowered them to be partners in shaping the future of Kajiado County and responding effectively to the challenges posed by climate change.

The CCAP encompasses a wide range of strategies and actions that align with our vision of a climate-resilient and sustainable county. It aims to enhance our adaptive capacity, promote sustainable land and water management practices, foster clean and renewable energy solutions, and strengthen our disaster preparedness and response mechanisms. Through these measures, we seek to safeguard our environment, protect our communities, and promote sustainable socio-economic development.

I extend my sincere gratitude to all the individuals and organizations who have contributed their time, expertise, and resources to the PCRA process and the development of the Kajiado County Climate Change Action Plan. Your commitment to this endeavor is commendable, and I applaud your dedication to the well-being of our county and its residents.

I urge all stakeholders, including government agencies, civil society organizations, private sector entities, and community members, to actively participate in the implementation of the CCCAP. It is through our collective actions and collaboration that we can truly make a difference in building a climate-resilient Kajiado County.

I am confident that the Kajiado County Climate Change Action Plan will serve as a catalyst for positive change. By embracing this plan and working together, we can create a future that is sustainable, prosperous, and resilient for generations to come.

**HE Joseph Ole Lenku,**



**Governor Kajiado County**

## ACKNOWLEDGEMENT

I would like to acknowledge and commend the Kajiado County Climate Change Action Plan, which aligns seamlessly with the visionary goals set forth by the governor. This plan encompasses the governor's vision of implementing modulated pastoralism, fostering a climate-proofed environment, and creating livable towns within Kajiado County.

First and foremost, I appreciate the emphasis placed on modulated pastoralism as an integral component of the action plan. Recognizing the importance of sustainable land use practices and the preservation of traditional livelihoods, this approach ensures a harmonious coexistence between the needs of the local communities and the conservation of natural resources. By promoting responsible grazing management, supporting the establishment of grazing reserves, and implementing strategies that safeguard rangelands, the action plan demonstrates a forward-thinking approach to sustainable pastoralism.

Furthermore, I would like to acknowledge the commitment of the Kajiado County Climate Change Action Plan to creating a climate-proofed environment. The plan's recognition of the threats posed by climate change and its proactive measures to mitigate and adapt to these challenges is commendable. By prioritizing climate resilience, investing in climate-smart agriculture, promoting afforestation and reforestation initiatives, and enhancing water resource management, the action plan aims to build a resilient county capable of withstanding climate impacts and protecting the well-being of its residents. The focus on creating livable towns within Kajiado County is also a noteworthy aspect of the action plan. By integrating sustainable urban development strategies, promoting green infrastructure, enhancing waste management systems, and improving access to essential services, the plan aims to create vibrant and inclusive towns that prioritize the well-being and quality of life of their inhabitants. This holistic approach to urban planning contributes to the overall vision of a thriving and sustainable county.

In conclusion, I extend my sincere appreciation to the Kajiado County Climate Change Action Plan for embracing the governor's visionary goals of modulated pastoralism, a climate-proofed environment, and livable towns. This comprehensive plan demonstrates a commitment to sustainable development, resilience, and the well-being of both present and future generations. I applaud the collective efforts of all involved in shaping this action plan and encourage its successful implementation for the benefit of Kajiado County and its residents.

**Dr. Leina Mpoke**

A handwritten signature in black ink, consisting of a stylized initial 'L' followed by a large, sweeping loop that ends in a horizontal line.

**CECM- Water Services, Environment, Natural Resources and Climate Change.**

## **EXECUTIVE SUMMARY**

The Kajiado County Climate Change Action Plan (CCCAP) is a comprehensive and strategic roadmap that outlines the county's vision, objectives, and actions to address the challenges and opportunities posed by climate change. Developed through a participatory process, the CCCAP is designed to guide the county government, stakeholders, and communities in adapting to climate change, reducing greenhouse gas emissions, and promoting sustainable development.

The CCAP begins by providing a thorough analysis of the climate risks and vulnerabilities specific to Kajiado County. It identifies key sectors, communities, and ecosystems that are most at risk from climate change impacts. Through this assessment, the plan lays the foundation for targeted and effective interventions that address the county's unique challenges. The plan emphasizes the importance of enhancing adaptive capacity to build resilience in the face of climate change. It outlines strategies and measures to promote sustainable land management practices, protect and restore ecosystems, and improve water resource management. By integrating climate-smart practices into agriculture, livestock management, and rangeland conservation, the CCCAP aims to enhance the resilience of communities and safeguard their livelihoods.

Mitigation strategies form a crucial component of the CCCAP, aiming to reduce greenhouse gas emissions and contribute to global efforts to mitigate climate change. The plan promotes the transition to clean and renewable energy sources, energy efficiency, and sustainable transportation options. It also encourages sustainable waste management practices and advocates for the reduction of emissions from industrial processes. Mainstreaming climate change considerations into development planning is a key objective of the CCCAP. The plan emphasizes the integration of climate resilience and sustainability principles into sectoral policies, land-use planning, and infrastructure development. By incorporating climate change adaptation and mitigation measures into county planning processes, Kajiado aims to ensure that climate change is a cross-cutting priority in all aspects of governance and decision-making.

The CCCAP recognizes the importance of stakeholder engagement and collaboration. It encourages partnerships between the county government, communities, civil society organizations, and the private sector to foster knowledge sharing, capacity building, and participatory decision-making. The plan emphasizes the role of community participation in shaping climate change responses and acknowledges the value of indigenous knowledge in

building resilience. To ensure effective implementation and progress tracking, the CCCAP establishes a robust monitoring, evaluation, and review mechanism. It sets indicators, data collection systems, and evaluation frameworks to measure the outcomes and impacts of climate actions. Regular reviews will ensure that the plan remains adaptive and responsive to evolving climate risks and emerging opportunities.

The Kajiado County Climate Change Action Plan sets forth a bold vision for a sustainable, resilient, and low-carbon future. By implementing the strategies and actions outlined in this plan, Kajiado County aims to protect its communities, preserve its ecosystems, and contribute to global efforts to address climate change. The successful execution of the CCCAP relies on the collective efforts and collaboration of all stakeholders, and it is through their commitment that Kajiado County can navigate the challenges of climate change and achieve a prosperous and sustainable future.

## Table of Contents

.....	<b>1</b>
Definition of Terms .....	<b>10</b>
List of Acronyms.....	<b>11</b>
CHAPTER ONE. INTRODUCTION.....	<b>12</b>
1.1 Background and Context.....	12
1.2 Climatic Conditions .....	14
1.3 Ecological Conditions .....	14
1.3 PCRA Process that led to development of CCAP .....	15
1.4. Climatic Change Impact.....	18
1.5 Goal of Kajiado climate change county action plan 2023-2027.....	21
1.6 Guiding principles .....	22
1.7 Climate change actions undertaken by county .....	23
CHAPTER TWO: LEGISLATIVE FRAMEWORKS .....	<b>25</b>
2.1 International legislation.....	25
2.2 National legislation .....	25
2.3 County legislations .....	27
CHAPTER THREE: PARTICIPATORY CLIMATE ACTION PLANNING .....	<b>28</b>
3.1. Participatory Climate Action Plan Process.....	28
3.2 PRIORITY CLIMATE CHANGE ACTIONS FOR 2022-2027 .....	31
3.2.1 KAJIADO WEST SUB COUNTY .....	31
3.2.2 KAJIADO CENTRAL SUB COUNTY .....	34
3.2.3 KAJIADO EAST SUB COUNTY .....	37
3.2.4. KAJIADO SOUTH SUB COUNTY.....	40
3.2.5. KAJIADO NORTH.....	43
3.3. Kajiado County Climate Change Action Plan 2023-2027 .....	46
3.4. ENABLING ISSUES IDENTIFIED BY KAJIADO COUNTY. ....	51
CHAPTER FOUR: DELIVERING THE CLIMATE ACTION PLAN. ....	<b>55</b>
4.1 Enabling Policy and Regulatory Framework.....	55
4.2 Institutional arrangement and Capacity and Knowledge Management.....	56
4.3. Technology and Innovation .....	58
4.4 Climate Finance Resource Mobilization .....	60
CHAPTER FIVE: MONITORING AND EVALUATION .....	<b>63</b>
5.1. Introduction .....	63
5.2 Reporting.....	64



4.3	Enabling Action .....	64
CHAPTER SIX IMPLEMENTATION AND COORDINATION MECHANISMS .....		66
6.1	Directorate of climate change.....	66
6.2	Structures in place.....	66
6.3	Kajiado climate change working group .....	66
6.4	Kajiado county climate change council .....	67
6.5	Establishment of the ward climate change council .....	69
6.5.	Implementation matrix .....	70

## Definition of Terms

Climate Change	Change in the climate system that is caused by significant changes in the concentration of greenhouse gases due to human activities, and which is in addition to the natural Climate Change that has been observed during a considerable period.
Adaptation	Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
Adaptive capacity	Ability of systems, institutions, humans, and other organisms to adjust to potential damage, take advantage of opportunities, or respond to consequences.
Global warming	Observed or projected gradual increase in global surface temperature. It is one of the consequences of Climate Change.
Greenhouse gases	Gases that absorb and emit radiant energy within the thermal infrared range. The main GHGs measured in a GHG inventory are, carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), per-fluorocarbons (PFCs), hydro-fluorocarbons (HFCs), sulphur hexafluoride (SF <sub>6</sub> ) and nitrogen tri-fluoride (NF <sub>3</sub> ).
Mitigation	Human interventions to prevent or slow down atmospheric GHG concentrations by limiting current or future emissions, and/or enhancing potential sinks for greenhouse gases.
Resilience	Capacity of social, economic and environmental systems to cope with a hazardous event, trend, or disturbance.
Vulnerability	Propensity or predisposition to be adversely affected. It encompasses sensitivity or susceptibility to harm, and lack of capacity to cope and adapt.

## List of Acronyms

ADSW	Anglican Development Services Western
CCAP	Climate Change Action Plan
CCF	County Climate Change Fund
CFA	Community Forest Association
CIDP	County Integrated Development Plan
CSO	Civil Society Organizations
ECDE	Early Childhood Development Education
GIS	Geographical Information Systems
KCB	Kenya Commercial Bank
KFS	Kenya Forest Service
KIHBS	Kenya Integrated Household Budget Survey
DNMP	Division of National Malaria Programme
KMD	Kenya Meteorological Department
KWS	Kenya Wildlife Services
MD	Managing Director
NEMA	National Environment Management Authority
PCRA	Participatory Climate Risk Assessment
PWD	Persons with Disability
TVET	Technical and Vocational Training Colleges
WG	Working Group
WRA	Water Resources Authority

## CHAPTER ONE. INTRODUCTION

### 1.1 Background and Context

Kajiado County is a vibrant and diverse region located in [insert geographical location]. Known for its unique cultural heritage, breathtaking landscapes, and rich biodiversity, Kajiado County offers a captivating blend of traditional and modern influences. With its strategic location, the county serves as a gateway to various national parks, conservation areas, and tourist attractions, making it a significant contributor to Kenya's tourism industry.

Kajiado County is home to a resilient and dynamic population comprising diverse ethnic groups, including the Maasai, Kikuyu, Kamba, and Luo communities, among others. The county's cultural tapestry is woven with a deep appreciation for traditional practices, such as pastoralism, alongside modern developments and urbanization. This fusion creates a vibrant and harmonious social fabric that celebrates diversity and fosters a strong sense of community. The county's economy is primarily driven by agriculture, livestock rearing, trade, and tourism. Agriculture plays a vital role in sustaining livelihoods, with both rain-fed and irrigated farming practices supporting the production of crops such as maize, beans, and vegetables. Livestock rearing, particularly by the Maasai community, is a significant economic activity, with cattle, sheep, and goats being the mainstay of pastoralist livelihoods.

Kajiado County's natural resources are an invaluable asset, with its diverse ecosystems supporting a wide range of flora and fauna. The county is home to wildlife species such as elephants, giraffes, zebras, and numerous bird species, attracting nature enthusiasts and conservationists from around the world. However, like many regions across the globe, Kajiado County faces the challenges posed by climate change. The impacts of climate change, including droughts, erratic rainfall patterns, land degradation, and rising temperatures, have profound implications for the county's socio-economic development, natural resources, and the well-being of its communities. Recognizing the urgency of addressing climate change and the need to build resilience, the County Government of Kajiado has taken proactive steps to develop comprehensive strategies and action plans. The Kajiado County Climate Change Action Plan (CCAP) serves as a roadmap to address climate risks, enhance adaptive capacity, promote sustainable development, and ensure a prosperous and resilient future for the county. With its commitment to sustainable development, community engagement, and innovative approaches, Kajiado County stands poised to navigate the

challenges of a rapidly changing world while preserving its cultural heritage, protecting its natural treasures, and improving the quality of life for its residents. Kajiado County Climate Change Action Plan represents a transformative and forward-thinking strategy designed to address the challenges posed by climate change and promote sustainable development in our county. This comprehensive plan is the culmination of extensive research, stakeholder engagement, and participatory processes, aimed at understanding the unique climate risks faced by Kajiado County and formulating effective strategies to mitigate and adapt to these risks. Climate change presents significant threats to our county, impacting various sectors, including agriculture, water resources, ecosystems, infrastructure, and human settlements. The increasing frequency and intensity of droughts, erratic rainfall patterns, land degradation, and heatwaves directly affect the well-being and livelihoods of our communities. It is imperative that we take proactive measures to build resilience and ensure a sustainable future for our county. The County Climate Change Action Plan is rooted in the principles of sustainability, inclusivity, and community-driven approaches. It acknowledges the importance of local knowledge, expertise, and engagement in developing effective strategies. Through the participatory processes, community members, governmental agencies, non-governmental organizations, and technical experts have come together to collectively address climate risks and envision a resilient future for Kajiado County.

The Action Plan encompasses a wide range of goals, objectives, strategies, and actions that aim to tackle the complex challenges of climate change. It seeks to build climate resilience, mitigate greenhouse gas emissions, promote sustainable water management, and strengthen institutional capacity and governance. By addressing these key areas, the plan provides a comprehensive framework for guiding our county towards a sustainable and climate-resilient future.

This plan recognizes the interdependencies among different sectors and the need for integrated approaches. It highlights the importance of sustainable agricultural practices, efficient water management, renewable energy adoption, ecosystem conservation, and climate-proofed infrastructure. These measures aim to not only mitigate climate change impacts but also contribute to the overall well-being and prosperity of our communities. The successful implementation of the Kajiado County Climate Change Action Plan relies on collaboration, cooperation, and partnerships among all stakeholders. It requires the active participation and commitment of government agencies, community leaders, civil society organizations, private sector entities, and development

partners. By working together, we can leverage our collective strengths, knowledge, and resources to effectively address climate risks and create a sustainable future for our county.

As we embark on this transformative journey, the Kajiado County Climate Change Action Plan provides a roadmap for action, guiding us towards a future where our communities are resilient, our ecosystems are protected, and our economy thrives in a sustainable manner. It is a testament to our commitment to safeguarding the well-being of current and future generations, recognizing that climate change is not a distant challenge but an urgent priority that requires immediate attention.

## **1.2 Climatic Conditions**

Kajiado County experiences long rains between March and May every year with short rains falling between October and December. The rainfall patterns varies from place to place depending on the converging –ascending air flow, air temperature, moisture bearing winds and mountain ranges. As at the year 2022, the average highest rainfall recorded was 389.9mm around Ngong hills and the slopes of Mt. Kilimanjaro. The lowest was 2.3mm recorded around Amboseli basin and the western parts of the county. This shows a negative trend in the average yearly rainfall received owing to the effects of climate change.

Kajiado County has a cool dry climate with mean annual temperatures. Over the last seven (7) years, the mean annual temperature was 38.2°C with the years 2021,2020,2019 and 2017 receiving 29.2°C, 28.6°C, 28.4°C and 28.4°C consecutively. This shows an increasing trend of temperatures recorded over the past years. The highest temperatures of about 34<sup>0</sup>C have previously been recorded around Lake Magadi while the lowest of 10<sup>0</sup>C in Loitokitok on the eastern slopes of Mt. Kilimanjaro.

## **1.3 Ecological Conditions**

The county's soils include well drained, shallow to moderately deep, brown to dark brown, firm and slightly smeary, strongly calcareous, stony to gravelly clay loam; in many places saline and/or sodic soils and with inclusions of lava fields. (*National Accelerated Agricultural Inputs Access Program Report, 2014*).

The three geological regions in the county are Quaternary volcanic, Pleistocene and basement rock soils. They are mainly found in Rift Valley especially the Quaternary volcanic. In the Amboseli

lake drainage system are the Pleistocene soils and the basement system rocks are found mainly along the river valleys and some parts of the plains. Basement rocks mostly comprise of various gneisses, cists, quartzite and crystalline limestone. Most rivers in the eastern part of the Rift Valley drain toward the east while those within the floor of the valley are restricted to the small depressions and lakes that have no major outlets. It is within this region that Lake Magadi is found.

The amount of surface water varies from area to area. Vegetation type in the county is determined by altitude, soil type and rainfall. In many instances it has been modified by animal and human activity. Grazing, browsing, charcoal burning, extraction of fuel wood and cultivation are the major causes of vegetation reduction. In the lower parts of Mt. Kilimanjaro, indigenous trees have been cleared to create room for agriculture. Vegetation is scarce in low altitude areas and increases with altitude. Ground cover throughout the county varies seasonally with rainfall and grazing intensity. Canopy cover ranges from less than 1 percentage on heavily settled areas to about 30 percentage on steep hills. (*County Climate Risk Profile Report*)

### **1.3 PCRA Process that led to development of CCAP**

The PCRA exercise employed a systematic and participatory methodology. In addition, as described in the PCRA guide, Kajiado County PCRA was implemented through 8 main steps that is; Formation of the technical working group; training of the technical working group; mapping of stakeholders; preparation for community engagements; conducting participatory risk assessment at ward level; preparation of ward level risk assessment reports; data analysis and preparation for county level multi-stakeholder workshop; multi-stakeholder climate change risk assessment workshop and final report writing as detailed in the section below:

- a) Creation of the Technical Working Group:** The technical working group was constituted in November 2022 through appointment by the Chief Officer in Charge of Climate Change. Considerations for appointment to the technical working group comprised of; representation of directors and technical officers in the climate change relevant sectors such as environment, water, agriculture, livestock, lands, public health, citizen participation, ICT & finance, gender and social services. Civil society organizations & Ministries, Departments and Agencies (MDA); committed to create time for the exercise, knowledge, skills and experience relevant to the task among others. In total, the technical working group had 15 members. This technical working group was supported by a wider

consultative group which provided advice through the whole process. The Technical working group had a broader membership which included the Ward Climate Change Planning Committees, County Emergency Management Unit, Economic Planning, County Climate Change Steering Committee and County Climate Change Planning Committee, national government agencies, Members of the Civil Society organization, academia and media and communication unit.

- b) Stakeholders engagement and analysis;** The stakeholders were identified during the PCRA stakeholders mapping and analysis process. The technical working group were divided into 5 groups according to the Sub-counties. Their roles were to Identify the stakeholders in order of their interest and roles in climate change which include climate action and building resilience, those involved in climate action and responses to climate impacts, those with knowledge and expertise relevant to climate adaptation and building resilience and community representatives and those impacted by climate change
- c) Preparation for ward level engagements:** The Climate Change Unit sensitized the citizens on radio of the upcoming climate change risk assessment exercise and mobilized participants with the support of Subcounty Administrator, Ward Administrators, Village Administrators, Chiefs and Citizen Participation officers. Given the big geographic area of the county, the Technical WG adopted a process where the wards were engaged in clusters of 2-3 wards per venue per day considering proximity to each other as well as common climate change challenges. The identified community participants were in addition mobilized through their respective ward climate change planning committees. Programs, engagement tools and other materials relevant to the community engagements prepared included; Day program, community guiding questions and the note takers feedback forms.
- d) Engagement of Communities at Ward Level on PCRA;** An average of 50 participants were mobilized from the wards in line with the mobilization criteria stated above. The participants mobilized consisted of different livelihoods groups such as Pastoralists, farmers and traders, marginalized groups, youth and PWDs in addition to the members of the Ward Climate Change Planning Committees. Other participants included ward agriculture officers, Sub-county, ward administrators, foresters, citizens participation officer and other technical officers with ward level mandate. In the first session of the



community meetings, all the 2-3 wards clustered were jointly taken through an introduction session. The introduction session covered the significance of the PCRA process, overview of climate change trends followed by explanation of the process and its application in the county planning and development cycle. The participants were then segregated into their respective villages clustered according to their similarities whereby they chose among the group a chair and secretary to take notes. The process took one cluster per day and it took the Technical WG 20 working days to cover all the 25 wards. The community engagement meetings started by sketching a climate hazard and community assets map. Thereafter, the climate change risk assessment tools were administered to determine the main hazards, prioritize them, identify vulnerabilities, local response actions and propose adaptation strategies. The output of this process was that the community's identified key climate change risks and hazards and priority response measures.

- e) **Data Analysis and Preparations for County Level Participatory Climate Change Risk Assessment:** The data from the wards was summarized into reports and risk maps digitized by the GIS unit capturing the main hazards and prioritized response actions per ward and at the sub county level. This was followed by one-day meeting of technical committee to develop the workshop program and share responsibilities among team members as well as agree on the workshop execution strategy. The County Director Meteorology prepared an overview presentation on historical, current and projected climate scenarios for the county while the director economic planning prepared presentation on the socio-economic status of the county. The Directors GIS and Climate Change presented the prevalent climate hazards and their geographic distribution in the county. A concept for the workshop was developed which detailed the background of the exercise, objectives, program and list of invitees.
- f) **County Level Validation Workshop on Participatory Climate Change Risk Assessment;** The 2-day workshop was held from 22<sup>nd</sup> to 23<sup>rd</sup> May 2023 with objective to validate the findings from the wards and have the multi-stakeholders incorporate their views into the Kajiado County PCRA process. The workshop had 50 participants who included the PCRA Task Team, government officers from line departments such as water, agriculture, environment, climate change and public health; representatives of Civil

Society Organisations implementing climate change related projects; academia; community representatives among others.

During the workshop, the participants were introduced to the general overview of the county followed by the current and projected climate change scenarios. This presentation was followed by identification of climate change hazards, Societal, social/political challenges, current and historical climate hazards and trends which was compared to the hazards that had been prioritized by the wards and followed by updating the hazard maps from the wards. The participants prioritized the hazards, response measures as well as drivers of climate change vulnerability. The wards were clustered into sub-counties due to similarity of livelihoods pursued as well as for cross-fertilisation of ideas.

- g) Participatory Climate Risk Assessment Report;** The team then developed a participatory climate risk assessment report through consolidating the data gathered throughout the risk assessment process. The technical expert contracted by the national treasury provided the necessary backstopping and review of the report until final draft was developed leading to development of County Climate Change Action Plan ( CCAP).

#### **1.4. Climatic Change Impact**

Kajiado County, located in [insert geographical location], is vulnerable to a range of climate change impacts that pose significant challenges to its environment, communities, and socio-economic development. These impacts are a result of global climate change trends combined with the county's unique geographical and ecological characteristics. Here is a comprehensive overview of climate change impacts specific to Kajiado County:

**a) Droughts and Water Scarcity:**

Kajiado County experiences a semi-arid climate with limited and erratic rainfall patterns. Climate change exacerbates the frequency and severity of droughts in the region, leading to water scarcity and significant challenges for agriculture, livestock rearing, and human livelihoods. Prolonged droughts have a direct impact on the availability of water for domestic use, irrigation, and livestock watering, leading to decreased crop yields, livestock losses, and food insecurity.

**b) Erratic Rainfall Patterns:**

Climate change influences the distribution and intensity of rainfall in Kajiado County. Erratic rainfall patterns, including irregular and unpredictable seasonal rains, pose challenges for agricultural planning and productivity. Farmers rely on rain-fed agriculture, and the changing rainfall patterns can result in crop failures, reduced yields, and limited food production. These impacts have implications for food security, nutrition, and the overall well-being of the population.

**c) Land Degradation and Desertification:**

Kajiado County faces significant challenges related to land degradation and desertification, which are exacerbated by climate change. Soil erosion, deforestation, overgrazing, and unsustainable land management practices contribute to the degradation of land resources. Climate change further intensifies these processes, leading to reduced soil fertility, loss of vegetation cover, and increased vulnerability to droughts. Land degradation and desertification threaten agricultural productivity, grazing resources for livestock, and the resilience of ecosystems.

**d) Heatwaves and Temperature Extremes:**

Rising temperatures associated with climate change result in increased occurrences of heatwaves in Kajiado County. High temperatures have adverse effects on human health, particularly for vulnerable populations, including the elderly and young children. Heatwaves also impact livestock, leading to reduced productivity, increased stress, and potential livestock losses. Additionally, temperature extremes affect water availability, exacerbate water scarcity issues, and impact the growth and survival of crops and vegetation.

**e) Ecosystem Disruption:**

Climate change affects the biodiversity and ecosystems in Kajiado County. Changes in temperature and rainfall patterns can lead to shifts in vegetation cover and species distribution. Native plant and animal species may face challenges in adapting to these changes, leading to potential loss of biodiversity. Ecosystem disruptions have cascading effects on ecosystem services, including pollination, nutrient cycling, and water regulation, impacting the overall resilience and functioning of the county's ecosystems.

**f) Human Health Risks:**

Climate change poses risks to human health in Kajiado County. Increased temperatures and heatwaves can result in heat-related illnesses, such as heatstroke and dehydration. Changes in rainfall patterns and temperature can also influence the transmission of vector-borne diseases like malaria and dengue fever. Water scarcity and poor sanitation resulting from climate change impacts further increase the risk of waterborne diseases. These health impacts require appropriate adaptation measures, public health interventions, and access to healthcare services.

**g) Socio-economic Implications:**

The climate change impacts in Kajiado County have socio-economic implications for its communities. The majority of the population relies on agriculture and livestock rearing for their livelihoods, making them highly susceptible to climate variability and change. Crop failures, livestock losses, and reduced income opportunities due to climate change can result in increased poverty, food insecurity, and migration. Furthermore, the costs associated with climate change adaptation, disaster response, and infrastructure repairs place a burden on the county's economy.

Addressing the climate change impacts in Kajiado County requires a multi-faceted approach that includes adaptation strategies, sustainable land management practices, water resource management, and community resilience-building initiatives. It is crucial to integrate climate change considerations into development planning, promote sustainable agricultural practices, enhance water storage and conservation mechanisms, and strengthen early warning systems to mitigate the adverse effects of climate change and build a more sustainable and resilient future for the county

### **1.5 Goal of Kajiado climate change county action plan 2023-2027**

The Kajiado County Climate Change Action Plan (CCCAP), 2023-2027, is a 5 -year plan that seeks to enhance the capacity of the county to undertake adaptation, mitigation and resilience actions, and promote low carbon development pathways for sustainability in Kajiado County.

It aims to align the county with the Kenya's development goals as stipulated in the vision 2030 by providing mechanisms to achieve low carbon development in a manner that prioritizes adaptation and mitigation in the different sectors. In addition, Kajiado County Climate Change Action Plan (CCAP) seeks to provide a strategic framework and roadmap for addressing the challenges and opportunities presented by climate change in the county. The CCCAP aims to guide the county government, stakeholders, and communities in understanding, adapting to, and mitigating the impacts of climate change. It seeks to promote sustainable development, enhance resilience, and ensure the well-being of the county's population and ecosystems in the face of a changing climate.

#### **Objectives of the Kajiado County Climate Change Action Plan (CCAP):**

1. ***Assess Climate Risks and Vulnerabilities:*** The CCCAP aims to conduct a comprehensive assessment of climate risks and vulnerabilities specific to Kajiado County. It seeks to identify the key sectors, communities, and ecosystems most at risk from the impacts of climate change. This objective involves analyzing historical data, engaging with local communities, and consulting scientific research to understand the specific climate risks faced by the county.
2. ***Enhance Adaptive Capacity:*** The CCCAP aims to enhance the adaptive capacity of Kajiado County by developing strategies and interventions to build resilience and reduce vulnerability. This objective involves identifying priority areas for adaptation, promoting sustainable land and water management practices, strengthening disaster preparedness and response mechanisms, and integrating climate considerations into development planning processes.
3. ***Promote Mitigation Strategies:*** The CCCAP seeks to promote mitigation strategies to reduce greenhouse gas emissions and contribute to global efforts to mitigate climate change. This objective involves identifying and implementing measures to reduce emissions from key sectors, such as energy, transportation, agriculture, and waste

management. It includes promoting renewable energy sources, energy efficiency, sustainable agricultural practices, and low-carbon transportation options.

4. ***Mainstream Climate Change into Development Planning:*** The CCCAP aims to mainstream climate change considerations into the county's development planning processes. This objective involves integrating climate resilience and sustainability principles into sectoral policies, land-use planning, infrastructure development, and socio-economic programs. It seeks to ensure that climate change is a cross-cutting priority in all aspects of county governance and decision-making.
5. ***Foster Stakeholder Engagement and Collaboration:*** The CCCAP recognizes the importance of stakeholder engagement and collaboration in addressing climate change. It aims to foster partnerships and collaboration among the county government, communities, civil society organizations, private sector entities, and other relevant stakeholders. This objective involves promoting awareness, knowledge sharing, capacity building, and participatory decision-making processes to ensure the effective implementation of climate actions.
6. ***Monitor, Evaluate, and Review Progress:*** The CCCAP seeks to establish a robust monitoring, evaluation, and review mechanism to track progress, assess the effectiveness of implemented measures, and adapt strategies as needed. This objective involves setting up monitoring indicators, data collection systems, and evaluation frameworks to measure the outcomes and impacts of climate actions. Regular review processes ensure the plan remains responsive to evolving climate risks and emerging opportunities

## **1.6 Guiding principles**

- a. Clean and healthy environment
- b. Sustainable development
- c. Partnership
- d. Cooperative governance
- e. Equity and social inclusion
- f. Accountability and transparency
- g. Cost effectiveness:

- h. The polluter pays principle (PPP)

### **1.7 Climate change actions undertaken by county**

The department of Environment, Natural Resources and climate change has undertaken several activities in response to climate change effects. The actions are for the mitigation and adaptation for climate change effects;

**Afforestation-**The department has planted more than 5, 000,000 tree seedlings in all over county in collaboration with National Government and private entities for the past 3 years. This has enabled to improve forest cover from 3.4% to 7.6% .The department has also established two tree nurseries, at the headquarter office and in Nkaimurunya in Kajiado North sub-county for the growing of tree seedlings for distribution to institutions and individuals in the community.

**Dumpsites** produce methane which is a greenhouse gas, contributing to global warming. The county has decommissioned the Ngong Dumpsite to a sanitary landfill and established an Integrated Resource Recovery Centre. The county has also established a Taka ni mali hub in kitengela dumpsite for recycling of waste. There has been a series of public participation forums and sensitizing the public on the projects for efficiency.

**Climate smart agricultural actions-** The department of Agriculture, Livestock and fisheries have several programmes geared toward climate change mitigation and adaptation. Kenya Climate-smart agriculture project (KCSAP) that applies integrated approach to managing landscapes, cropland, livestock, forests and fisheries that addresses the interlinked challenges of food security and accelerating climate change. Integrated and climate smart innovations for pastoralists economies and landscapes (ICSIAPL) project- The project aims to enhance the livelihoods of agro-pastoralist communities through improved forage production and livestock farming while building on the commercialization of climate-smart innovations and sustainable landscape management. Agriculture contributes 26% to Kenya’s Gross Domestic Product (GDP).

The department is mandated with Controlled pollution from our quarries. The project proponents are required to adhere to all quarrying requirements including, dust control measures, safety measures, noise control, and rehabilitation measures. The department also controls sand harvesting in our rivers to avoid overharvesting of sand that may lead to river degradation.

The department of water is also encouraging communities to harvest rain water. The department has a rain water harvesting Act, 2021 that requires landlords and homeowners to install water harvesting infrastructures. The county government in partnership with stakeholders is also helping communities to sink shallow wells, water dams and boreholes to collect water that will be used in the event of severe drought. The department is also doing solarization of community and institution boreholes and providing technical support to individuals that want to change from electricity or generators to solar panels for their boreholes.



## CHAPTER TWO: LEGISLATIVE FRAMEWORKS

Climate change is a global problem that demands a global solution, and Kenya is an active participant in international efforts. This Action plan will be advised by the following legislation;

### **2.1 International legislation**

The international response to climate change is now recorded under the Paris Agreement, which aims to strengthen the global response to the threat of climate change by keeping global temperature rise this century well below 2° C above pre-industrial levels. Kenya ratified the United Nations Framework Convention on Climate (UNFCCC) **in 1994**, and since then the country has been working towards the achievement of the objectives of the Convention.

The Paris Agreement entered into force for Kenya on 27th January 2017, and as set out in Article 2(6) of the Constitution (2010), the Paris Agreement now forms part of the law of Kenya. Kenya's Nationally Determined Contribution sets out the country's actions to contribute to achieving the global goal set out in the Paris Agreement and includes mitigation and adaptation contributions.

### **2.2 National legislation**

At the domestic level, a robust regulatory framework comprising laws, policies, plans, and institutions is being progressively established at the national and county levels to address climate change. The foundation of the institutional and legal framework for climate change action is the Constitution of Kenya (2010). Article 10 sets out national values and principles of governance, such as sustainable development, devolution of government, and public participation, that are mandatory when making or implementing any law or public policy decisions, including climate change. Article 42 provides for the right to a clean and healthy environment for every Kenyan, which includes the right to have the environment protected for the benefit of present and future generations.

Kenya has other legal frameworks for climate change actions including;

- a) Environmental Management and Coordination Act, 1999 (2015 revised)-An Act of

Parliament to provide for the establishment of an appropriate legal and institutional framework for the management of the environment

- b) National Climate Change Act (2016)-This Act is applied for the development, management, implementation, and regulation of mechanisms to enhance climate change resilience and low carbon development for the sustainable development of Kenya.
- c) National Climate Change Response Strategy (2010)-for providing a framework for a comprehensive and strategic approach to climate change adaptation, mitigation, technology and finance
- d) National Climate Change Action Plan NCCAP (2018-2022)-for the mainstreaming of climate risk reduction into national, sector and local development plans and programs, the assessments of vulnerability and facilitation of capacity building, the formulation of a framework strategy and program, in consultation with the global effort to manage climate change.
- e) National Adaptation Plan NAP (2015-2030)-The aim of NAP is to consolidate the country's vision on adaptation supported by macro-level adaptation actions that relate with the economic sectors and county level vulnerabilities to enhance long term resilience and adaptive capacity.
- f) Kenya Climate Smart Agriculture Strategy (2017- 2026)-The broad objective of the Kenya CSA Strategy (KCSAS) is to adapt to climate change, build resilience of agricultural systems while minimizing emissions for enhanced food and nutritional security and improved livelihoods.
- g) Climate Risk Management Framework (2017)-outlines how the government intends to harmonize its climate change and disaster risk policies.
- h) National Climate Change Framework Policy (2018)-The goal of this framework Policy is to enhance adaptive capacity and resilience to climate change, and promote low carbon development for the sustainable development of Kenya.
- i) Public health Act, 1986 (2012 revised)
- j) Kenya Forest conservation and management Act, 2016-This Act makes provision for the conservation and management of public, community and private forests and areas of forest land that require special protection, defines the rights in forests and prescribes rules for

the use of forest land.

- k) Kenya meteorological Bill
- l) Kenya Water Act, 2016
- m) Irrigation Act 2019

### **2.3 County legislations**

At County level robust regulatory framework comprising laws, policies, plans, and institutions is being progressively established and adopted to address climate change. At the local level, Kajiado County has enacted the following legislation;

- a) Kajiado county integrated development plan 2023 – 2027 This plan sets out the programmes and projects, financing framework and the timelines that will guide the implementation the county priorities in the five years.
- b) County climate change Act 2020-establishes a climate change fund that allocates a portion of the development budgets to funds that support local climate change actions.
- c) Environment Protection Act, 2020-provides for the protection and conservation of the Environment and other connected purposes.
- d) Kajiado Rain Water harvesting Act, 2021-The Act provides for compulsory harvesting of rainwater in every residential, commercial and institutional building within Kajiado County, to conserve and ensure the availability of water while also ensuring the recharge of groundwater.
- e) Climate-smart agriculture
- f) Kajiado county finance Act, 2020

## CHAPTER THREE: PARTICIPATORY CLIMATE ACTION PLANNING

Participatory climate action planning was largely informed by the participatory climate risk assessment as well as other available material relevant for climate action planning at county, regional and national context, including any existing Climate Change Action Plan (CCCAP), drafts of the National Climate Change Action Plan and the CIDP. The technical working group leading the participatory climate risk assessment was also involved in the participatory climate action planning. Key stakeholders at all levels got an opportunity to actively input in the plan, discuss it and validate it and ensure the plan is developed through a process that adheres to the locally led climate action principles.

### **3.1. Participatory Climate Action Plan Process**

#### **a) Review of Key Documents**

The technical working group held a 2 days meeting to review all key documents available. These documents include CIDP, National Climate Change Action plan 2018-2022, county spatial plan, Climate risk report etc. All key national and county plans were reviewed to ensure alignment between those and the county climate change action plan to be developed.

#### **b) Collecting Public Input Objective:**

The stakeholders identified during the PCRA stakeholders mapping and analysis process were given an opportunity to review and respond to the findings of the county climate risk analysis (and other relevant documents). The participatory sub-county workshops brought together different interest groups including community representatives, ward climate change planning committee representatives, civil society organizations, faith-based organizations, gender interest groups, government agencies, research organizations, youth and other key stakeholders. The participants were then allowed to suggest actions that would address the risks identified in the

PCRA report. The Climate Change Unit sensitized the citizens on radio of the upcoming climate change action plan public data collection exercise and mobilized participants with the support of Subcounty Administrator, Ward Administrators, Village Administrators, Chiefs and Citizen Participation officers. Given the big geographic area of the county and limitation of time, the Technical WG adopted a process where the wards were engaged in a sub county per day considering that most wards in each sub county has similar climate and challenges. Programs,

engagement tools and other materials relevant to the community engagements prepared included; Day program, community guiding questions and the note takers feedback forms. An average of 50 participants was mobilized from the wards in line with the mobilization criteria stated above. The participants mobilized consisted of different livelihoods groups such as Pastoralists, farmers and traders, marginalized groups, youth and PWDs in addition to the members of the Ward Climate Change Planning Committees. Other participants included ward agriculture officers, Sub-county, ward administrators, foresters, citizens participation officer and other technical officers with ward level mandate. In the first session of the community meetings, the wards were clustered differently and jointly taken through the PCRA report findings. Thereafter, the climate change action plan tools were administered to determine the priority local response actions and propose adaptation strategies that would address the risks identified. During these consultations, consideration were given to Ward climate investment priorities as well as trans-boundary climate risk issues cutting across different Wards as identified in their risk and resilience assessment reports or community-level consultations. The process took one sub county per day and it took the Technical WG 5 working days to cover the entire 5 sub county. The output of this exercise is the climate change action plan with detailed climate adaptation investments in line with the strategic adaptation priorities identified in the climate risk assessment report

### **c). Drafting the County Climate Change Action Plan**

The technical working group convened a 3 days' workshop to synthesize all the information collection during public participation and secondary data review. The climate change action plan addresses the risks identified In the climate risk assessment report by ensuring integration with the actions proposed by the stakeholders and community with priority given to the climate resilience needs and priorities of women, youth, ethnic minorities, people living with disabilities and other marginalised and vulnerable groups. The CCCAP includes key parameters such as timing, actors responsible for various actions, sub-actions, budget, and key performance indicators. The output of this exercise is the First draft of the County Climate Change Action Plan.

### **d). Validation Workshop for the CCCAP**

The technical working group convened a 2 days' workshop at the county level involving representatives of all key stakeholders and multi-sectoral experts to validate the action plans. The stakeholders were given an opportunity to address gaps in the plan and refining proposed actions

based on realistic situational assessment by diverse stakeholders. The stakeholders in the workshop were keen on inclusion especially of vulnerable groups and marginalized needs. The first day entailed general review of the PCRA report and the action plan to ensure all key inputs from consulted stakeholders were captured. On the second day, the technical working group officers divided the stakeholders into five groups according to their sub county for focus group discussions where participants were able to carry out in-depth review of the risks and actions drafted in the plan. The output of the exercise was the feedback that was captured by the technical working group for improvement of the first draft.

**e). Public feedback**

The department circulated the draft plan to key stakeholders including CSOs, community representatives and ward council members for them to make comments through memoranda or into the document. This gave an opportunity to stakeholders that did not sufficient time or opportunity to provide inputs in the document, making comments, suggestions, and recommendations on transboundary climate risk management actions. The technical working also used local radios e.g. bus radio, Maiyian FM, to seek broader feedback through radio feedback/discussion sessions.

**f). Development of final draft of CCCAP**

The CCCAP technical working group convened a one-day meeting to finalize drafting of the document. During this process the team developed an implementation framework or matrix and summary budget projections for delivering the plan. The output was the finalized CCCAP ready for review and approval by the county government executive committee.

**g) . Presentation of the CCCAP to the County Executive Committee**

The technical WG organized a one-day meeting on with the county executive committee to present the document to the team in detail, answer questions arising and seek approval. The TWG and committee members discussed the document and adopted it.

**h). Presentation of the CCCAP to the County Assembly**

The technical working group shared the draft CCAP with the relevant committee of the county assembly for their review before scheduling a one-day meeting to discuss the plan with the committee. During the meeting, the TWG presented the draft CCCAP to the county assembly

committee for discussion and adoption. The output was the finalized and adopted CCCAP

### 3.2 PRIORITY CLIMATE CHANGE ACTIONS FOR 2022-2027

The community members in all sub counties explained in detail the actions that will address the climate risks identified in the climate risk assessment report.

#### 3.2.1 KAJIADO WEST SUB COUNTY

Kajiado West Sub County is one of the sub counties found in Kajiado County. It covers an area of 7,862km<sup>2</sup> and has a population of over 182,849 according to 2019 census. The Sub County is divided into five administrative wards namely Mosiro, Iloodokilani, Ewuaso, keekonyokie and Magadi ward. Livestock rearing and crop farming are the main activities practiced in the Sub County. The Sub - county is also known for minerals such as building materials in Kenya Marble Quarry (KMQ), sand, Lake Magadi which is the source of trona and animals licks. Despite of all this, the sun county was one of the most affected sub counties due to its remoteness, vastness and over dependency of livestock farming. The development of the action plan will help the sub county to be adopted to current and future effects of climate change.

WARD	ACTION IN ORDER PRIORITIES	REMARKS
Mosiro	A mega water pan	The water pan will serve as a multipurpose dam for domestic use, livestock and irrigation. The water pan will solve issues of water accessibility thus reduce distance covered by women and children as well as waiting time. i.e oldepe village
	Irrigation scheme in oldorko	The irrigation scheme will build resilience, towards drought and solve issues of youth employment
	Climate proofed Bridge in Embarbal	This will enable Emparbal community to transport goods and services especially

		food during raining seasons. This will build resilience in terms of food security.
	Hay production (reseeding, harvesting, bailing and storage)	This will help in controlling soil erosion as well as fodder production.
<b>Ilodokilani</b>	A mega dam	This will solve the water shortage in the ward and save time for women who go long distances looking for water.
	Solarization of boreholes	this will drastically reduce production cost with expanded pumping hours to 8hrs a day and increase revenue in the long run.
	Provision of drought tolerant animal breeds and crops	These breeds will improve the local breed and make them drought resistant.
	Hay production (reseeding, harvesting, bailing and storage)	This will help in controlling soil erosion as well as fodder production
	Bead work value chain	Alternative source of livelihood for women
<b>Magadi</b>	Pipeline installation and extension of fresh water from Sampu to Oldonyonyokie and Magadi locations.	This will help solve the water scarcity and reduce walking distance to water points
	A mega dam along olekeju ngiro	The water will be used for domestic and livestock and irrigation by women and youth groups
	Restocking of drought tolerant animal breeds	Most families were affected the past drought hence the need to restock to enable them to adapt to future effects of climate change
	Mixed farming (milk goats, poultry, bee keeping, pigs, aquaculture and crops)	The community will be able to spread out risk that will lower the impact of future droughts



	Solar mini grid	There is huge deposit of solar energy that can be tapped.
	Improved cooking solutions	Women groups and youth groups to be trained on making clean cooking jikos for livelihood and environmental conservation
	Grassland and Rangeland management	This will regenerate the depleted indigenous grasses and eradication of invasive species like prosopis Juliflora
	Climate proof bridge	To connect Kamukurru and Loosinyai due to the floods.
<b>Keekonyokie</b>	3 Water pans (Inkiito, Kisaju and Oloontona).	The water pans will help in irrigation and supply of water to the neighboring communities which will help in food security
	Mega dam at Olooseos	
	Hay production (reseeding, harvesting, bailing and storage)	This will help in controlling soil erosion as well as fodder production
	Borehole drilling and Solarization at Emboliei, Olooyiankalani, oloompaluani, Kipeto, Inchorroi	Alternative source of portable water at a lower coast
	Value addition of dairy products	This will solve the issue of milk storage by increasing its shell life.
	Beed work value chain	Alternative source of livelihood for women
	Value addition of Kiserian Abature waste management	Waste management from the Kiserian Abature to bio gas production.
	Rangeland management at Esonorua	This will regenerate the depleted indigenous grasses

	Pipeline installation and extension from Oloropil to enkereyian and from oltinga to enkereyian as well as iloodoariak springs	This will help solve the water scarcity in the and reduce walking distance to water points
<b>Ewuaso</b>	Water pans at najile water grounds, enkorika public land, Olodungoro, namunyak enkusero keru and kimmelok public land	The water pans will help in irrigation and supply of water to the neighboring communities which will help in food security
	Borehole drilling and equipping in Olngarua, Engusero sampu	Alternative water supply
	Mixed farming- apiculture, aquaculture and poultry farming	To spread risks to reduce the impacts of hazards
	Beed work value addition.	Alternative source of livelihood for women to reduce over dependency on, milk selling.
	Provision of green cooking energy to eradicate charcoal burning	To conserve the environment as well improve women health and diversification of alternative livelihoods

**3.2.2 KAJIADO CENTRAL SUB COUNTY**

Kajiado Central has a population of 161,862 people according to the 2019 census.it covers an area of 4,240 kilometers per square areas. The Sub County is further divided into 5 County administrative wards namely Ildamat, Dalalekutuk,, Purko, Matapato North and Matapato South wards. Kajiado Central is predominantly semi-arid. The main economic activity is livestock and crop farming. Crop farming is mainly in the Southern and Western parts of the County along rivers and springs.

WARD	ACTION IN ORDER OF PRIORITIES	REMARKS
<b>Ildamat ward</b>	Drilling and solarization of boreholes	Reduce the coast of water production
	Value addition of livestock and livestock products	Alternative source of livelihood for women
	Protection of water springs i.e Oloyiangalani, nenkobei, olchorro and emugorr	Constant water supply and restoration of drying springs
	Building waste recycling plant	To achieve sustainable waste management and employment opportunities
	Rangeland management	Uprooting of invasive species such as Oltiameleki to improve room for grass regeneration
	Tree Nurseries to women groups and PWD	Source of income generation and environmental conservation
<b>Purko Ward</b>	Construction of water pans at Oloorera and Enkaroni.	Reduce water shortage and distance to water points
	Distilling of Maalen dam	
	Mixed farming	To spread risks to reduce the impacts of hazards
	Rangeland management	This will regenerate the depleted indigenous grasses
	Diversification of alternative livelihood. Ie. Beadworks, kitchen gardening, table banking	To eradicate poverty and build resilience for the community to adapt to climate change

	Establishment of tree nurseries	Source of income generation and environmental conservation
<b>Dalalekutuk</b>	Provision of high breed/improved livestock breed	Quality not Quantity of livestock
	Rain water harvesting	Construction of water pans and earth pans
	Grass land and rangeland management/ Conservation of public land	Eradication of invasive species to pave way for grass germination and
	Establishment of tree nurseries	Source of income generation and environmental conservation
	Construction of sand dams along major rivers Olkejuado river and Olkeria river	This is to conserve sand and water
<b>Matapato North</b>	Establishment of tree nurseries	Source of income generation and environmental conservation
	Solarization of Boreholes	this will drastically reduce production cost with expanded pumping hours to 8hrs a day and increase revenue in the long run.
	Hay production (reseeding, harvesting, bailing and storage)	This will help in controlling soil erosion as well as fodder production
	Alternative sources of energy	
<b>Matapato South</b>	Establishment of tree nurseries	Source of income generation and environmental conservation

Solarization of boreholes	this will drastically reduce production cost with expanded pumping hours to 8hrs a day and increase revenue in the long run.
Hay production (reseeding, harvesting, bailing and storage)	This will help in controlling soil erosion as well as fodder production
Drilling of Boreholes at strategic community location	Increase water accessibility for the community, schools and health facilities
Establishment of tree nurseries	Source of income generation and environmental conservation
Construction of water pans and earth pans	Reduce water shortage and distance to water points

**3.2.3 KAJIADO EAST SUB COUNTY**

Kajiado East Sub-County is a cosmopolitan area in Kajiado County. It lies within the Nairobi metropolis and borders Machakos and Makueni counties in the North East position respectively and it’s approximately 20km from Nairobi city center. The Sub County is further divided into 5 County administrative wards namely Kitengela, Kenyewa-poka, Imaroro, Kaputei North and Oloorsirkon-Sholinke ward. The main activity economic activity for the Sub County is largely livestock and agricultural related business. Demographic features are dynamic especially in ethnic ratios, density and lifestyle parameters due to current land tenure system. Large track of Land which were livestock/wildlife grazing have been sub divided for sale into willing buyers who are putting up residential houses and real estate development. The Sub County has been experiencing human wildlife conflicts mostly due to drought such as in Kenyewa-Poka ward (Masimba) which is brought about by scarce resources (water) and encroachment of animal’s corridors. The Action plan will help the Sub County to manage human wildlife conflicts and adopt to effects of Climate change.

WARD	ACTION IN ORDER OF PRIORITIES	REMARKS
<b>Imaroro</b>	Pasture management	This will help in controlling soil erosion as well as fodder production
	Drilling of boreholes, pipelines expansion and Construction of water pans	Reduce water shortage and distance to water points
	Tree nurseries	Source of income generation and environmental conservation
	Erecting weather focus points	For early warning systems for climate hazards and disasters
	Construction of sand dams along Olkeriai river	This is to conserve sand and water
	Improving of livestock breeds (fattening, crossbreeding, veterinary services)  Milk coolant, Hides and skins industries	
	<b>Kenyewa poka</b>	Mixed-farming
Fodder value chain (sorghum, maize, sweet potatoes)		Alternative to the normal rain fed grass
Livestock and livestock product value addition		Increased income due to long lifespan of the products (Beef, milk, hide and skin
Construction and solarization of Water pans and boreholes		Reduce water shortage and distance to water points

	Tree nurseries	Source of income generation and environmental conservation
<b>Kitengela ward</b>	Tree nurseries	Source of income generation and environmental conservation
	Mixed farming (poultry, aquaculture, fishponds, apiculture)	Alternative source of livelihood to spread climate risks
	Value addition of milk products	Increased income due to long shelf life of milk (butter, yoghurt, cheese, ghee, mala)
	Solarization of boreholes	Reduce the cost of water production
<b>Oloosirkon/ Sholinke</b>	Tree nurseries	Source of income generation and environmental conservation
	Rain Water harvesting (plastic tanks)	To store water for future use
	Rehabilitation of abandoned quarries	To return the aesthetic value of the environment
	Borehole drilling and Solarizations.	Reduce the cost of water product
	Mixed farming Hay Production, Dairy farming & Community early sensitization.	Alternative source of livelihood to spread climate risks
<b>Kaputiei North (fantastic city)</b>	Planting of drought tolerant crops	Improved yields during the dry season.
	Tree nurseries establishment	Source of income generation and environmental conservation

	Alternative source of livelihood (bee keeping, pig rearing, poultry, aquaculture)	Diversification of livelihood to eradicate poverty and build resilience
	Introduction of improved livestock breeds	To enable our livestock to adapt to effects of climate change
	Beadwork value chain.	The will provide for other alternative sources of livelihood for women and youth

**3.2.4. KAJIADO SOUTH SUB COUNTY**

Kajiado south sub -county also known as Loitoktok Constituency. It is one of the five constituencies in Kajiado located in the southern part of Kenya. It borders Kenya and Tanzania. It has a population of estimated 191,846 according to the Kenya Population and Housing Census 2019. 94,613 Males and 97,225 females, covering an area of approximately 6337km2. It has five wards namely: Entonet/Lenkisim, Imbirikani/Eselenkei, Kimana, Rombo and Kuku. The main economic activity is nomadic pastoralism and small- scale farming. Kajiado South Sub County being an arid and semi-arid land has experienced prolonged drought, decline in water sources such as springs, loss of vegetation cover and increase in temperatures has led to increase in poverty, school dropouts, high mortality rate of livestock and human-wildlife conflicts.

WARD	ACTION ORDER PRIORITIES	IN REMARKS
Entonet/Lenkisim	Boreholes drilling and solarization	To curb the issue of water scarcity in the wards
	Value addition of livestock product	This will protect livelihood and reduce poverty due to increased income



	Modulated pastoralism	Diversification of drought tolerant breeds to curb effects of climate change and eradicate poverty
	Open markets for livestock products	This will provide market for livestock product and increase income for the community.
	Beading value chain	This will provide for other alternative sources of livelihood for women and youth
	Hay production(reseeding)	This will help in controlling soil erosion as well as fodder production
<b>Imbirikani eselenkei ward</b>	Borehole drilling and solarization	To curb the issue of water scarcity and cost
	Provision of coolants	Increased shell life will attract more income for women
	Tree nurseries	Source of income generation and environmental conservation
	Improved cattle breeds	Better breeds that have high value
	Construction of water pans	Reduce water shortage and distance to water points
	Rangeland and grassland management	This will help in controlling soil erosion as well as fodder production
	Beading value chain	Alternative source of income for women
<b>Kimana ward</b>	Water pans for water harvesting	For sustainable supply of water
	Drilling and solarization of boreholes	To curb the cost and distance to water points

	Dairy farming and value addition	To increase the shell life for more income generation
	Beading value chain	Alternative source of livelihood for women
	Tree nurseries establishment	For conservation of environment and income generation for groups
	Hay farming	This will help in controlling soil erosion as well as fodder production to be used during dry season
<b>Rombo ward</b>	Protection of water catchment areas	to conserve environment and sustain supply of water
	Drilling of boreholes and solarization	To reduce the cost of water
	Fencing of swamps. Ie. Esosian and Nasera swamp	Water from the swamp will be used for irrigation as an alternative source of livelihood
	Rehabilitation of water canals	To enhance more food production and hence food security
	Construction of water pans	To reduce distance to water points
	Building of gabions, Rangeland management (Hay production)	To reduce gully erosion and farms to remain fertile
<b>Kuku ward</b>	Construction of Water pans and earth pans	Harvesting water to be used during dry seasons
	Protection of water catchment and wetlands	For constant supply of water and environmental protection
	rangeland and grassland	To reduce soil erosion and production of fodder

	management, Value addition of livestock and crops	
	Drilling of boreholes	To increase water accessibility to the community, schools and health facilities
	Clean cooking solutions	Clean cooking jikos for women groups

**3.2.5. KAJIADO NORTH**

Kajiado North Sub-County is one of the five constituencies in Kajiado County. It borders Kiambu and Nairobi counties. Kajiado North Sub-County is highly cosmopolitan with almost every ethnic community in Kenya. The constituency has a population of estimated 306,596 according to the Kenya Bureau of statistics 2019, covering an area of approximately 110.6km<sup>2</sup>. Kajiado North Sub-County comprises of five wards which includes; Olkeri, Ongata Rongai, Nkaimurunya, Oloolua and Ngong. Kajiado North Sub -County being within the Nairobi Metropolis ,business becomes a major economic activity. The constituency has been affected by climate change in various ways including low markets, drying up of rivers and decline in vegetation cover.

Ward	ACTION IN ORDER OF PRIORITIES REMARKS	
<b>Ongata Rongai</b>	Proper drainage systems	During floods there will be less cases of diseases
	Water harvesting	To store water to be used during dry seasons
	Growing of drought resistant crops	To curb food insecurity brought by crop failure during droughts
	Recycling of waste	To reduce dumping that causes health problems

<b>Nkaimurunya</b>	Drilling boreholes and solarization in primary schools	Decrease the cost of water and improve accessibility
	Water supply projects	Increase water accessibility and reduce distance to water points
	Value addition of farm and livestock products	Raise the value of the products and attract high incomes
	Tree nursery establishment	Income generating activity for groups
	Construction of climate proof social amenities ie. Social halls, markets, public sanitation facilities	Provide conducive environment
<b>Olkeri</b>	Alternative sources of energy (clean energy-LPG, Biogas, solar, wind)	Reduced deforestation and improve utilization of affordable energy sources
	Solid waste management system	Recycling of waste and proper drainage and sewerage systems for environmentally friendly towns
	Dairy farming and value addition of dairy products	High income for households and address food insecurity
	Underground water harvesting storages	For sustainable supply of water especially during dry seasons.
<b>Ololua</b>	Tree nursery for indigenous tree species and fruit trees	Source of income for groups and for afforestation activities in the forest

	Alternative sources of livelihood (apiculture, ecotourism, herbal medicine extraction)	Sustainable income for households and spreading climate risks
	Protection of Water catchment areas and wetlands	Constant supply of water and environmental protection
	Green energy establishment-solar	To reduce production of greenhouse gases and reduce cost of energy
<b>Ngong</b>	Construction of proper drainage systems	To reduce water borne diseases especially during floods
	Rain water harvesting	To store water to be used during dry seasons
	Establishment of a recycling plant	To reduce open dumping that cause health challenges and also income generating activities for groups doing segregation
	Tree nursery establishment and afforestation of Ngong forest	Tree nurseries to be managed by the well-established community forest associations to be able to accrue income benefits and relatively enforce afforestation in the forest.

Kajiado County Climate Change Action Plan identifies areas where smart climate actions will be implemented over the next five years in line with global, national and county government plans and policies.

The actions will be as per the different sectors recognized by the vision 2030 and within the foundation of the county government as outline in schedule 4 of the constitution of Kenya.

### 3.3. Kajiado County Climate Change Action Plan 2023-2027

<b>Kajiado County Climate Change Action Plan 2023-2027</b>	
<b>SECTOR</b>	<b>ACTIONS FOR MITIGATION AND ADAPTATION TO CLIMATE CHANGE</b>
<b>Environment, Natural Resources and forestry</b>	<ul style="list-style-type: none"> <li>● Increase forest cover to 10% of the total land area through Afforestation and reforestation programs to restore degraded and deforested areas in Counties</li> <li>● Rehabilitate degraded lands, including rangelands and abandoned quarry pits with indigenous tree species;</li> <li>● Implement initiatives to reduce deforestation and forest degradation</li> <li>● Implement alternative sources of energy to reduce dependence on forest for charcoal and wood fuel.</li> <li>● Establishment of tree nurseries for fast-growing tree species in each sub-county.</li> <li>● School tree planting programs</li> <li>● Encourage involvement of community in county tree planting days</li> <li>● Encourage Forestation efforts with civil societies</li> <li>● Farmer-managed natural regeneration</li> <li>● Waste to energy -conversion of open dumpsites to sanitary landfills</li> <li>● Proper waste management through recycling</li> </ul>

	<ul style="list-style-type: none"> <li>● Encourage the use of 4Rs-Reduce, Reuse, recover and Recycle</li> <li>● Encourage segregation of waste at source</li> <li>● Undertake routine clean-ups of towns</li> <li>● Control of over harvesting of sand in rivers</li> <li>● Control of quarrying activities</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>● Increase annual per capita water availability through the development of water infrastructure</li> <li>● Climate-proof water harvesting and water storage infrastructure</li> <li>● Promote water efficiency (monitor leakage, reduce, re-use, and recycle) and Water treatment</li> <li>● Spring/water catchment and riparian areas protection</li> <li>● Capture of water run-off on roads</li> <li>● Strategic placement of dams and water pans</li> </ul>
<b>Agriculture, livestock and fisheries</b>	<p><b>Crops</b></p> <ul style="list-style-type: none"> <li>● Undertake farm forestry / agroforestry</li> <li>● Promoting planting of drought tolerant crops</li> <li>● Establishment of irrigation systems, such as construction of dams/water pans for irrigation and upscaling drip irrigation</li> </ul>

- Educating farmers on conservation agriculture (soil and water conservation)
- Enhanced agricultural extension services
- Crop diversification
- Promote Agro ecology-sustainable farming that works with nature
- Climate information services for farmers
- Promote urban agriculture
- Promotion of non-rain agricultural practices (greenhouse farming, aquaponics and hydroponics)
- Initiate Crop insurance for farmers to caution them against climate-related disasters
- Link farmers to market opportunities

#### **Livestock**

- Controlled grazing
- Promote fodder banks
- Encourage hay establishment, harvesting and storage for use in dry seasons
- Promoting growth of drought tolerant animal feeds e.g. Brachiara
- Promoting drought-resistant breeds of livestock and poultry
- Encourage livestock insurance to cushion farmers from climate-related shocks.



	<ul style="list-style-type: none"> <li>● Management of invasive tree species</li> <li>● Link farmers to market opportunities</li> </ul> <p><b>Fisheries</b></p> <ul style="list-style-type: none"> <li>● Promote aquaculture/ Fish farming</li> <li>● Promoting aquaponics</li> <li>● Promoting sustainable low cost feeds such as black soldier flies and crickets as fish feeds</li> <li>● Promote rearing of black soldier flies and crickets for management of solid waste</li> <li>● Link farmers to market opportunities</li> </ul>
<p><b>Health, Sanitation and Human Settlements</b></p>	<ul style="list-style-type: none"> <li>● Vaccination / immunization campaigns and programmes</li> <li>● Vector-borne disease surveillance, reporting and treatment</li> <li>● Distribution of mosquito nets</li> <li>● Controlling flooding in human settlements</li> <li>● Planning urban settlements to incorporate sewer systems</li> <li>● Controlling pollution from the sewerage systems by repairing leaks and enforcement of proper disposal</li> <li>● Promote construction of green and eco buildings</li> <li>● Encourage municipalities for management of waste.</li> </ul>

<b>Energy and Transport</b>	<ul style="list-style-type: none"> <li>● Promoting renewable/green energy (wind, solar, biogas)</li> <li>● Promotion of clean cooking solution e.g. efficient cooking stoves, biogas and briquettes</li> <li>● Construction of green roads</li> <li>● Designating walking and bicycle lanes on roads</li> <li>● Designate highway and roads for infrastructure that encourage uptake of electric technology e.g. charging points for electric cars.</li> <li>● Encourage individuals to acquire electric vehicles</li> </ul>
<b>Tourism and Wildlife</b>	<ul style="list-style-type: none"> <li>● Promote eco-tourism</li> <li>● Protect community wildlife conservancies</li> <li>● Encouraging direct financial benefits for conservation to the community</li> <li>● Promote designing, construction and operation of low impact facilities in conservancies and parks</li> <li>● Build environmental awareness to tourists and local</li> </ul>
<b>Trade</b>	<ul style="list-style-type: none"> <li>● Incorporate climate smart innovations into the existing market infrastructures</li> <li>● Incentivize climate smart innovations in businesses</li> </ul>

<b>Disaster Risk Management</b>	<ul style="list-style-type: none"> <li>● Provide timely response after the occurrence of a disaster</li> <li>● Support other sectors/departments to undertake measures to prepare and prevent for drought and flood disasters</li> <li>● To reduce losses from drought disasters by buying livestock before emaciation by drought</li> <li>● Put in place early warning system e.g. SMS based system for warning communities on a foreseen disaster</li> <li>● Sensitize the community on the roles of the emergency response docketts and establish a 24 hour communication system</li> </ul>
---------------------------------	--

### 3.4. ENABLING ISSUES IDENTIFIED BY KAJIADO COUNTY.

Enabling actions are required to implement the priority adaptation and mitigation actions by equipping government and stakeholders with the knowledge, skills, technologies and financing needed to deliver and report on climate actions. The enabling actions are listed below.

<b>ENABLING ACTIONS</b>	
Legal and Regulatory framework	<ul style="list-style-type: none"> <li>● Establish and operationalize legal and institutional frameworks for climate change</li> <li>● Establish and operationalize climate change fund to address climate change concerns</li> <li>● Enforce compliance of the legal frameworks</li> </ul>

	<ul style="list-style-type: none"> <li>● Establish a monitoring and evaluation framework for compliance</li> <li>● Mainstreaming the CCAP into the County Integrated Plan (CIDP 2023-2027)</li> </ul>
Education	<ul style="list-style-type: none"> <li>● Enhance community awareness on climate change</li> <li>● Child to parent climate change initiatives.</li> <li>● Incorporate climate smart lessons in school activities.</li> <li>● Increase accessibility to learning materials and tools</li> <li>● Improve network reception for farmers to receive information and alerts.</li> <li>● Synchronize school calendar with weather-related events</li> </ul>
Institutions	<ul style="list-style-type: none"> <li>● Establish climate change and disaster response unit</li> <li>● Establish and operationalize climate change and disaster management fund/recovery “kitty” for post-drought and post-flood</li> </ul>
Planning	<ul style="list-style-type: none"> <li>● Climate change planning committees’ members appointed</li> <li>● Development and operationalization of county spatial plans</li> <li>● Proper planning of towns</li> <li>● Proper land use planning</li> </ul>

Infrastructure	<ul style="list-style-type: none"> <li>● climate resilient infrastructure</li> <li>● Weather monitoring infrastructure</li> <li>● Develop green infrastructure for water</li> </ul>
Technology	<ul style="list-style-type: none"> <li>● Provide Climate Information Services for communities, farmers and early warning systems</li> <li>● Establish a Sustainable Consumption and Production Networking facility</li> <li>● Promote climate technologies and innovation in the private sector</li> <li>● Identify policy and fiscal incentives to promote uptake of climate-friendly technologies.</li> </ul>
Cooperatives	<ul style="list-style-type: none"> <li>● Promoting adoption of Climate Smart practices targeting sustainable intensification</li> <li>● Provision of weather information, index-based insurance and provision of extension services to the farmers affordably</li> <li>● Enabling members to manage climate risks through sensitization and adherence to environmental standards</li> <li>● Adoption of eco-friendly processes at cooperative level including energy, water and material usage</li> <li>● Promotion of linkages between rural communities and large-scale public and private institutions to enable access to risk management tools and other technologies</li> <li>● Organizing smallholder farmers into economic units to enable rapid and more sustainable climate actions and knowledge transfer.</li> <li>● Promoting access to finance hence promoting investments in climate-smart agriculture practices</li> </ul>

	<ul style="list-style-type: none"><li>● Lobby and advocacy trajectories to influence local governments to prioritize investments in climate-smart practices</li></ul>
Conflict resolutions	<ul style="list-style-type: none"><li>● Strengthening of conflict resolution mechanisms</li></ul>

## CHAPTER: FOUR DELIVERING THE CLIMATE ACTION PLAN.

### 4.1 Enabling Policy and Regulatory Framework

The process of developing a comprehensive policy and regulatory framework for climate change is well underway in Kajiado, as demonstrated by the Kajiado County Climate Change Act, 2020, and County Climate Change Policy, 2022.

At the County level, support is needed to develop appropriate legislation, including climate fund regulations, that are informed by the local context, aligned to county systems, and conform to national and county public finance policies and laws. This legal and policy framework will guide the development and utilization of County Climate Change Funds and enable climate finance to address County-specific local issues.

The two enabling actions are described below in the table below.

	<b>Enabling action</b>	<b>Coordinating institutions and relevant partners</b>	<b>Expected results (process indicator)</b>
1.	Prioritize, develop and implement the needed regulations to effectively implement the County Climate Change Act, 2020 through a multi-stakeholder process that includes women, youth, and marginalized and minority groups.	Department of Environment, Natural resources, and Climate Change	By 30th December 2022 – Assessment of needed regulations complete.  By 30th September 2025 – two regulations developed and operationalized.
2.	County Government of Kajiado to develop County climate change fund regulations that are linked to the National Climate Change Fund.	Department of Finance Department of Environment, Natural resources, and Climate Change	By 30th December 2022 – Kajiado County Government to have developed climate change fund regulations.

#### 4.2 Institutional arrangement and Capacity and Knowledge Management

The priority capacity development actions emphasize establishing the engendered coordination structures for the Climate Change Directorate to effectively implement the County Climate Change Act, 2020 and County Climate Change Policy. The actions will also build the capacity of climate change units in county departments. This action will include building the capacity of County Executive Committee (CEC) members responsible for climate change and officials assigned to the climate change units in County. This will include support to report on climate change, to enhance the implementation of public finance management in relation to climate finance, and to develop policies and frameworks linked to the County Climate Change Act 2020 and County Climate Change Policy, 2022.

The operation of the County Climate Change Unit is a priority action to promote climate information and knowledge management. This unit provides a one-stop repository of climate change-related information and is equipped with an online climate change portal. This unit will be under the department of environment and natural resources. The integration of climate change in education curriculum, the development of a gender and inter-generational awareness plan, and the development of a public awareness and engagement strategy are priority actions required under the County Climate Change Act, 2020.

No.	Enabling action	Coordinating institutions and relevant partners	Expected results (process indicator)
1.	Operate a publicly accessible climate change unit that includes a climate change desk and officers, robust and up-to-date climate change knowledge management system and an updated climate change information portal that has platforms for children, youth,	Department of Environment and Natural Resources	By 30th December 2022 – Business plan for climate change unit developed.



	women, and marginalized and minority communities.		
2.	<p>Strengthen the capacity of the County Government institutions to implement the county Climate Change Act, including: Training of staff of climate change units on reporting and climate finance.</p> <p>Support to County Climate Change Council and ward climate change council.</p> <p>Mobilisation and tracking of climate finance allocations through County Climate Change Funds.</p>	<p>Department of finance</p> <p>Department of Environment and Natural Resources.</p>	<p>By 30th December 2022 – Climate change is mainstreamed in MTP sector plans.</p> <p>By 30th September 2025 – all relevant county departments providing annual reports on climate change.</p>
3.	<p>Build the capacity of stakeholders, including - Vulnerable groups, including women, youth, persons with disabilities and marginalized and minority communities, to participate in, attract funding for, and report on climate change actions.</p> <p>- Private sector and civil society to implement and report on climate actions.</p>	<p>Finance Department</p> <p>Department of Environment, Natural Resources and Climate Change.</p> <p>Department of Gender, social services, youth and sports</p>	<p>By 30th December 2022 – Ten awareness sessions held.</p> <p>By 30th September 2025 – Twenty awareness sessions held.</p>
4.	Develop and operationalize a public awareness and engagement strategy that highlights outreach to politicians and	Department of Environment, Natural	By 30th March 2023 – Public awareness and engagement strategy

	media; and engagement of vulnerable groups, including women, older members of society, children, youth, persons with disabilities, and members of minority and marginalized communities.	Resources and Climate Change Department of citizen participation	delivered to the county climate change Council.  By 30th June 2023 – Strategy operationalized in the county.
5.	Develop a county vulnerability assessment to identify and prioritize adaptation actions. To include identification and compilation of existing vulnerability assessment at the County level.	Department of Environment, Natural Resources and Climate Change	By 30th December 2023 – County vulnerability assessment developed.  By 30th September 2025 – County vulnerability assessment informs updating of County Climate Change Action Plan.

#### 4.3. Technology and Innovation

The technology and innovation actions are important enablers of success for the adaptation and mitigation actions described earlier. An overall objective is to support the sectors to promote appropriate technologies to deliver adaptation and mitigation actions, such as water harvesting, climate information services, and clean cooking technologies.

No.	Enabling action	Coordinating institutions and relevant partners	Expected results(process indicator)
-----	-----------------	---	-------------------------------------

1.	<p>Improve the capacity of climate change unit, county climate change council and ward climate change council to coordinate the activities and services that it delivers. This includes the promotion, up scaling and dissemination of endogenous technologies that meet the needs of women and marginalized groups.</p>	<p>Research institutions  Private sector</p>	<p>By 30th June 2024 – Information on five endogenous climate technologies disseminated to stakeholders.</p>
2.	<p>Provide Climate Information Services (CIS) – including information to help farmers manage risk and to inform early warning systems, to inform decision making for organizations, businesses and households.</p>	<p>Department of Environment, Natural Resources and Climate Change  Private sector</p>	<p>By 30th December 2024 – the County Climate Information Service Plans developed.</p>
3.	<p>Promote gender-responsive climate technologies and innovation in the private sector through the provision of financing, capacity building and start-up/scale-up services. Encourage youth innovation through outreach programmes with schools, universities and youth organisations.</p>	<p>Department of Environment, Natural Resources and Climate Change  Private sector</p>	<p>By 30th December 2025– Clients, are supported to commercialize their clean technology businesses.  By 30th September 2025 – Clean technology businesses reach 300 customers</p>
4.	<p>Identify policy and fiscal incentives to promote the uptake of climate-friendly technology (such as tax incentives, reduced energy tariffs, low-interest loans, public private partnerships).</p>	<p>Finance department  Department of Environment, Natural</p>	<p>By 30th December 2024 – Options identified and analyzed, including development of baseline information</p>

		Resources and Climate Change  Private sector	and expected climate results.
--	--	--	-------------------------------

**4.4 Climate Finance Resource Mobilization**

The priority climate finance and resource mobilization actions emphasize designing and launching the Climate Change Fund, implementing the county resource mobilization strategy, improving access modalities and efficiency of climate finance, and ensuring that climate finance is available for actions in key sectors.

No.	Enabling action	Coordinating institutions and relevant partners	Expected results (process indicator)
1.	Operationalise the Climate Change Fund, including establishment of the management and oversight of the fund; annual budgeting and reporting; development of policies, guidelines and procedures; and development partner, and other contributions.	Department of finance  Department of environment and natural resources.	By 30th December 2022 – Fund is operationalized, including establishment and the management councils as set out in the Climate Change Act, 2020.
2.	Enhance the capacity of the county designated authority to mobilise and manage climate finance, including the management of, access to, and tracking of county climate finance; and development of funding proposals.	Department of finance  Department of Environment, Natural Resources and Climate Change	By 30th December 2023 –County resource mobilization strategy operationalized for climate finance mobilization.

	Operationalize the climate finance resource mobilisation strategy (including domestic allocations, international climate finance, access to carbon credits and markets, allocations from the private sector, and Public-Private Partnerships for climate-friendly investments).		
3.	Report on county climate finance flows through an improved tracking system (including building capacity of government officials to track climate finance), that is supported through improved coordination with development partners.	Department of Finance  Department of Environment, Natural Resources and Climate Change	By 30th December 2023 – The climate finance tracking system established at the county level.  By 30th June 2024 – Climate finance tracking system reporting on domestic and international climate finance flows
4.	Build the capacity of the private sector and civil society to develop bankable projects and build the in-house capacity of financial institutions to assess climate risk and develop climate-related schemes.	Department of finance  Department of Environment, Natural Resources and Climate  Private sector	By 2024– Three financial institutions have developed climate-related lending schemes.

5.	Participate in the design and implementation of market-based mechanisms; promote investor confidence and participation in market-based and results-based mechanisms; enhance residents' capacity to engage in carbon asset activities; strengthen the viability of domestic carbon asset production;	Department of finance Department of Environment, Natural Resources and Climate Private sector	By 30th June 2025 – Unit established to promote projects responsible for generating carbon credits.
----	--	---	--

## CHAPTER FIVE: MONITORING AND EVALUATION

### 5.1.Introduction

M&E of CCCAP 2022-2027 will focus on demonstrating that investment in adaptation and mitigation actions leads to real climate results and development benefits that are linked to the Big 4 agenda and County Integrated Development Plan (CIDP). The M&E system will track the implementation and results of CCCAP 2022-2027, and climate finance raised to deliver on the action plan. This will provide the evidence base for planning and implementing future actions, seeking support, and domestic reporting.

The establishment of the M&E system will include the development of reporting frameworks for the County Government and community, and processes to compile, analyze, and report on actions and results. The key to success is a workable M&E structure that is appropriate for a devolved governance system and for the available resources.

The M&E system will:

- Ensure that the responsible departments' report on their progress and achievement of CCCAP actions.
- Ensure efficient reporting processes for the Councils, and draw on established reporting procedures where possible, such as the County Integrated Evaluation System.
- Report on climate finance that supports the delivery of CCCAP 2022-2027.
- Identify a limited number of County indicators that have baseline data and are tracked by The County Treasury and Planning to measure climate-related impacts at the County level
- Use gender-aggregated data where possible and priorities collection of this data if it is not available
- Track and measure GHG emissions on a sector basis at the county level.

## 5.2 Reporting

Kajiado County is required to provide information on mitigation, adaptation and support received, including

1. County inventory to enable tracking of progress on implementing and achieving the mitigation component.
2. Information related to climate change impacts, vulnerabilities, and adaptation.
3. Information on financial, technology development and transfer, capacity building needs, and support received from the national government, and partners.

The implementation of this action plan will be reviewed every five years. The review will utilize reports from communities and councils, as well as inputs from relevant stakeholders. Important stakeholders in the review process include academia, media, women, youth, and minority and marginalized groups including the pastoralists' community.

### 4.3 Enabling Action

No.	Enabling action	Coordinating institutions and relevant partners	Expected results (process indicator)
1.	Establish the monitoring and evaluation (M&E) component of the MRV+ system to report on adaptation actions and benefits, including identification and measurement of adaptation indicators (including collection of baseline information).	Climate Change Directorate County Government	By 30th June 2025 – Adaptation M&E system fully functional, setting out institutional structures and role of stakeholders in reporting.
2.	Establish a system to track and report on land-based emissions using the development of a monitoring and	Environment Department-climate change unit	By 30th September 2025 – Reporting on land-based emissions



	reporting system for a transparent accounting of emissions and removals in the forestry and land-use sectors.		fully integrated GHG inventory.
3.	Establish a Climate Business Platform to support centralized reporting requirements of private entities.	Climate Change Directorate Private sector	By 30th September 2025 – Private sector large emitters are reporting to Department on a voluntary basis.

## CHAPTER 6 : IMPLEMENTATION AND COORDINATION MECHANISMS

### 6.1 Directorate of climate change

- I. Formulation of legislative framework of the county
- II. Formulation of the climate change plans, strategies and reports
- III. Mainstream climate change cations in all sectors, programs, projects and plans

### 6.2 Structures in place

Establishment of a Climate Change Unit

The department has the climate change unit in place with the following officers

attached to it;

- I. CEC-Climate Change
- II. Chief Officer-Environment, Natural Resources & Climate Change
- III. Director-Environment, Natural Resources & Climate Change
- IV. Deputy Director-Climate Change
- V. Climate Change Officers
- VI. Fund administrator
- VII. Fund accountant
- VIII. Monitoring and Evaluation Officer
- IX. Environment Safeguard Officer
- X. Social Safeguard Officer
- XI. Grievances mechanism officer

### 6.3 Kajiado climate change working group

The department has already formed a technical working group drawing officers from all departments including;

1. Environment, Natural resources and climate change

2. Water services
3. Agriculture, livestock and fisheries
4. Public health
5. Gender and social services
6. ICT
7. Monitoring and Evaluation
8. Finance and economic planning
9. Irrigation and food security
10. Lands and physical planning

The climate change working group officers have already being trained on their mandate which *include;*

- I. Ensuring mainstreaming of climate actions in their sectors/departments plans, policies and programs
- II. Reporting on the progress of adoption of climate smart actions

#### **6.4 Kajiado county climate change council**

Members of the Climate Change Council are set out in Part 2 of the Climate Change Act, 2020 and are listed below:

- a. A Chairperson who shall be the Governor of the County;
- b. The Deputy Governor of the County who shall be vice chairperson of the Council;
- c. The County Executive Committee Member for the time being responsible for Environment and Natural Resources or a representative;
- d. County Executive Committee Member for the time being responsible for County Treasury or a representative, who shall be the Secretary;
- e. Chief Officer in charge of Environment;
- f. Chief Officer in charge of Agriculture, livestock and fisheries;
- g. The County Director of the Emergency Fund in the County;
- h. the County Director of the National Drought Management Authority in the County;
- i. the County Director of the National Environment Management Authority in the County;
- j. the County Director of Meteorological Department in the County;

- k. Fund Administrator;
- l. a representative of the private sector nominated by the body representing the largest number of institutions in the private sector within the county; and
- m. a representative of the Civil Society nominated by the CEC Environment and Natural Resources within the county.

#### Functions

- Adopt relevant policy and other measures necessary for climate change response and attaining low carbon climate change resilient development
- Approve and oversee implementation of the county climate change action plan
- Approve and provide overall guidance for the development of a climate finance framework for the county
- Facilitate and monitor the implementation of the climate finance framework at the ward level;
- Approve ward disbursement proposal by the fund administrator
- Ensure compliance of the fund administrator to the public finance management principles under Article 201 of the constitution of Kenya
- Prepare climate change awareness strategy for the county
- Identify and implement incentives for the private sector and institutions such as schools, community groups, to develop affordable and locally appropriate adaptation and mitigation technologies for climate change
- Prepare and submit annual report on progress of implementation of climate change actions to the county assembly for revise and debate and a copy of this report shall be forwarded to the directorate for information purposes
- Approval of county climate change project proposals
- Ensure compliance of the fund administrator to the public finance management principles under Article 201 of the constitution of Kenya
- Prepare climate change awareness strategy for the county
- Identify and implement incentives for the private sector and institutions such as schools, community groups, to develop affordable and locally appropriate adaptation and mitigation technologies for climate change.

- Prepare and submit annual report on progress of implementation of climate change actions to the county assembly for revise and debate and a copy of this report shall be forwarded to the directorate for information purposes
- Approval of county climate change project proposals

### **6.5 Establishment of the ward climate change council**

1. A chairperson who shall be elected from among the members
2. Five (5) technical officers each from; finance, agriculture, Environment, public health
3. and livestock appointed by the county climate change council competitively sourced;
4. Two (2) youth representative of different gender nominated by the county secretary
5. through a competitive process
6. A representative of persons living with disability nominated by the county secretary
7. through a competitive process
8. A representative from ward based public benefit organization nominated by the county
9. secretary through a competitive process.
10. A representative from the civil society organization within the county nominated by the
11. county secretary through a competitive process
12. A representative from private sector within the county secretary through a competitive process

### **FUNCTIONS**

- Mobilize and hold consultative meetings on climate change with local communities together with relevant agencies
- Conduct public participation on climate change compliance and related matters
- Prepare programs and project proposals through aggregation and coordination of climate change resilience;
- Prepare project budgets for the county climate change approval and allocation of funds
- Oversee the implementation of climate change projects and programs under its mandate
- Report on sectorial greenhouse gas emissions for the county inventory
- Prepare and submit annual report on progress of implementation of climate change actions and/or projects within its jurisdiction to the county climate change council

## 6.5. Implementation matrix

Actions	Indicators	Adaptation/ mitigation	Actors	Timelines
<b>Mainstream climate change into County planning processes, including County development policies and plans, County Integrated Development Plans, Performance Contracts, and the short to medium term budget making process.</b>	Over 10 plans and policies that have prioritized climate change in their processes	Addressing climate risks in all projects in all sectors	Department of Environment and climate change  County line departments  County assembly	Annually
<b>Tree nurseries established</b>	<ul style="list-style-type: none"> <li>• 2 mega tree nurseries established per sub county</li> <li>• 5 groups per sub county supported to establish and operationalized</li> </ul>	Income generating activity for the groups	Department of Environment and climate change	By 31 <sup>st</sup> December 2024
<b>Increase forest cover to 10% of total land area;</b>	<ul style="list-style-type: none"> <li>• 1, 000,000 trees grown and natured</li> </ul>	Decreases temperatures and	Department of Environment	By June 31 <sup>st</sup> 2024

<p><b>rehabilitate degraded lands, including rangelands; increase resilience of the wildlife and tourism sector</b></p>	<ul style="list-style-type: none"> <li>• 10,000 acres of degraded land rehabilitated</li> </ul>	<p>increased precipitation</p>	<p>and climate change</p>	
<p><b>Increase livestock productivity</b></p>	<ul style="list-style-type: none"> <li>• 10,000 acres of land reseeded</li> <li>• 5000 tonnes of hay harvested and stored</li> <li>• Over 10,000 metric tonnes of milk produced</li> <li>• Post harvest losses reduced by 40%</li> </ul>	<p>Increase in household income</p>	<p>Department of Environment and climate  Department of Livestock  Partners</p>	<p>By June 31<sup>st</sup> 2024</p>
<p><b>Increase crop productivity</b></p>	<ul style="list-style-type: none"> <li>• 100,000 acres of land brought under irrigation</li> <li>• Over 20 crop value chains established</li> <li>• Post harvest lossess reduced by 50%</li> </ul>	<p>Increase in household income</p>	<p>Department of Environment and climate change  Department of Agriculture  Partners</p>	<p>By December 31<sup>st</sup> 2024</p>
<p><b>Establish and operationalize water harvesting facilities</b></p>	<ul style="list-style-type: none"> <li>• 5 mega water pans per sub county</li> </ul>		<p>Department of Environment and climate</p>	

	<ul style="list-style-type: none"> <li>• 10 boreholes drilled per sub county</li> </ul>		Department of water	
<b>Solarize boreholes in the county</b>	<ul style="list-style-type: none"> <li>• 20 boreholes per sub county equipped with solar sytems</li> </ul>		Department of Environment and climate Department of water	
<b>Alternative sources of livelihood</b>	<ul style="list-style-type: none"> <li>• 5 groups per sub county helped to start poultry farming</li> <li>• 10 Group ranches and 5 community forest associations provided with apiaries</li> <li>• 2 farmer groups per sub county helped with establishing fish ponds</li> <li>• 5 women group per sub county helped with establishment of curios</li> </ul>	Increased channels of income Diversification of livelihoods	Department of Environment and climate Change Department of fisheries Department of livestock	By December 31 <sup>st</sup> 2024
<b>Promote clean energy technologies in all sectors of</b>	<ul style="list-style-type: none"> <li>• 2 solar mini-grids constructed and operationalized</li> </ul>	<ul style="list-style-type: none"> <li>• Decline in deforestation</li> </ul>	Department of Environment and climate	By December 2025



<p><b>economic development.</b></p>	<ul style="list-style-type: none"> <li>• 5 women groups per sub county provided with clean cooking jikos</li> <li>• 2 youth groups per sub county supported to establish juakali shops for making clean cooking jikos</li> </ul>	<ul style="list-style-type: none"> <li>• Affordable energy for households</li> <li>• Increase in income for youth groups</li> </ul>	<p>change, Energy, public health NEMA Partners</p>	
<p><b>Ensure participatory engagement of private sector and special groups in formulating and implementing climate change action plans.</b></p>	<ul style="list-style-type: none"> <li>• 300 stakeholders engaged</li> <li>• 10000 women engaged</li> <li>• 300 PWDS involved</li> <li>• 500 elderly people involved</li> <li>• 1000 youth involved</li> </ul>	<p>Inclusion of all sectors and special groups</p>	<p>Department of Environment and climate, Citizen participation, economic planning, trade and cooperatives</p>	<p>By June 31<sup>st</sup> 2024</p>
<p><b>Disseminate relevant information for policy and decision making and early warning</b></p>	<ul style="list-style-type: none"> <li>• Monthly, quarterly and annual reports disseminated on timely basis to the lowest level</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure inclusion of all parties in decision making</li> <li>• Household preparedness to disasters improved</li> </ul>	<p>Department of environment and climate change stakeholders</p>	<p>By June 2023</p>

<p><b>Identify research and technology needs; and promote strategic and systematic climate change-related research, innovation and technology and their diffusion.</b></p>	<ul style="list-style-type: none"> <li>• 5 research done, 1 in each sub county</li> <li>• 1 innovation per sub county developed and adopted</li> </ul>	<p>Improvement of county preparedness to climate hazards</p>	<p>Department of environment and climate change education and vocational training stakeholders</p>	<p>By December 31<sup>st</sup> 2024</p>
--	--	--	--	---