COUNTY GOVERNMENT OF WAJIR

County Climate Action Plan

(In Partnership with the National Treasury under the FLLoCA Program)

WAJIR

2023 - 2027

Korondille Hills

Severe drought lead to the deaths of these six giraffes in Sabuli Wildlife Conservancy

May 2023

Foreword

Climate change is one of the most pressing challenges of our time, and its impacts are being felt worldwide. Wajir County, located in the arid and semi-arid region of Kenya, is particularly vulnerable to the effects of climate change. Our county, like many others, is experiencing rising temperatures, changing rainfall patterns, and increased frequency of extreme weather events.

As the Governor of Wajir County, I am acutely aware of the profound impact that climate change has on our communities, economy, and environment. The effects of prolonged droughts on our agriculture and livestock sectors have led to food insecurity and economic instability. The scarcity of water resources has caused hardship for our residents, particularly women and children who bear the burden of fetching water from long distances. Our ecosystems, including forests and rangelands, are under threat, affecting biodiversity and exacerbating land degradation.

However, amidst these challenges, we also recognize the opportunities for transformative action. We have seen how climate-resilient practices, such as sustainable land management and climate-smart agriculture, can improve productivity and enhance livelihoods. By harnessing renewable energy sources, we can mitigate greenhouse gas emissions and reduce our reliance on fossil fuels. We can also build adaptive capacity within our communities, empowering them to withstand and recover from climate-related shocks.

It is with this vision of a resilient and sustainable future that we present the Wajir County Climate Change Action Plan. This plan sets out our strategic framework for addressing climate change and outlines a roadmap for action. It has been developed through a collaborative and inclusive process, bringing together stakeholders from government agencies, civil society organizations, the private sector, and local communities. I am grateful for their dedication, expertise, and commitment to this cause.

The Climate Change Action Plan is a dynamic document that lays the foundation for our collective efforts to mitigate greenhouse gas emissions, adapt to changing climate conditions, and build resilience in our county. It provides a comprehensive assessment of our vulnerabilities, identifies priority sectors and interventions, and sets measurable targets and indicators for monitoring progress. It also emphasizes the importance of integrating climate change considerations into our policies, plans, and budgets, ensuring a coherent and coordinated approach.

As we embark on this journey, we recognize that the successful implementation of the Climate Change Action Plan requires the active participation and engagement of all stakeholders. We encourage individuals, communities, businesses, and organizations to join us in this endeavor. Together, we can make a meaningful difference and secure a sustainable future for Wajir County.

I extend my gratitude to the technical experts and development partners who have supported us in the formulation of this Action Plan. Their knowledge, resources, and guidance have been invaluable in shaping our response to climate change.

I urge all stakeholders to read, understand, and act upon the recommendations outlined in this plan. Let us work together to create a resilient, low-carbon, and climate-resilient Wajir County for generations to come.

H.E FCPA Hon. Ahmed Abdullahi Mohamed
Governor, Wajir County, &
Deputy Chairperson, Council of Governors (CoG)

Acknowledgement

The County Climate Change Action Plan (CCCAP) was conducted by the County Government of Wajir, Department of Environment and Climate Change and its partners with the financial support of the World Bank through the National Treasury under the Financing Locally Led Climate Action (FLLoCA) program. The success of this CCCAP was enabled by the goodwill and guidance of the Wajir County Governor, H.E FCBA Hon Ahmed Abdullahi. The Chief Officer, Department of Environment and Climate Change and the Wajir County Directorate of Climate Change Unit (DCCU), that provided the coordination which enabled the successful implementation of the process.

The Directorate of Climate Change Unit and the entire Department of Environment, Energy and Climate Change appreciate the support of World Food Program (WFP) in financing the training of technical working group, the actual data collection from the ward level and recognizes it as true partner in addressing Climate Change issues in the County.

I highly appreciate the CCCAP task force, which included representation from the County Departments of Environment, Energy and Climate Change, Agriculture, Livestock and Fisheries, Decentralized Unit, Water Services, Finance and Economic Planning, Lands and Information Communication Technologies (ICT) and others all under the leadership and coordination of the Wajir County Directorate of Climate Change. We also appreciate the participation and inputs of the National Government Agencies such as Kenya Forest Services (KFS), National Drought Management Authority (NDMA) and Kenya Meteorological Department (KMD) and Civil Society Organizations such as Mercy Corps for their participation and input in the community engagements process.

Lastly, we acknowledge the contribution of the communities for their active participation in the identification and prioritization of Climate Change issues in their wards which informed the preparation of this report.

Hon. Khalif Abdi Ali
County Executive Committee Member (CECM)
Environment, Energy and Climate Change
Wajir County.

CCCAP Task Force

S/No	Name	Dept./Org	Designation	ID No.	Mobile No.
1.	Mohamed Bashey	Environment and climate change	Environmental officer	29557040	0726141403
2.	Adan Salat	Natural Resources	Director	22911419	0775628672
3.	Ahmed Mohamed	Tourism	Tourism and wildlife officer	29339263	0727862312
4.	Ahmed I. Kusow	Special Programs	Senior PPO	29596066	0720127560
5.	Mohamed Ahmed Madey	E -Planning	Economist	26636939	0792610118
6.	Adan Billow	Finance	Principal accountant	27256089	0710880850
7.	Abdullahi Osman	KFS Wajir	RMA	29858800	0710637043
8.	Dakane Shimoy	WCG	CCO	21639393	0720340326
9.	Sharun Iman	Education	Ass/director	25751054	0726682279
10.	Jimale Mohamed	Environment	Director	22578389	0722993022
11.	Yahya Dahir	CCU	Ad. Deputy director	26911407	0725848134
12.	Said Mohamed	Livestock	Livestock Officer	27871877	0720091672
13.	Halima Abdullahi	Wildlife	D/Director	11224469	0720880811
14.	Ahmed Abdille	Decentralized unit	Director	22828623	0720336954
15.	Hassan I. Ahmed	NDMA	SDIO	23803848	0716059923
16.	Maimuna Said	NEMA	Environmental Officer	36572624	0742042646
17.	Mohamed Rashid A.	DRM	SDMO	26875495	0720012597
18.	Sadik Ugass	Agriculture	SCAO	36415063	0724268606
19.	Kaltuma Mohmed	Economic planning	SCPO	30985713	0724652684
20.	Mohamed Kunow	Water	SWO	33241000	0722786063

TABLE OF CONTENTS

List of Figures

List of Table

Acronyms

Agriculture Sector Development Support Programme	ASDSP
Annual Development Plan	ADP
Arid and Semi-Arid Lands	ASAL
Central Bank of Kenya	CBK
Civil Society Organizations	CSO
County Climate Change Action Plan	CCCAP
Climate Change Unit	CCU
Climate Act Fund	CAF
Community Based Organizations	CBO
Community Forest Association	CFA
Conference of the Parties	COP
County Chief Officer	CCO
County Climate Action Plan	CCAP
County Climate Change Action Plan	CCCAP
County Climate Change Funds	CCCFs
County Executive Committee Member	CECM
County Information Services	CIS
County Integrated Development Plan	CIDP
Disaster Risk Management	DRM
Environment Impact Assessment	EIA
feed-in-tariff	FIT
Financial Year	FY
Financially Locally Led Climate Change Action	FlloCCA
Foot and Mouth Disease	FMD
Government of Kenya	GOK
Green Houses Gases	GHG
Integrated Water Resources Management	IWRM
Internally Displaced Persons	IDPs
Kenya Agricultural and Livestock Research Organization	KALRO
Kenya Climate Smart Agriculture	KCSA
Kenya Climate Smart Agriculture Strategy	KCSAS
Kenya Devolution Support Program	KDSP
Kenya Forest Service	KFS
Kenya Forestry Research Institute	KEFRI
Kenya Meteorological Department	KMD
Kenya National Bureau of Statistics	KNBS
Kenya Urban Support Program	KUSP
Kenya Wildlife Service	KWS
Lumpy Skin Disease	LSD
March April May rains	MAM
Measurement, Reporting, and Verification	MRV

Medium Term Plans	MTPs
Middle East Respiratory Syndrome	MERS
Monitoring and Evaluation Unit	M&E Unit
National Adaptation Plan	NAP
National Climate Change Action Plan	NCCAP
National Climate Change Council	NCCC
National Drought Management Authority	NDMA
National Environment Management Authority	NEMA
Nationally Determined Contribution	NDC
Non-Governmental Organization	NGO
Participatory Climate Risk Assessment	PCRA
Persons with disabilities	PLWD's
peste des petits	PPR
Project Operation Manual	POM
Reduce, Reuse, and Recycle	3Rs
Rift Valley Fever	RVF
Short Message Service	SMS
Sustainable Development Goals	SDGs
Technical Working Group	TWG
United Nations	UN
United Nations Framework Convention on Climate Change	UNFCCC
Wajir County Assembly	WCA
Wajir County Climate Change Action Plan	WCCCAP
Wajir County Government	WCG
Wajir Peace and Development Committee	WPDC
World Food Program	WFP
Directorate of Climate Change Unit	DCCU

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 (CO2), methane (CH4), nitrous oxide (N2O), per-fluorocarbons (PFCs), hydro-fluorocarbons(HFCs), sculpture hexafluoride (SF6) and nitrogen tri-fluoride (NF3).
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.

Executive Summary

The Wajir County Climate Change Action Plan presents a strategic framework for addressing the challenges and opportunities posed by climate change in our county. This executive summary provides a condensed overview of the plan, highlighting its key objectives, priority sectors, and recommended interventions.

Climate change is already impacting Wajir County, with rising temperatures, changing rainfall patterns, and increased frequency of extreme weather events. These changes pose significant risks to our communities, economy, and environment. However, through proactive and coordinated action, we can build resilience and seize opportunities for sustainable development.

The objectives of the Climate Change Action Plan are:

1. Mitigate Greenhouse Gas Emissions: We aim to reduce greenhouse gas emissions in Wajir County through promoting renewable energy sources, energy efficiency measures, and sustainable land use practices. By transitioning to a low-carbon economy, we can contribute to global climate goals while improving local air quality and reducing dependence on fossil fuels.

2. Adaptation and Resilience: Our plan prioritizes building adaptive capacity and resilience to climate change impacts. We will implement measures to enhance water resource management, promote climate-smart agriculture, strengthen disaster risk reduction, and protect ecosystems. These actions will help safeguard livelihoods, reduce vulnerability, and ensure sustainable development in the face of climate-related challenges.

3. Mainstreaming Climate Change: We recognize the importance of integrating climate change considerations into all sectors and levels of governance. The Climate Change Action Plan recommends mainstreaming climate change adaptation and mitigation measures into county policies, plans, and budgets. This will ensure a coordinated and coherent approach to climate action across different sectors and stakeholder groups.

The priority sectors identified for intervention in Wajir County include agriculture, livestock, water resources, energy, infrastructure, and ecosystems. Within these sectors, specific actions and

interventions are proposed to address climate change impacts and promote sustainable practices. These actions include promoting climate-smart agricultural techniques, enhancing water harvesting and storage systems, promoting renewable energy sources, improving infrastructure resilience, and implementing ecosystem restoration initiatives.

The successful implementation of the Climate Change Action Plan requires the collaboration and involvement of various stakeholders, including government agencies, civil society organizations, the private sector, and local communities. We emphasize the importance of stakeholder engagement, capacity building, and knowledge sharing to ensure the effective implementation of climate actions.

Monitoring and evaluation are integral to the plan's success. We have defined key performance indicators and established a framework for tracking progress towards the set targets. Regular monitoring and evaluation will enable us to assess the effectiveness of interventions, identify gaps, and make necessary adjustments to achieve our climate goals.

The Wajir County Climate Change Action Plan represents our commitment to addressing climate change and securing a sustainable future for our county. By implementing the recommended actions, we can build resilience, reduce greenhouse gas emissions, and improve the well-being of our communities. Together, let us forge a path towards a climate-resilient and low-carbon Wajir County.

Hon. Khalif Abdi Ali
County Executive Committee Member (CECM)
Environment, Energy and Climate Change
Wajir County

CHAPTER ONE: BACKGROUND AND CONTEXT

1.1. Introduction & Background

Wajir County is located in the North Eastern Region of Kenya. The county lies between latitudes 3°N 60'N and 0°20'N and Longitudes 39°E and 41°E and covers an area of 56,685.9 Km^2. (Wajir CIDP, 2018). It borders Marsabit to the North West, Isiolo to the South West, Mandera to the West, Somalia to the East and Garissa to the South. The County has a population of 781, 263 with 415, 374 males, 365,840 females and 49 Intersex (KNBS, 2019). Wajir town is the County's capital. Other main towns include Buna, Eldas, Bute, Habaswein, Griftu, Hadado, Diif, Biyamathow, Sarman, Elben, Wagalla and Khorof Harar. The County is divided into 6 sub-counties namely Wajir East, Wajir West, Wajir North, Wajir South, Eldas and Tarbaj. The 6 sub-counties are further sub-divided into 30 wards. Wajir West has 4 wards (Arbajahan, Hadado/ Athibohol;, Ademasajida and Ganyure/Wagalla), Tarbaj has 4 wards (Elben, Sarman, Tarbaj and Wargadud), Wajir East has 4 wards (Wagberi, Township, Barwaqo and Khorof Harar), Eldas has 4 wards (Eldas, Della, Lakoley South/ Basir and Elnur), Wajir South has 7 wards (Benane, Burder, Dadajabula, Habaswein, Lagbogol South, Ibrahim Ure and Diff) and Wajir North has 7 wards (Gurar, Bute, Korondille, Malkagufu, Batalu, Danaba and Godoma (WCG). The County is generally flat with an average altitude of 244m (Wajir CIDP, 2018). Wajir County falls in the ecological zones V-VI. Zone V receives rainfall between 300-600mm annually while zone VI receives an annual rainfall of 200-400mm (Wajir CIDP, 2018).

Wajir County falls in the semi-arid region in the North Eastern part of Kenya. The already delicate environment makes the county prone to climatic hazards and disasters. It is paramount to address these climatic hazards promptly, failure to which they advance to disasters while threaten food security through disruption of the nomadic lifestyle, cropping and overall ecosystem procedures. Compromised food security contributes to reduced nutrition and increased disease incidences. Proper mechanisms on how to handle climatic hazards should be identified and implemented at all levels Great strides have been made at the global, regional and national levels with the formulation of plans, policies and frameworks that are useful for climate change mitigation and adaptation. For instance, the Sendai Framework 2015-2030 which is closely linked to the 2030 Agenda for Sustainable Development, has clear targets and priorities that should help actors to develop proper climate change interventions at community levels

The Wajir County Climate Change Action Plan has been developed to guide the county and other economic actors to mitigate and adapt to the adverse impacts of climate change by

enhancing community resilient through thriving economy and environment using a participatory approach which promote locally led climate actions. The development of the Wajir county climate change action plan is in line with the Climate Change Act 2016 which requires both the national and county government to develop action plans to guide the incorporation of climate change in the sectoral projects. The plan covers a period of Five years as from the financial year 2023/2024. The development of the action plan was participatory by actively engaging with relevant stakeholders in all community engagement spheres. The plan entails main economic livelihood sectoral plan in the county which was priorities at ward level during the participatory climate risk assessment and the subsequent action plan development at ward level conducted across the thirty wards in Wajir County.

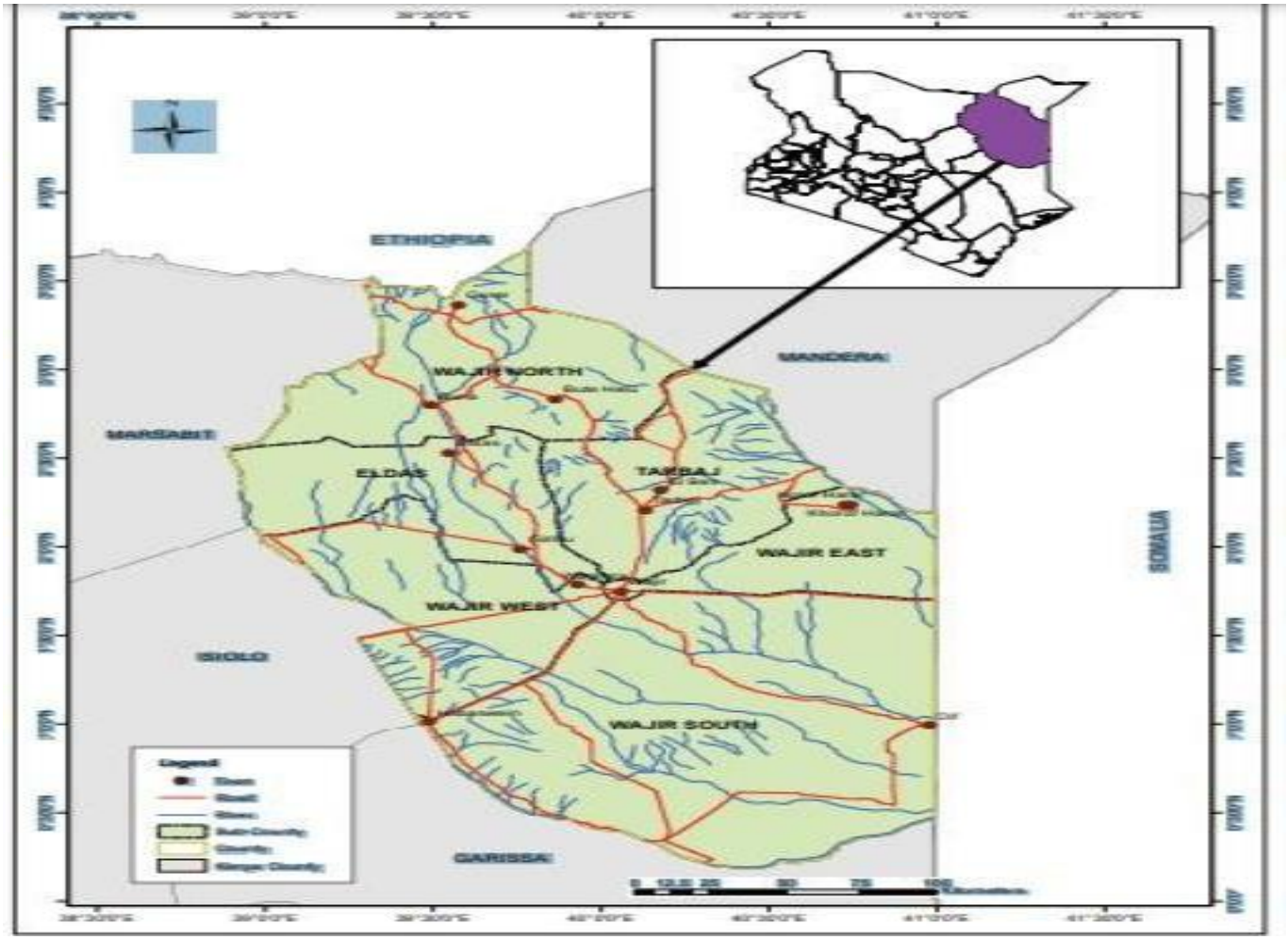


Figure 1: Location of Wajir County in local and national context (Source: RCMRD)

Globally average temperatures has increased by more than 1°C since preindustrial times leading to both atmospheric and oceanic heat waves, melting of snows and icebergs and rising sea levels as the concentrations of greenhouse gases have increased. The projections of future global and

regional climate change indicate that continued emissions of greenhouse gases will cause further warming and changes to our nature.

Equally at regional level Kenya has been experiencing adverse climate change impacts ranging from rising temperature, extreme and unpredictable weather change, sporadic rainfall, prolonged dry periods, pest and disease outbreaks and strong winds. The extreme weather conditions have resulted to food and nutrition insecurity, damage on infrastructure and homesteads, loss of lives, loss of livelihoods. This has consequently affected the country's development and economy status as funds that will otherwise be used in development is used in disaster management due to climate change. Subsequently this has affected the achievement of the country's goals as envisioned in Kenya Vision 2030, Sustainable Development Goals and other national plans.

Wajir County being classified as one of the ASAL counties with fragile ecosystems has most impacted by climate change thus the need to have an action plan to guide the mitigation and adaptation to the impacts. These changes in climate have caused and will cause extensive direct and indirect harm to the county's ecosystem and its people which include:

- prolong drought threatening habitable land and particularly biological infrastructure
- Extreme weather, including high temperature and low rainfall affecting the land production and vegetative regeneration
- Further pressure on the scarce water resources and food production systems with associated impacts on the ASAL ecosystems
- Increased chance and upscale of invasive species
- Heightened risk of the arrival of new pests and diseases
- Poorer water quality
- Desertification

The development of Wajir County Climate Change Action Plan is anchored on article 10 of The Constitution which outlines 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 that 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. It is also anchored on Climate Change Act (2016) which is the core legislation regulating Kenya's climate change response through mainstreaming climate change into sector functions, and it is

the legal foundation of the action plan. The plan is also in line with National Climate Change Action Plan 2018-2022), Kenya Climate Smart Agriculture Strategy (2017-2026), Climate Risk Management Framework (2017), National Climate Change Policy (2018), and National Climate Finance Policy (2018), among other sector plans and policies that address aspects of climate change.

Vulnerability to Climate Change

Wajir County lies within the arid and semi-arid dry and hot grassland region where the climate is influenced by unfavorable ecological systems. The county is characterized of high temperatures and low humidity while the summers are short, sweltering, muggy, and mostly cloudy; the winters are short, warm, windy, and partly cloudy; and it is dry year round. Over the course of the year, the temperature typically varies from 73°F to 97°F and is rarely below 71°F or above 100°F. February is the warmest month in the year with a temperature of 39℃. Wajir County experiences seasonal variation in rainfall. The rainfall patterns are characterized of long and short seasons with annual average precipitation of 240mm. The long rains occur in only in April in the recent years unlike the usual MAM. While the short rains begin at the end of October until December at an average of 240mm and generally Rainfall has become irregular and unpredictable. The frequency and magnitude of extreme weather events is projected to increase with far reaching impacts across the county effecting the solely livestock of Wajir county populace which is the pastoralism.

1.1 Purpose and process of the CCCAP

1.1.1 Purpose of CCCAP

The County Climate Change Action Plan (CCCAP) assesses the current situation of the county with regard to climate change risk and outlines the NCCAP's agenda for adaptation and mitigation in the county level as a response to the current situation and projected impact Wajir County Climate Change Action Plan 2023-2027 seeks to further Kenya’s development goals by providing mechanisms and measures to achieve low carbon climate resilient development, in a manner that prioritizes adaptation, and recognizes the essence of enhancing the climate resilience. The report further Align climate change actions in the county with both the global and National Government’s development agenda while encourage participation of the

private sector, civil society, and vulnerable groups within society, including children, women, older members of society, persons with disabilities, youth, and members of minority or marginalized communities of Wajir county populace. The Plan helps the county to Guide the mainstreaming of climate change adaptation and mitigation actions into sector functions by creating a resilient and thriving environment and economy using a participatory approach that builds the capacity of local community to enhance locally led climate actions.

1.1.2 Process of CCCAP

The development of Wajir county climate Action plan has underwent various process as underline in the FlloCCA and the project operation manual (POM) as follows:

- Preparation of first Wajir county climate change action plan by the TWG and the climate change unit
- Collection of public inputs and feedback on the draft
- Multi-stakeholders validation of the WCCCAP
- Preparation of WCCCAP final draft
- Presentation of WCCCAP for deliberation and approval
- Finally, WCCAP presentation of WCCCAP to the Wajir county assembly for deliberation and approval

1.2.0 Underlying Climate Resilience Context

Wajir County falls in the semi-arid region in the North Eastern part of Kenya. The already delicate environment makes the county prone to hazards and disasters. It is paramount to address hazards promptly, failure to which they advance to disasters. Disasters threaten food security through disruption of the nomadic lifestyle, cropping and overall ecosystem procedures. Compromised food security contributes to reduced nutrition and increased disease incidences. Hazards are complex as a primary hazard can generate a secondary hazard. For example, floods which is a primary hazard leads to subsequent hazards such as conflicts, human and livestock diseases. Proper mechanisms on how to handle these hazards before they graduate to disasters should be identified and put in place. Great strides have been made at the global, regional and national levels with the formulation of policies and frameworks that are useful for disaster management. For instance, the Sendai Framework 2015-2030 which is closely linked to the 2030 Agenda for Sustainable Development, has clear targets and priorities that should help with the fight against disasters. There

is a need to streamline global and national policies on disaster risk reduction at the county level. County governments have a duty to draft policies that address their unique hazard and disaster challenges.

1.2.1 Impacts of Climate Hazards in the County

1.2.1.1. Drought

Wajir county's climate and environmental conditions make it susceptible to drought episodes. Wajir county has a generally hot and dry climate with minimal rainfall received during the year. Drought is a slow onset hazard that can have devastating impacts on the entire ecosystem. Shortage or lack of adequate precipitation affects pasture, availability of food due to crop failure, reduced quantity of drinking water and leads to ethnic rivalry also Humans-wildlife conflict. Unsustainable land uses, increasing human population and conversion of land for arable farming coupled with poor communication infrastructure and lack of (or poorly implemented) traditional coping mechanisms are also major catalysts of droughts in the county. It is evident that climate change exacerbates drought in the county, therefore, integration of climate change adaptation and disaster risk management strategies is important.

1.2.1.2. Floods

Wajir county's flat landscape makes it prone to flooding. Flooding in the county is a result of heavy rainfall. Floods in the county are mainly flash floods. Flooding in the County causes damage to infrastructure with roads being rendered impassable thus affecting the supply of essential commodities such as food. Learning in schools is disrupted, forced migrations, destruction of property and death of livestock are other impacts of flooding. Clearance of vegetation cover in the County for charcoal production contributes to degradation and desertification. Other factors like climate variability and climate change are attributed to increasingly erratic rainfall that leads to flooding. Early warning system and proper communication channels aid in averting the adverse impacts of floods.

1.2.1.3 Conflicts

Conflicts disrupt the livelihoods of people. Various conflict types are common in Wajir county. Clan-based disputes and extremism are believed to be prone in the County. Competition for natural resources like water and pasture fuels conflicts. Human-Wildlife conflicts are rampant in several sub-counties in Wajir. Snake bites and hyena attacks have caused human and livestock deaths. Conflicts have negative impacts on the socio-economic well-being of any community. Some of

these include infliction of injury to humans and livestock; disruption of learning due to closure of schools, displacement of people and increased medical expenditure and among others. Community-based peace building approaches are key for early warning, response and post-conflict management. Initiatives like the establishment of the Wajir Peace and Development Committee (WPDC) in 1994 have borne fruits in the fight against conflicts in Wajir (Karienye & Warfa, 2020).

1.2.1.4 Environmental Degradation

Wajir county falls in the arid and semi-arid region of Kenya. Arid and Semi-Arid Lands are fragile and prone to environmental degradation. Minimal vegetation cover leaves the ground bare and exposed to extreme anthropogenic and climatic events. Environmental degradation is the deterioration of the environment. Factors that contribute to environmental degradation in Wajir county include soil erosion, overgrazing, invasive species, clearing of vegetation for charcoal production and disposal of both solid and liquid waste. Climate change and variability and increased human population also exacerbate environmental degradation by putting pressure on the limited resources. Environmental degradation impacts the availability of pasture, water and contributes to increased flooding. Mechanisms aimed at reducing environmental degradation should be put in place in the County.

1.2.1.5 Human Diseases

Good health is mandatory for meaningful development to take place in any region in the world. Human diseases incapacitate people. Disease outbreaks can graduate into a disaster if not controlled on time. Pastoralist communities face great challenges when it comes to accessing quality health care. Some of these constraints include uneven distribution of health facilities, long travel distance to the health facilities and few medical personnel. The most prevalent human diseases in the county are Cholera, Measles, Kala-azar, Rift Valley Fever (RVF), Malnutrition, and 3 emerging diseases such as the 2019 corona virus (COVID19) pandemic together with conditions such as diabetes, hypertension, obesity and cancer.

1.2.1.6 Livestock Diseases

Livestock rearing is the backbone of the economy of Wajir county. Inhabitants of the County are pastoralists. Livestock disease outbreak can affect the socio-wellbeing of the entire community. Livestock reared in the county include cattle, donkeys, sheep, goats and camel. Livestock diseases, drought and minimal resources affect the livestock sector. Common livestock diseases in Wajir county include Foot and Mouth Disease (FMD), peste des petits (PPR), contagious caprine pleuropneumonia (CCPP), Rift Valley Fever (RVF), sheep and goat pox, Trypanosomiasis, Middle East Respiratory Syndrome (MERS), Anthrax and Lumpy Skin Disease (LSD). Most of these

diseases are highly contagious and cause immense losses (through death and decreased productivity) when they attack animals.

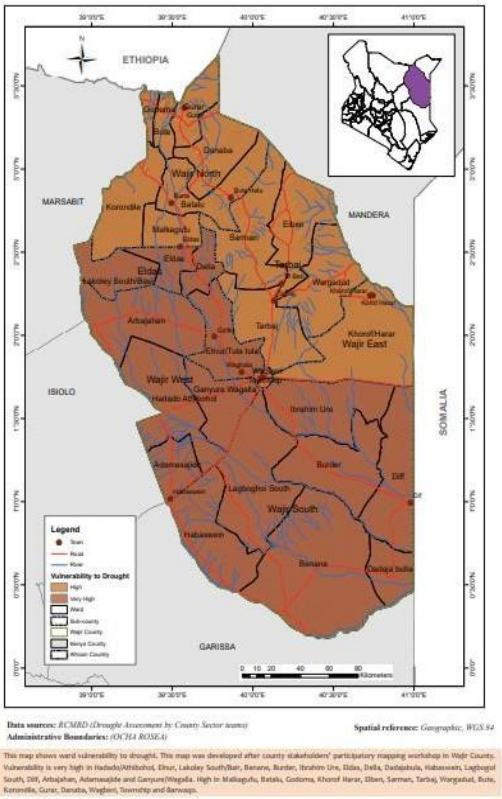
1.2.1.7 Crop Diseases and Pests

Crop production is rarely practised in Wajir county. Agriculture is practised in depressions and along drainage lines where there is more moisture due to seasonal flooding (Wajir CIDP, 2018). The poor environmental and climatic conditions hinder agricultural activities. The main crops grown for subsistence include sorghum, drought tolerant maize, beans, melons, cowpeas, green grams and horticultural crops like mangoes, citrus, kales, spinach, tomatoes, sweet and hot peppers (Wajir CIDP, 2018). Challenges faced by farmers in the region are crop disease and pest incidence, erratic rainfall and high temperatures. Crop diseases and pests in the county include Head smut, black leg (for Irish potatoes only) and black rot (for cabbages), while the pests that attack crops are such as; aphids, mealybug, desert locust, quelea quelea and stalk borers.

1.2.2 County Climate Hazard Map

The purpose of hazard maps is to provide a set of information in a form of a visual presentation concerning hazards and related disasters prevailing in a given geographic area. This visualization is for subsequent use in systematically addressing underlying risk factors and taking necessary measures to reduce potential adverse impacts on their geographic location so that disaster prevention activities and measures could be undertaken. Depending on the details they provide, hazard maps therefore would be an important tool for enhancing early warning, preparedness, contingency planning and implementing relief, early recovery, and rehabilitation interventions. As importantly, hazard maps could be used for planning and implementation of preventive measures including building resilience and adaptive capacity.

Figure 2: Drought in wards



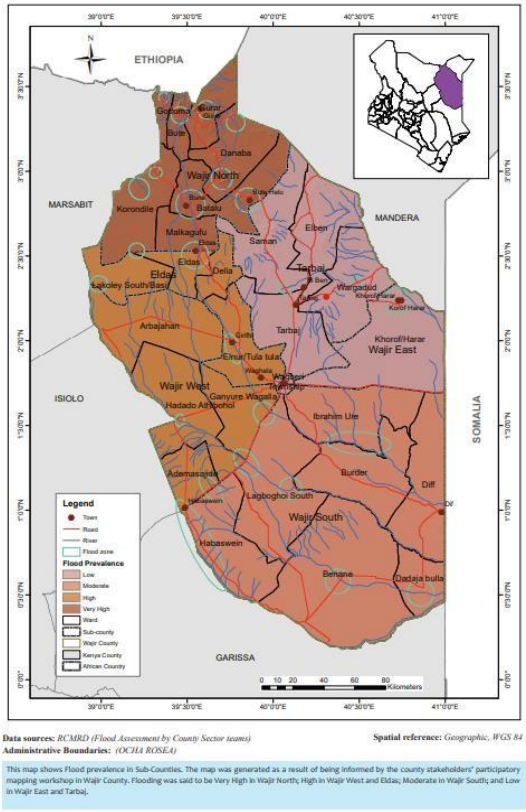
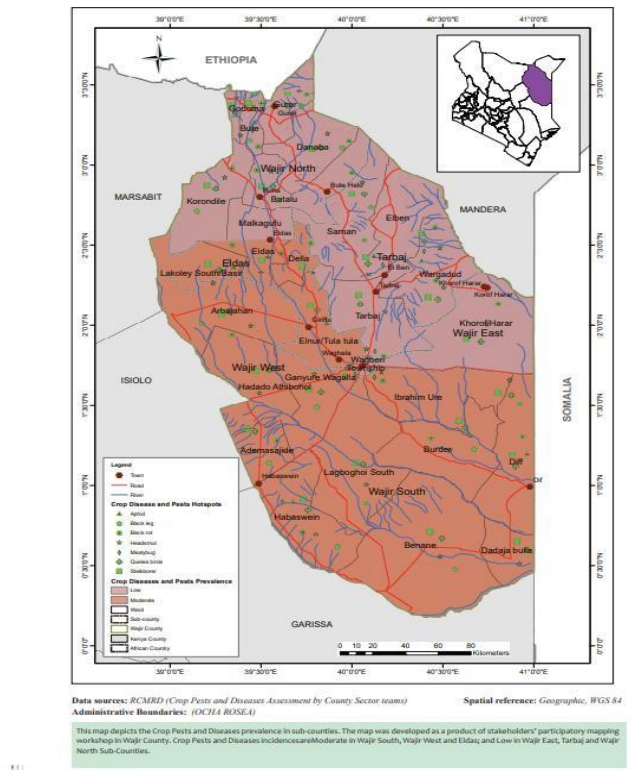


Figure 3: Flood prevalence in sub-counties

Figure 4: Crop disease and Pests in sub-counties



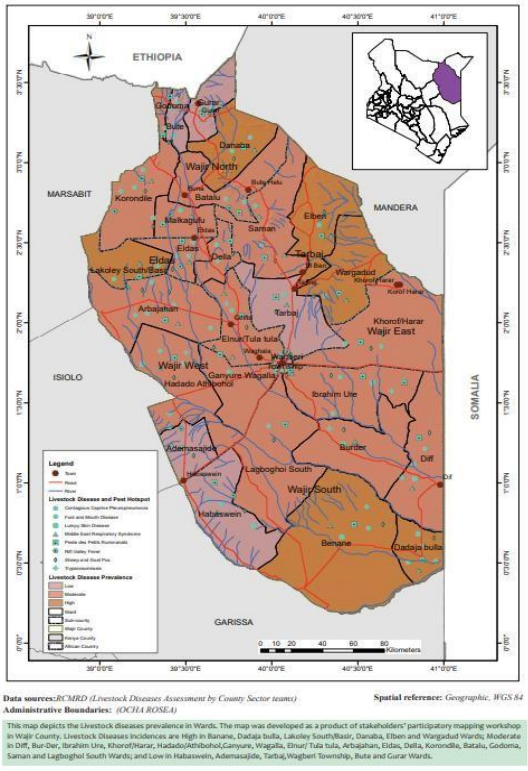
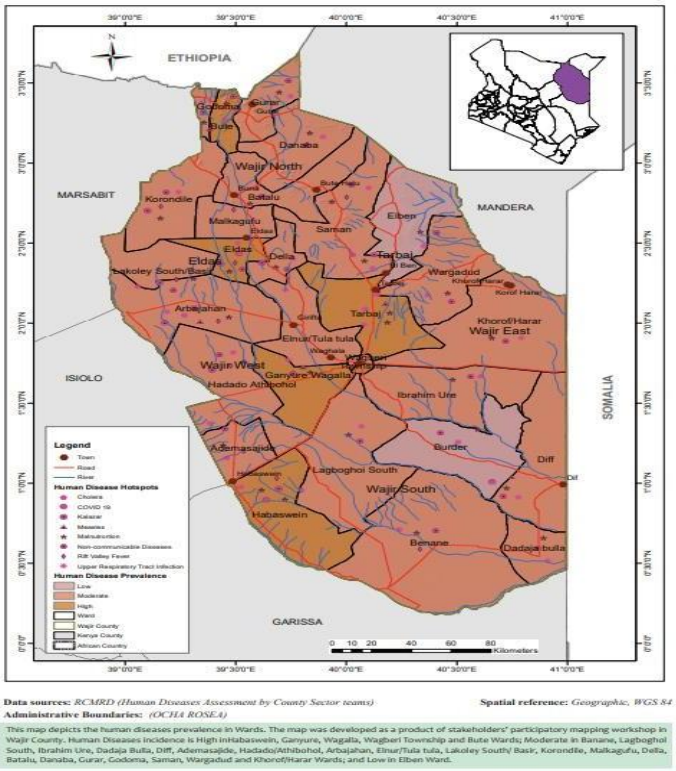


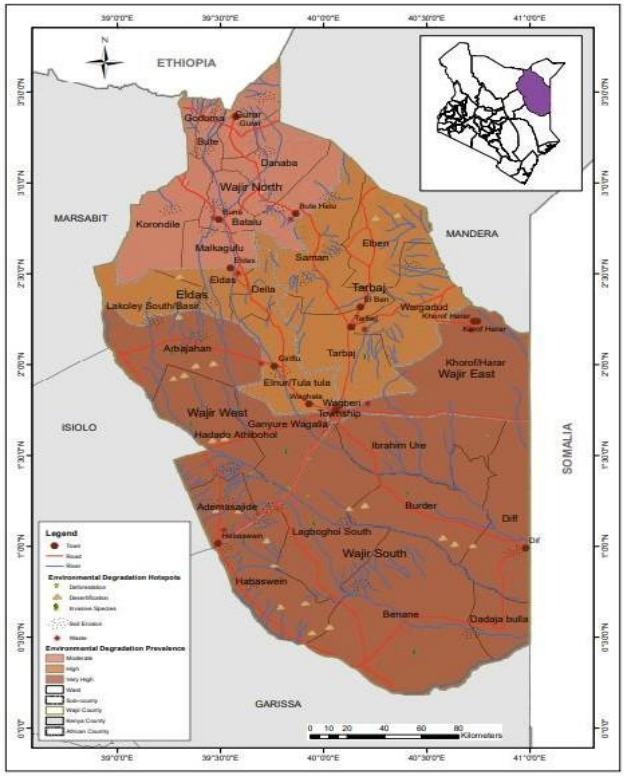
Figure 5: Livestock diseases prevalence in wards

Figure 6: Human diseases prevalence in wards



Data sources: *RCMRD (Human Diseases Assessment by County Sector teams)* **Spatial reference:** *Geographic, WGS 84*
Administrative Boundaries: *(OCHA ROSEA)*

This map depicts the human diseases prevalence in Wards. The map was developed as a product of stakeholders' participatory mapping workshop in Wajir County. Human Diseases incidence is High inHabaswein, Ganyure, Wagalla, Wagberi Township and Bute Wards; Moderate in Banane, Lagboghoi South, Ibrahim Ure, Dadaja Bulla, Diff, Ademasajide, Hadado/Athiboho, Arbajahan, Elnur/Tula tula, Lakoley South/ Basir, Korondile, Malkagufu, Della, Batalu, Danaba, Gurar, Godoma, Saman, Wargadud and Khorof/Harar Wards; and Low in Elben Ward.

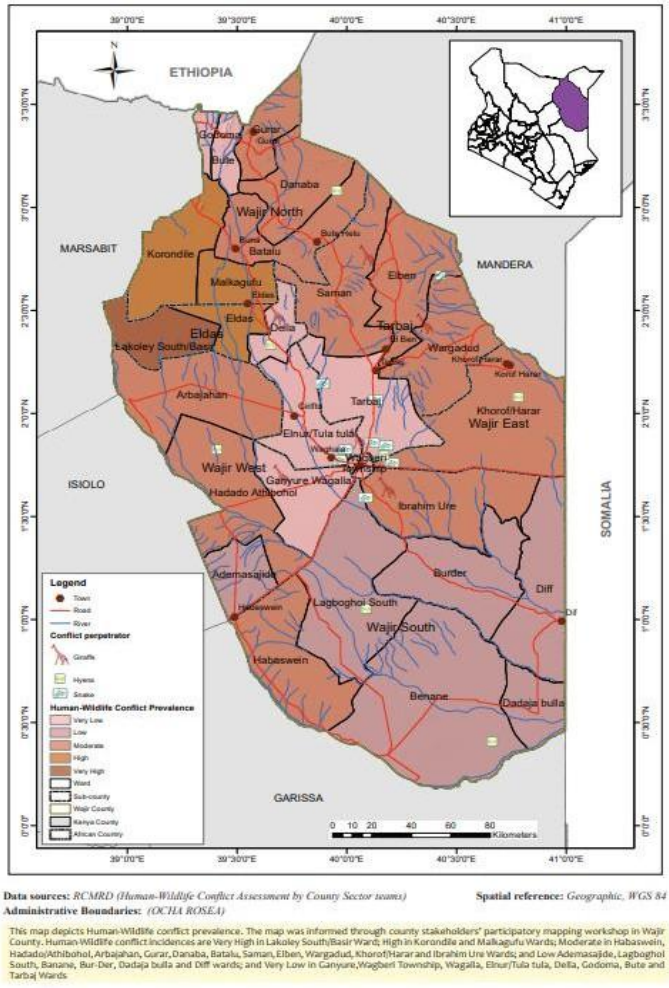


Data sources: *: RCMRD (Environmental Degradation Assessment by County Sector teams)* **Spatial reference:** *Geographic, WGS 84*
Administrative Boundaries: *(OCHA ROSEA)*

This map shows Environmental Degradation prevalence in Sub-Counties. The map was generated as a result of being informed by the county stakeholders' participatory mapping workshop in Wajir County. Factors highlighted to cause Environmental Degradation are Desertification, Invasive species, Improper waste disposal and Soil Erosion. Degradation was said to be Very High in Wajir South, Wajir West and Wajir East; High in Eldas and Tarbaj; and Moderate in Wajir North.

Figure 7: Environmental degradation prevalence in sub-counties

Figure 8: Human-Wildlife conflict



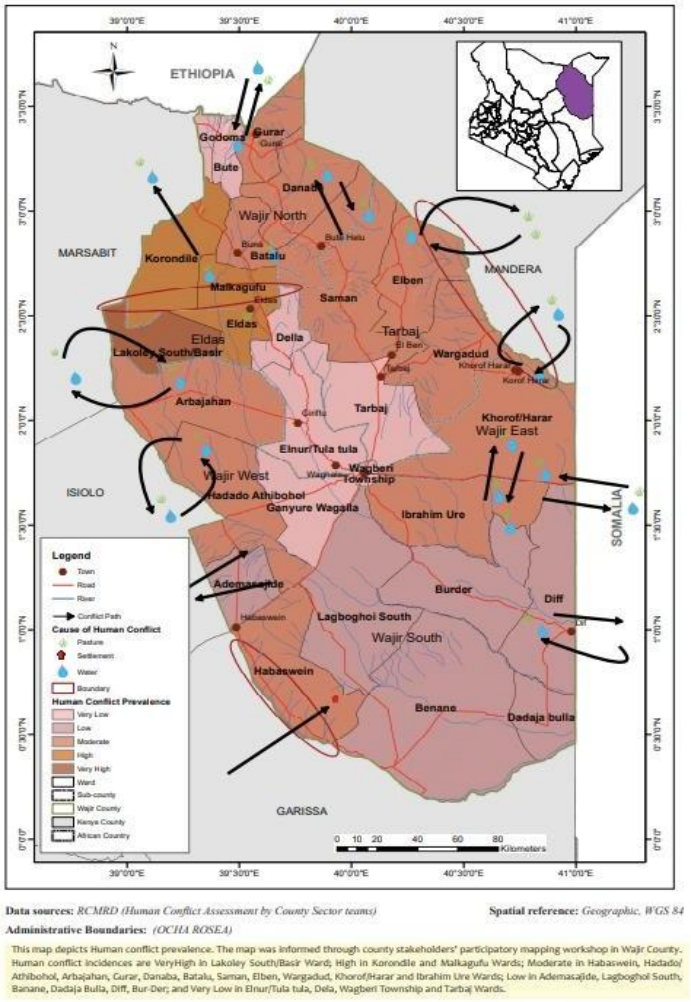


Figure 9: Human Conflict

1.2.3 Summary of Differentiated Climate exposure and Vulnerability of key groups and livelihoods in the County

Wajir County is located in the Northeastern region of Kenya between latitudes 3° N 60'N and 0 20'N and Longitudes 39° E and 41° E and covers an area of 56,685.9 Km2. It borders Somalia to the East, Ethiopia to the North, Mandera County to the North-East, Isiolo County to the South-West, Marsabit County to the West and Garissa County to the South. The county is home to various communities, including the Somali's and is predominantly Arid, with limited access to water and characterized by a nomadic pastoralist lifestyle. Exposure and vulnerability profiles can be analyzed in relation to several key factors: Climate Change and Environmental Factors where the county is highly susceptible to climate change impacts, including erratic rainfall patterns,

prolonged droughts, desertification, conflict(Resource base conflicts) and livestock diseases. Limited water resources and recurring droughts making communities vulnerable to water scarcity, food insecurity, and malnutrition. Environmental degradation, such as deforestation and land degradation, exacerbates the vulnerability of communities.

The main Livelihood and Economy in the county is Pastoralism, with majorly communities relying on livestock for their sustenance and income. Fluctuations in rainfall patterns and prolonged droughts directly affect the availability of pasture and water, leading to livestock deaths, loss of income, and increased vulnerability.

1.2.4 Differentiated impacts of climate trends and risks

The past and current climate trends and risks in Wajir County have had differentiated impacts on various key interest groups, particularly women, youth, ethnic minorities, people living with disabilities, and other marginalized and vulnerable groups. These specific challenges and vulnerabilities on key interest groups are.

Women in Wajir County often bear the primary responsibility for household tasks, including water and food provision. Climate change exacerbates their burden as water scarcity and droughts increase. Limited access to education and economic opportunities restricts women's ability to adapt to changing conditions, hindering their resilience.

Gender inequalities, such as limited decision-making power and control over resources, reduce women's capacity to cope with climate risks and contribute to their vulnerability.

Youth: Unemployment and limited economic prospects for youth in Wajir County exacerbate their vulnerability to climate change impacts. As traditional livelihoods, like pastoralism, become less viable due to climate-related challenges, youth face reduced opportunities for income generation. Lack of access to quality education and skills training further limits their ability to adapt and find alternative livelihood options.

People Living with Disabilities: People living with disabilities often face additional barriers in adapting to climate change impacts and this includes. Limited mobility, communication challenges, and reduced access to information and services can hinder their ability to cope with disasters and access support during emergencies. Inadequate infrastructure and facilities, including inclusive evacuation centers, can pose significant challenges for their safety and well-being.

Other Marginalized and Vulnerable Groups such as the elderly, internally displaced persons (IDPs), and those living in poverty, face compounding risks associated with climate change. Limited access to basic services, including healthcare, water, and sanitation, is further constrained

by climate-related challenges. Inadequate social protection measures and weak governance structures may exacerbate the vulnerability of these groups.

Addressing the differentiated impacts on these key interest groups requires targeted interventions and policies that prioritize their unique needs and perspectives. Ensuring the participation and inclusion of these groups in decision-making processes, promoting access to education and skills training, strengthening social safety nets, and implementing climate-resilient infrastructure are vital for building their resilience and reducing vulnerability in Wajir County.

1.3 Brief Overview of Climate Change Actions in the County

1.3.1 Mainstreaming of NCCAP in County Actions

This National Climate Change Action Plan (NCCAP) 2018-2022 is a five-year plan to steer Kenya's climate change action. The Plan derives from the Climate Change Act (Number 11 of 2016), which requires the Government of Kenya (GoK) to develop Action Plans to guide the mainstreaming of climate change into sector functions. NCCAP 2018-2022 will further the achievement of Kenya's development goals by providing mechanisms to realize low carbon climate resilient development. It emphasizes sustainability, while prioritizing adaptation and enhanced climate resilience for vulnerable groups, including women, youth, persons with disabilities, and marginalized and minority communities.

NCCAP 2018-2022 was developed at a time when significant changes in Kenya's climate were evident. Climate-related disasters, particularly droughts and floods, were frequent, and their impacts adversely affected the economy and livelihoods in the country. Temperature rise spanned across all seasons, and rainfall patterns had changed. With an economy that is dependent on climate-sensitive sectors, such as agriculture, water, energy, tourism, wildlife, and health, these changes in the country's climate were singled out as severe threats to the well-being of Kenyans. The economic cost of floods and drought in the country created a long-term fiscal liability equivalent to between 2% and 2.8% of the country's Gross Domestic Product, every year.

Seven priority areas underpin NCCAP 2018- 2022;

1. Disaster Risk Management.

2. Food and Nutrition Security.
3. Water and the Blue Economy.
4. Forestry; Wildlife, and Tourism.
5. Health, Sanitation, and Human Settlements.
6. Manufacturing.
7. Energy and Transport.

Through these priority areas, climate change action is aligned to the Government's Big Four Agenda, and the Sustainable Development Goals (SDGs). NCCAP 2018-2022 seeks to increase the number of households and entities benefiting from devolved adaptive services; improve the ability of people to cope with drought and floods; improve the coordination and delivery of disaster management response; improve crop productivity through roll out of actions in the Kenya Climate Smart Agriculture (KCSA), 2017-2026; improve crop productivity by increasing the acreage under irrigation; increase productivity in the livestock and fisheries sectors through implementation of relevant actions in KCSA; diversify livelihoods to adjust to the changing climate; increase annual per capita water availability through development of water infrastructure; climate proof water harvesting and water storage infrastructure, and improve flood control; promote water efficiency through monitoring, reducing wastage, re-using, recycling, and modelling; improve access to good quality water; improve the climate resilience of coastal communities; afforest and reforest degraded and deforested areas in Counties; implement initiatives to reduce deforestation and forest degradation; restore degraded landscapes in arid and semi-arid lands, and rangelands; promote sustainable timber production on privately owned land; conserve land area for wildlife; reduce incidences of malaria and other vector-borne disease; promote recycling to divert collected waste away from disposal sites; climate proof landfill sites; control flooding in human settlements; promote green buildings; increase energy efficiency; improve water use and resource efficiency; optimise manufacturing and production processes; promote industrial symbiosis in industrial zones; increase renewable energy for electricity generation; increase captive renewable energy; improve energy efficiency and conservation.

1.3.2 Climate Change in CIDP

The Wajir County Participatory Climate Risk Assessment (PCRA) process, which led to the development of strategic adaptation investment priorities, was inclusive and involved various stakeholders, such as youths, women, persons with disabilities (PLWD's), local partners,

professional bodies, county government institutions, and leadership. The process was facilitated by a well-coordinated technical working group and culminated into a comprehensive Wajir County PCRA Report.

By prioritizing these strategic adaptation investments and actions, the County aims to enhance resilience, mitigate climate risks, and ensure sustainable development in the face of ever-changing climate conditions. These priorities are aligned with the County's Integrated Development Plans (CIDP) commitment to enhancing water access and security, promoting self-reliance in food production, and preserving its natural resources, while safeguarding the well-being and livelihoods of its residents.

1.3.3 Other key climate actions/strategies in the County

Successful implementation of the actions planned for in this NCCAP will require the efforts of Kenya's 47 counties. Wajir County Governments being the implementing agents of many of the climate actions set out by NCAAP will implement the actions in such locally-appropriate ways as would bring on board the unique needs of local populations. Wajir County Governments will play critical roles in such areas as:

Table 1: Wajir County Government roles

Priorities	**Climate action**
Disaster risk management	➢ Enacted a disaster management bill. Wajir county's Disaster Management Bill (2014) acts as a guide on the prevention, mitigation, preparedness, response and recovery from emergencies and disasters. ➢ Priority climate actions to be implemented under the Disaster Management bill which aimed at supporting action against climate-induced risks, such as drought risk management, resilience and preparedness measures, response

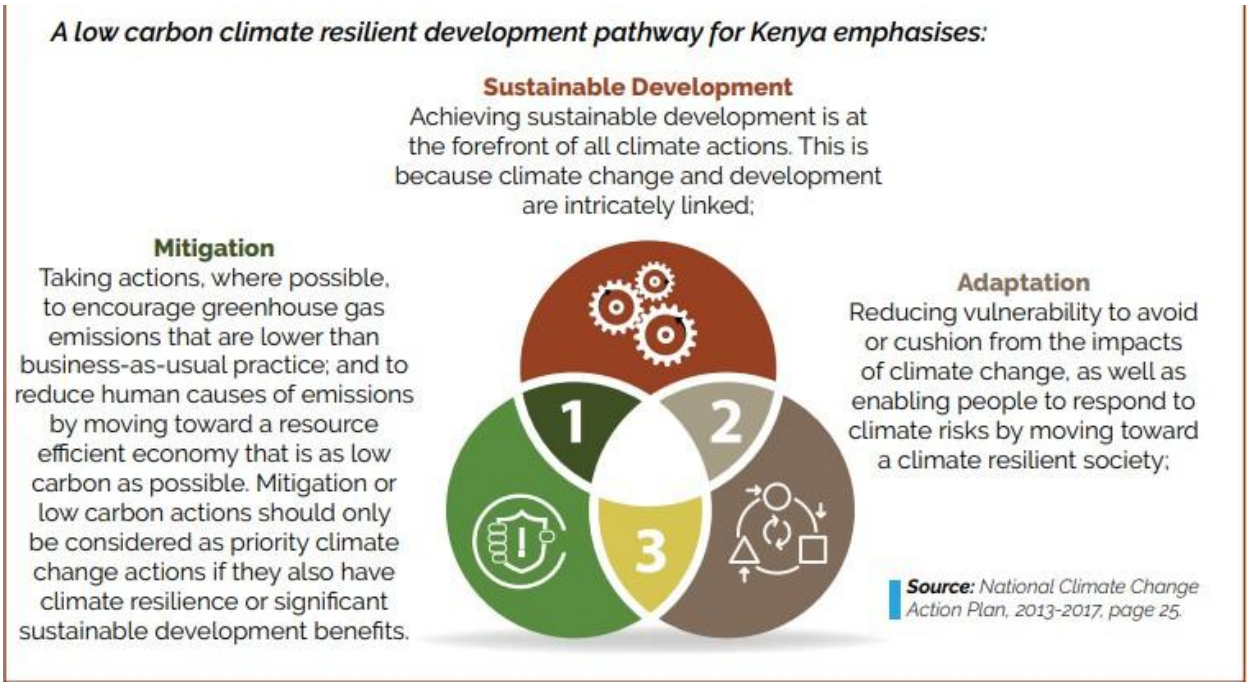
	interventions, and recovery interventions that include protecting the most vulnerable populations. ➢ Response measures to address drought, floods, and other climate-driven disasters.
Food and Nutrition	Agriculture, including crop and animal husbandry; livestock sale yards; County abattoirs; plant and animal disease control.
Water	Water management and implementation of policies established by the National Government on water conservation.
Forestry; Wildlife, and Tourism	Implementation of policies on natural resource and environmental conservation, and the management of community and private wildlife conservancies.
Health, Sanitation, and Human Settlements	• Wajir County health facilities and promotion of primary health care, refuse removal and dumping, solid waste disposal, housing, and management systems for storm water. • Climate proof landfill sites. • Control flooding in human settlement. • Promote green buildings: Buildings are better able to withstand the impacts of climate change through an improved policy and regulatory framework.
Manufacturing	Improve energy and resource efficiency in manufacturing sector.
Energy and Transport	➢ Increase captive renewable energy. ➢ Improve energy efficiency and conservation. ➢ Climate proof energy infrastructure.

	➢ Promote the transition to clean cooking with alternative clean fuels in urban areas; and clean biomass (charcoal and wood) cook stoves and alternatives in rural areas.

CHAPTER TWO: POLICY ENVIRONMENT

2.1 National Policy Context

Kenya takes climate change seriously. This is demonstrated by its enactment of the Climate Change Act (Number 11 of 2016). This Act is the first climate change-dedicated legislation in Africa. It provides the regulatory framework for enhanced response to climate change, and mechanisms and measures to transition to low carbon climate resilient development. This pathway emphasizes sustainable development, while prioritizing adaptation, and recognizing the importance of enhancing the climate resilience of vulnerable groups, including children, women, youth, persons with disabilities, the elderly, and marginalized and minority communities.



2.1.1 The National Perspective

The Climate Change Act sets out the institutional structures and responsibilities in the oversight and management of NCCAPs, including this NCCAP 2018-2022. The National Climate Change Council (NCCC) is responsible for overall coordination, while the Cabinet Secretary responsible for climate change affairs submits NCCAPs for approval, and reports to NCCC and Parliament on their implementation. Implementation of NCCAP 2018- 2022 is supported by a number of National, County, and sectoral policies and plans that have been developed, such as the National Climate Change Response Strategy (2010), the National Adaptation Plan (NAP 2015-2030), the Kenya Climate Smart Agriculture Strategy (2017-2026) and the National Climate Finance Policy

(2017). County Governments are enacting regulations to allocate a portion of their development budgets to support climate change action. State departments and national public entities are required to establish climate change units to integrate NCCAP 2018-2022 into their strategies and implementation plans, and to report to NCCC on an annual basis. County Governments are to integrate actions in NCCAP 2018-2022 into their CIDPs for the 2018-2022 period, and designate a County Executive Committee member to coordinate climate change affairs.

Climate change is causing rise in average global temperatures and sea levels. This is triggering major environmental and economic disruptions. In Kenya, heat, drought, and floods are negatively impacting lives, with human health increasingly being at risk. Extreme climate events cause significant loss of life, and adversely affect the national economy. In the 1997-2016 period, the country experienced an average of 57.95 deaths per year, and GDP losses of 0.362% per year, due to extreme climate events. The Kenyan economy is dependent on climate-sensitive sectors, such as agriculture, water, energy, tourism, wildlife, and health, whose vulnerability is increased by climate change. Increased intensities and magnitudes of climate related disasters in Kenya aggravate conflicts, mostly over natural resources. They are a threat to Kenya's security.

- High levels of multi-dimensional poverty, particularly in ASALs
- Gender inequality
- Environmental degradation, including loss of forest cover
- High reliance of the national economy and local livelihoods on rain-fed agriculture
- High level of water scarcity, and mismanagement of water resources
- Insecure land tenure, and land fragmentation
- Population growth, and migration to urban areas
- Heavy disease burden, and limited access to quality health care, particularly in rural, and remote areas.

2.1.2 National Legal and Policy Framework

Section 13 of the Climate Change Act, 2016 provides for the development of National Climate Change Action Plans (NCCAPs) to prescribe measures and mechanisms to mainstream adaptation and mitigation actions into sector functions of the National and County Governments. The Act requires the Cabinet Secretary responsible for climate change affairs to review and update the NCCAP every five-years. The first NCCAP was for the period 2013-2017. NCCAP 2018-2022 is Kenya's second Action Plan on climate change. It builds on NCCAP 2013-2017 by which considerable progress was made. This progress includes, the establishment of climate change funds in five counties, expanding geothermal power, establishment of the National Climate Change

Resource Centre, and improvement of the legal and policy framework (see Chapter 2 for more details). NCCAP 2018-2022 is a framework for Kenya to deliver on its Nationally Determined Contribution (NDC) under the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC).

> "Kenya's NDC under the *Paris Agreement* of the *UNFCCC* includes mitigation and adaptation contributions. In regard to adaptation,"Kenya will ensure enhanced resilience to climate change towardsthe attainment of Vision 2030, by mainstreaming climate change into Medium Term Plans (MTPs), and implementing adaptation actions." The mitigation contribution "seeks to abate Kenya's GHG emissions by 30% by 2030, relative to the business as usual scenario of 143 MtCO2eq." Achievement of Kenya's NDC is subject to international support in the form of finance, investment, technology development and transfer, and capacity development."
>
> - ***Kenya's Nationally Determined Contribution(NDC) (2016)***

Climate change is a shared responsibility between the National Government and County Governments. The National Government led and guided the process of developing NCCAP 2018-2022, and worked with County Governments during this process. Implementation of the Plan is coordinated by the two levels of government, in line with the Constitution of Kenya (2010). NCCAP 2018-2022 coincides with the second generation of County Governments. County Governments are responsible for a number of devolved functions whose actions will contribute to the achievement of NCCAP 2018-2022, and the Big Four Agenda. NCCAP 2018-2022 guides the climate actions of the National and County Governments, the private sector, civil society, and other actors, to enable Kenya transition to low carbon climate resilient development.

the Climate Change Act 2016 mandates the National Climate Change Council to set targets for the regulation of GHG emissions (Section 6). Section 13 of the Act further requires the NCCAP to prescribe measures and mechanisms to review levels and trends of GHG emissions. Section 15 further imposes an obligation on all state departments and national government public entities to report on sectoral GHG emissions for the national inventory.

NEMA is empowered, pursuant to Section 17, to regulate, enforce and monitor compliance on levels of GHG emissions on behalf of the National Climate Change Council. Failure to comply may incur a fine of up to 1 million Kenyan shillings and five years' imprisonment for officers of an entity.

The Climate Change Act also provides for incentives to those who encourage and put in place measures for the elimination of climate change, including the reduction of GHG emissions and the use of renewable energy.

The NCCAP 2018–2022 provides detailed guidelines for GHG emissions. According to the NCCAP, actions in the six mitigation sectors set out in the UNFCCC – agriculture, energy, forestry, industry, transport and waste – are expected to lead to lower emissions than in the projected baseline and help to meet Kenya's mitigation NDC to abate GHG emissions by 30 per cent by 2030 relative to the business-as-usual scenario.

As part of the priority enabling actions, the NCCAP required the National Treasury and Planning Department, among other lead agencies, to identify policy and fiscal incentives (such as tax incentives, reduced energy tariffs, low interest loans and public-private partnerships) that promote the uptake of climate-friendly technology by 30 December 2020. Although the 30 December 2020 deadline contemplated in the NCCAP was not met, the National Treasury is continuing the process of developing a National Policy Framework on Green Fiscal Incentives. An inter-ministerial taskforce with officers drawn from ministries, departments and agencies, development partners and specialised technical agencies and supported by consultants is expected to develop the policy. The National Treasury is responsible for developing climate finance strategy and regulations, and the National Climate Change Fund is also vested in the department. In its Strategic Plan 2018/19 – 2022/23, the National Treasury recognises climate finance action through sectoral policy development as one of its key result areas.
In October 2021, the Central Bank of Kenya (CBK) issued its Guidance on Climate-Related Risk Management, which is meant to guide institutions licensed under the Banking Act, Cap 488 on climate-related financial risks. The guidance incorporates a governance approach that aims to integrate climate risk considerations in the management, business decisions and activities of the institutions. A risk-based approach under the Guidance will also assist the institutions to effectively entrench climate-related financial risks in their risk management frameworks. Consequently, banks are expected to develop internal reporting structures and implementation plans and, ultimately, submit quarterly reports to CBK from the quarter ending 30 September 2022.
The NCCAP expects the public sector to play a role in the planning, implementation and monitoring of climate change interventions, with an emphasis on enhancing adaptive capacity

and improving the ability to withstand climate shocks. The private sector is also expected to take measures towards reducing GHG emissions from business operations.

It remains too early to assess whether the Kenyan government has delivered on its current targets on climate action. Most of the timelines contemplated under the NCCAP were set to lapse at the end of 2020 or in 2023.

Section 91 of the Energy Act establishes a renewable energy feed-in-tariff (FIT) system with the objectives of catalysing the generation of electricity through renewable energy sources and reducing GHG emissions by lessening reliance on non-renewable energy resources, among other objectives. The FIT policy was developed by the Ministry of Energy in 2008 as a guideline on the government's commitment to incentivise the generation and use of renewable energy through preferential tariffs.

There has been limited litigation in the area of climate action in Kenya. However, citizens are becoming more empowered to take up action to enforce their environmental rights. A recent notable case is *Save Lamu & 5 others v. National Environmental Management Authority (NEMA) & another* [2019] eKLR, where a community-based organisation representing the interests and welfare of Lamu residents challenged the issuance of an EIA licence for a proposed 1,050MW coal-fired power plant in Lamu, a proclaimed World Heritage Site. One of the grounds of the challenge was that the project was likely to contribute to climate change and was inconsistent with Kenya's low carbon development commitments. The Tribunal, in applying the precautionary principle, noted that 'the omission to consider the provisions of the Climate Change Act 2016 was significant even though its eventual effect would be unknown'. The licence was consequently cancelled and a fresh EIA study ordered.
However, given recent developments where financiers have pulled out owing to concerted lobbying efforts against the project over environmental concerns, it is unclear whether the project will be developed.
In October 2022, in *Seifert & another v. National Environment Management Authority & another* [2022] eKLR, the National Environment Tribunal emphasised the importance of public participation and the value of an EIA in undertaking projects that have an impact on the public. In this case, the tribunal cancelled an EIA licence that was wrongly issued for lack of public participation.[49]

Finally, during the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow, Scotland, Kenya announced its plan to work with African countries that form the 'Giants Club' conservation group (a group of African nations consisting of Kenya, Uganda, Gabon, Rwanda, Botswana and Mozambique) to raise resources for investment in the continent's climate change mitigation programmes. Kenya also announced an ambitious plan to plant an additional 2 billion trees and to set up a US$5 billion tree growing fund towards reforestation measures.

In his address at COP26, President Uhuru Kenyatta said that extreme weather events as a result of climate change, including floods and droughts, lead to losses of between three and five per cent of Kenya's GDP annually. He further stated that there is, consequently, an urgent need for Kenya and all nations to implement bold mitigation and adaptation measures to avert the inevitable climate crisis. Kenya recognises that climate finance is key to delivering these measures and that the special needs and circumstances of Africa must be considered in the debate.

More recently, the President of Kenya, HE Hon Dr William Samoei Ruto, pledged US$4.2 billion to boost agricultural production to enhance food security in the country. In addition, he committed to putting 3 million acres of land under irrigation to reduce the over-reliance on rain for agricultural production.

The current administration has also made robust commitments at COP27 in Egypt to, among other things, spearhead the convening of a continental summit focusing on climate action in 2023 under the Committee of African Heads of State and Government on Climate Change and to increase the national tree cover from the current 12.13 per cent to 30 per cent in the next 10 years at an estimated cost of US$5 billion

In general Kenya was in limelight contributing towards international climate change intervention goals with various policies and legal frame working as summarized below:

- International: Kenya’s NDC sets out the country’s actions to contribute to achieving the global goal, set out in the Paris Agreement.
- Kenya ratified the Paris Agreement on 27th January 2017 which now forms part of the law of Kenya.
- The Paris Agreement under the UNFCCC (United Nations Framework Convention on Climate Change) 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 committed to reduce the country’s GHG emissions by 30% by 2030

- National: The foundation for climate change action is the Constitution of Kenya (2010). Article 42 provides for the right to a clean and healthy environment
- The Climate Change Act, 2016 is the main legislation guiding Kenya's climate change response
- In addition, Kenya has developed the National Climate Change Response Strategy (2010), first NCCAP (2013-2017), National Adaptation Plan (NAP 2015- 2030), Kenya Climate Smart Agriculture Strategy (2017-2026), Climate Risk Management Framework (2017), National Climate Change Policy (2018) and National Climate Finance Policy (2018), among other sector plans

	Enabling Actions	Coordinating Institution and Relevant Partners	Expected Results (Process Indicator)
F1	▪ Operationalise NCCF, including establishing the management and oversight of the Fund; annual budgeting and reporting; development of policies, guidelines and procedures; and capitalising the Fund through GCF, DPs, and other contributions. Action continued from *NCCAP 2013-2017 – Finance 1.*	▪ The National Treasury and Planning ▪ Office of the Attorney General and Department of Justice	**By 30th December 2020** NCCF is operationalised, secretariat and management board in place, as set out in the Climate Fund regulations. **By 30th June 2023** Climate finance being disbursed through identified funding windows; and NCCF is linked with CCCFs.
F2	▪ Enhance the capacity of the NDA to mobilise and manage climate finance, including the management of, access to, and tracking of international climate finance; and development of funding proposals. ▪ Build the capacity of national institutions to gain accreditation for international finance mechanisms, and to develop bankable proposals.	▪ County Governments ▪ The National Treasury and Planning ▪ State Departments ▪ NEMA	**By 30th December 2020** Climate resource mobilisation strategy developed. **By 30th June 2023** Climate resource mobilisation strategy cascaded to the Counties (five Counties have developed strategies).

Figure 10: National and County Structures

2.2 County Enabling Legal & Policy Framework

Development of a comprehensive policy and regulatory framework for climate change is well underway in Kenya. The process is articulated in the Climate Change Act, 2016, and the National Climate Change Policy, 2018. A key requirement of the Climate Change Act is the development of regulations to provide further interpretation on some of its provisions, and to support the operationalisation of such administrative aspects of the Act as reporting requirements. At the County level, support is needed to develop appropriate legislation, including climate fund regulations that are informed by local contexts, aligned to County systems, and conform to national

public finance policies and laws. This legal and policy framework will guide the development and utilisation of CCCFs, and enable climate finance to address County-specific local issues.

2.2.1. Wajir county climate change Fund

Wajir have established County Climate Change Funds (CCCFs) that identify, prioritise, and finance investments to reduce climate risk and attain adaptation priorities. This is achieved through community-level planning committees that identify adaptation needs, guided by transparent decision making criteria. CCCF investments aimed at building climate resilience have largely focused on livestock, water, natural resource governance and climate information services. CCCFs work through the government's established planning and budgeting systems, and will be linked with the Climate Change Fund established under the Climate Change Act (2016). The CCCFs are structured to blend resources from international climate finance, development partners, the private sector, and National Government and County budgets. Wajir County Climate change fund (WCCCF) legislation was enacted in Wajir in 2016. The legislation obligates the setting aside of 2% of the county development budget. This amount to KES 85Million in 2017/18 fiscal year.

A priority action will be to operationalise the Climate Change Fund to be overseen by the National Climate Change Council, which will allocate funding for priority mitigation and adaptation initiatives. The action includes the establishment of regulations, and management and oversight functions. Work will be undertaken to link the National Climate Change Fund (NCCF) with CCCFs. In 2018, such CCCFs were established in Garissa, Kitui, Makueni and Wajir Counties, and were in the planning and design stages in many other Counties.

The County Governments have a key delivery role in implementing the Climate Change Act, 2016, having jurisdiction, as set out in the Fourth Schedule (Part 2) of the Constitution, over sectors relevant for climate change such as agriculture, soil and water conservation, forestry, water and sanitation, and health.

As of Dec 2017 Five county governments—Garissa, Isiolo, Kitui, Makueni and Wajir—had established County Climate Change Funds (CCCFs) that identify, prioritize and finance investments to reduce climate risk and achieve adaptation priorities.

These funds are structured to blend financial resources from international climate finance, multilateral development banks, the private sector, the GOK and their own county budgets.

Article 203(2) of the Constitution requires that County governments be allocated a minimum of 15% of national revenue received annually, but the allocation often surpasses the minimum thus giving County governments considerable scope to influence climate change investments.

2.2.2. CIDP and Sectoral Policies

Successful implementation of the actions planned for in this NCCAP will require the efforts of Kenya's 47 counties. County Governments are the main implementing agents of many of the climate actions and will implement the actions in such locally-appropriate ways as would bring on board the unique needs of local populations.

The Climate Change Act, 2016 requires that County Governments mainstream climate change actions and interventions in their CIDPs, while taking into account National and County priorities. In 2022, Wajir county CIDPs mentioned the impacts of climate change in their areas of jurisdiction, and many identified actions to address these impacts. The main climate change impact mentioned in the CIDPs was increased temperatures that resulted in prolonged dry spells and droughts. Erratic rainfall, flooding, and unpredictable climate patterns were also noted. The CIDPs pointed out that climate change negatively impacted economic activities, leading to reduced food and livestock production, scarcity of potable water, increased spread of diseases, and increased conflicts (human/ human and human/wildlife).

At county level, many County Governments integrated climate change in their 2013 County Integrated Development Plans (CIDPs); acknowledging that climate change poses threats to their sustainable development. Wajir County Governments passed regulations to establish County Climate Change Funds (CCCFs) which established institutional structures to mainstream climate change in plans and programmes. The private sector was an active partner in the implementation of adaptation-related actions. It provided technologies, insurance products, and climate information services; many of which are facilitated by smart-phone applications. Various companies have also been active in building the climate resilience of farmers in their supply chains.

2.3 National Current and Historical Climate Trends

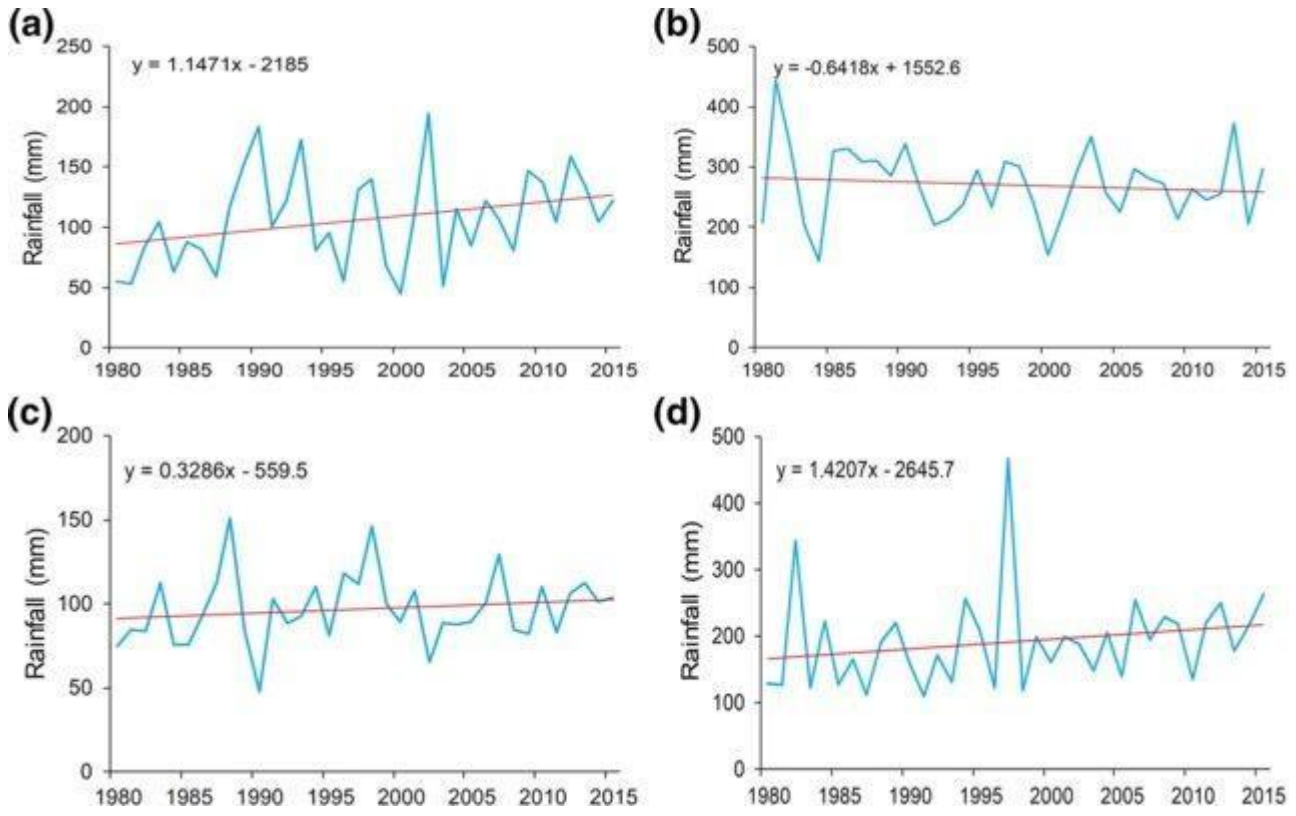


Figure 3: Kenya Time series of rainfall trends and patterns in the four standard seasons:

The above figure shows rainfall trend in the four seasons as mentioned below.
a) December–January–February.
b) March–April–May.
c) June–July–August; and
d) September–October–November. Source of data: (**KMD)**

2.4 County Historical Climate Trends

This presents Wajir County's climate climatology, 1981-2020, derived from observed historical data. Information should be used to build a strong understanding of current county climate conditions to appreciate future climate scenarios and projected change. You can visualize datafor the current climatology through a time series, the seasonal cycle, or as a monthly means. The analysis is available for both annual and seasonal data.

Wajir County Annual Total Rainfall Trend

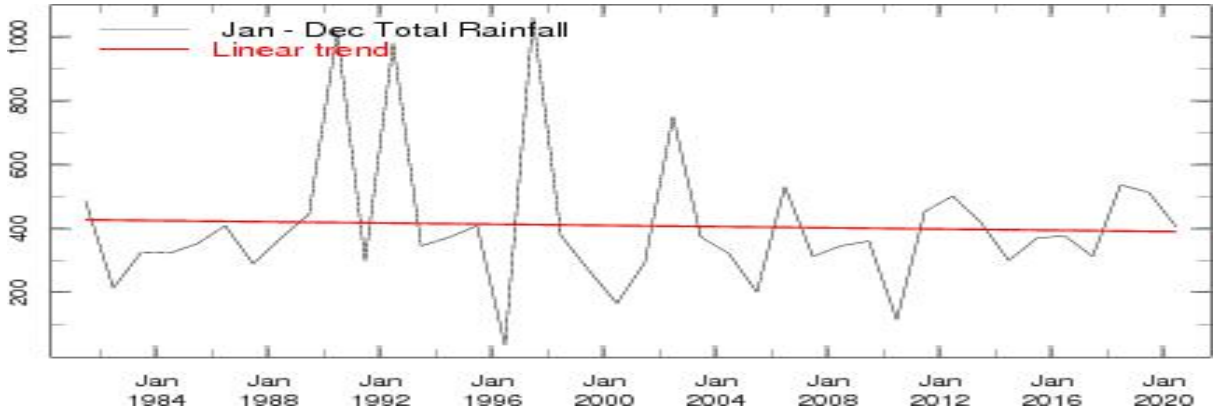
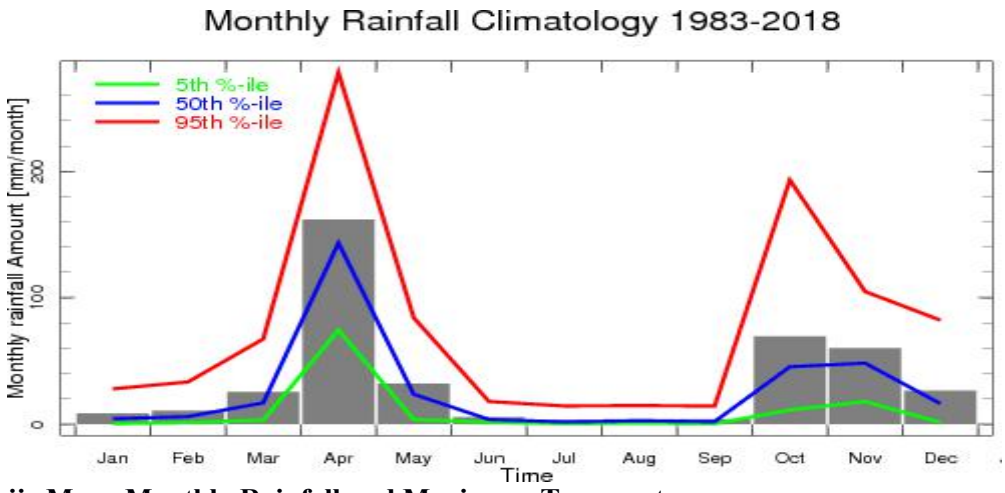


Figure 4: Wajir County Annual Total Rainfall Trend ***(KMD)***



Wajir Mean Monthly Rainfall and Maximum Temperature

Figure 5: Wajir Mean Monthly Rainfall ***(KMD)***

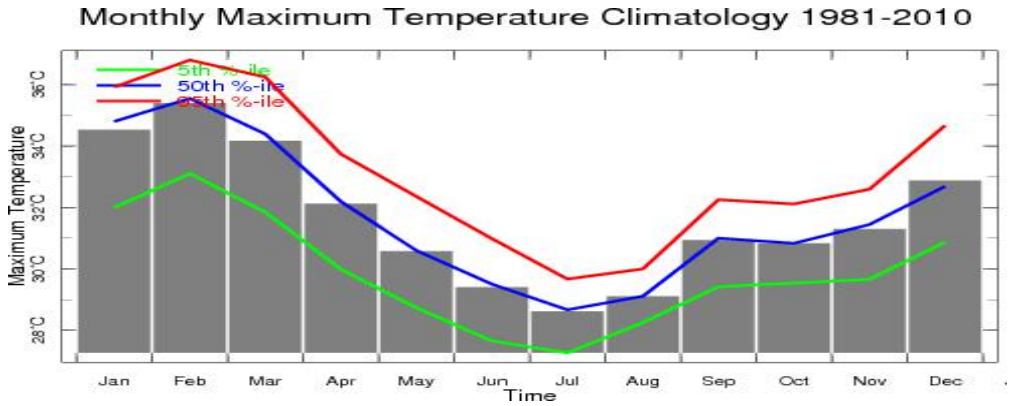


Figure 6: Wajir Mean Monthly Maximum Temperature ***(KMD)***

Wajir County Seasonal Total Rainfall Trends

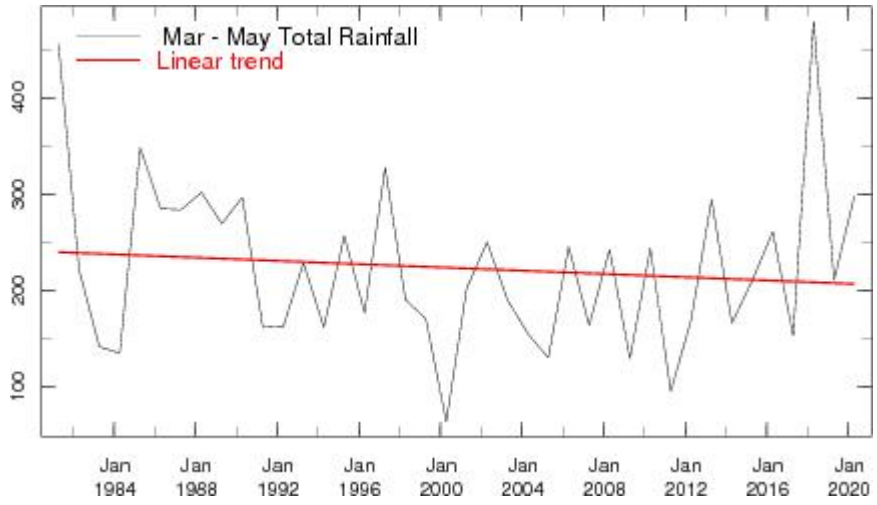


Figure 7: Wajir Count MAM Rainfall Trend ***(KMD)***

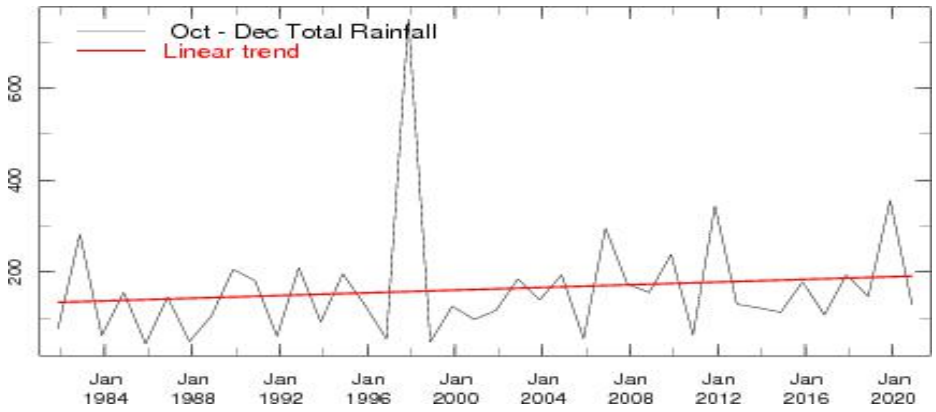


Figure 8: Wajir County OND Rainfall Trend ***(KMD)***

CHAPTER THREE: PRIORITY CLIMATE CHANGE ACTIONS

3.1 Identification of strategic climate action priorities in the PCRA

3.1 Introduction

CCCAP 2023-2027 takes cognisance of theimpacts of climate change on Wajir county socio-economic sectors. It identifies strategicareas where climate change action over the next five years will be linked to the county climate priority actions, recognizing that climate change could limit the achievement of the Action plan. The death of livestock and loss of livelihoods were were classical impact of the recent examples of negative impact of climate change in Wajir Other negative impacts include,an increase in food insecurity , deforestation ,human wildlife conflict ,mosquito infestation, livestock diseases ,high prices of electricity, poor solid waste management , high temperatures and strong winds .

Adaptive strategies include:

Adaptation strategy offers the opportunity of bringing different perspective that otherwise may be missed by traditional local responses. This concept can be particularly useful in identifying critical resilience projects with consideration to long-term resilience projects.

Drought

To counter the menace of drought which has great impact on livestock, crop production, availability of water, school retention, health and food security, the community has embraced innovative practices such as; increasing water sources through drilling boreholes, deepening shallow wells, rain water harvesting, increasing water storage facilities, recycling water and minimizing water wastage.

The county Government and partners encouraged farmers to adopt planting of drought-resistant/tolerant crops such as maize, sorghum, millet, beans and vegetables. The community also adapted pasture production and conservation to feed their livestock during the dry period.

Food insecurity is intervened through provision of relief food; cash transfer programs and destocking by the Government and partners.

To address scarcity of water the government and partners engaged in; drilling boreholes, water trucking and provision of subsidized fuel. The community was also engaged in deepening boreholes.

Environmental Degradation

Some of the key forms of environmental degradation in Wajir County include: Uncontrolled cutting down of trees for fuel wood and construction, construction and fencing of large private farms, Unsustainable land management practices, such as overgrazing and improper farming techniques contribute to soil erosion in Wajir County, destruction of water sources, over exploitation of shallow wells in Wajir town, Inadequate solid waste management systems and improper disposal of solid waste contribute to pollution in Wajir County.

The community has implemented measures to counter these forms of degradation such as Sustainable Land Management, Establishment of grazing area, establishment of rangeland bill, catchment conservation and improved infrastructure and technology e.g irrigation systems as well as strengthened environmental organizations.

Pest and diseases

As a result of climate change the county is vulnerable to a number of diseases as a result of climate change include water born diseases. The diseases are currently mitigated through provision of adept health services in hospitals, accessibility to clean water and sanitary facilities to limit the outbreak of waterborne diseases, heightened surveillance for new outbreaks, and outreach programs to reach nomads living in far areas.

To combat tropical diseases such as malaria and dengue fever, the community has adopted preventive measures such as the use of mosquito nets.

To compact pests', the community embraced use of pesticides and Planting of pest tolerant crops.

Human- Wildlife Conflict

Forest are habitats for wildlife, degradation of forest led to destruction of wildlife habitats and degradation of natural resources which led to invasion of wildlife in farmland in search for pasture thus human wildlife conflict.

The community has devised ways to mitigate human-wildlife conflict, such as community sensitizations, erecting physical barriers, thorny fences. Livelihood diversification by the communities adjacent to forests, early warning systems and rapid response teams by wildlife rangers.

Resource based conflicts

Wajir County faces resource based conflicts primarily related to water and pasture resources. Adapting to these conflicts requires a holistic approach that addresses the underlying causes and promotes sustainable resource management. potential adaptation strategies for resource-based conflicts in Wajir County include:

Strengthening local conflict resolution mechanisms, promoting dialogue, and fostering peaceful coexistence among different resource (Maslax system).

Improving infrastructure such as increasing water sources and road networks.

Encouraging diversification of livelihoods and Reducing dependency on a single resource, such as livestock

Adapting Community-based natural resource management by engaging local communities in decision-making processes related to resource management to foster ownership and cooperation.

3.2 Priority County Climate Change Actions

This section outlines the priority climate change actions envisaged in CCCAP 2023-2027for implementation in Wajir county . The actions:

Enable all sectors in Wajir county to work toward achieving climate change adaptation and mitigation objectives;

•Support achievement of the county Integrated Development Plan 2023-2028

•Enhance the adaptive capacity and resilience of communities, with emphasis on vulnerable groups within society;

•Require climate action in Wajir County to be undertaken in an integrated manner when addressing several priorities. For example, actions to plant trees to be implemented in a framework that appreciates and also contribute to disaster risk management, water, and food security objectives.

Priorities	Objectives

Disaster Risk (Floods and Drought) Management	Reduce risks that result from climate-related disasters, such as droughts and floods, to communities and infrastructure
Food and Nutrition Security	Increase food and nutrition security through enhanced productivity and resilience of the agricultural systems, in as low-carbon a manner as possible.
Availability and access to clean Water	Enhance the resilience of the water sector by ensuring access to, and efficient use of water for agriculture, manufacturing, domestic, wildlife, and other uses
Forestry, Wildlife and tourism	Increase forest cover to 10% of total land area, increase the resilience of the wildlife and tourism sectors, and rehabilitate degraded lands, including rangelands
Health, Sanitation and Human Settlements	Reduce incidences of malaria and other diseases that are projected to increase because of climate change, encourage climate-resilient solid waste management, and promote climate resilient buildings and settlements, including in urban centres, ASALs, and coastal areas

Table 2: Priority County Climate Change Actions

For each priority action, information is included on the problem being addressed, the action required to address the problem, expected results, county -level indicators, alignment with the CIDP, and relevant institutions to deliver the actions. CCCAP 2023-2027 recognizes that certain actions are enabling, and cut across the strategic priorities. These are, improving the legal and policy framework, building capacity and enhancing knowledge management, promoting technology and innovation, increasing access to climate finance, and measuring and reporting on climate actions.

3.2.1 Climate Change Priority 1: Disaster (Drought and Flood) Risk Management

Climate-related disasters, such as drought and floods, could prevent the achievement of third generation CIDP by adversely impacting socio-economic activities within the county . This requires proactive approaches in dealing with the disasters.

Impacts of climate-related disasters are felt at the household levels through food insecurity, and increased prices of food and fuel. At the county level, scarce government resources are re-allocated to address the impacts of floods and drought, at the expense of social programmes, such as health, and education. Climate shocks also have significant impacts on the county revenue generation .

Prolonged and chronic droughts in Wajir are increasing due to poor or failed rains, which results from climate change. Drought conditions: Wajir experiences erratic and insufficient rainfall, leading to extended periods of dryness. These conditions result in water scarcity, reduced crop yields, and limited pasture for livestock, which are crucial for the livelihoods of the predominantly pastoralist communities in the area.

Impact on agriculture: Agriculture is severely affected by prolonged droughts in Wajir. Insufficient rainfall leads to crop failures, affecting food production and exacerbating food insecurity. The lack of water also limits irrigation options, further hampering agricultural activities.

Livestock and pastoralism: The majority of Wajir's population relies on pastoralism, where they raise livestock as their main source of income and sustenance. Droughts directly impact the availability of water and pasture, leading to livestock deaths, decreased milk production, and increased vulnerability to diseases. This, in turn, threatens the economic stability of the local communities.

Humanitarian impact: Prolonged droughts in Wajir have caused severe humanitarian crises in the past. Insufficient water resources lead to waterborne diseases, malnutrition, and displacement as communities search for alternative sources of water and grazing areas for their livestock. Additionally, it increases the risk of conflicts over scarce resources.

Environmental consequences: Chronic droughts also have long-term consequences for the environment in Wajir. They contribute to desertification, soil erosion, and the degradation of natural ecosystems. Reduced vegetation cover and loss of biodiversity further exacerbate the challenges faced by local communities.

Addressing the issue of prolonged and chronic droughts requires a multi-faceted approach. This includes implementing sustainable water management practices, improving agricultural techniques, promoting alternative livelihood options, and investing in infrastructure for water storage and irrigation. Additionally, early warning systems, drought-resistant crops, and livestock insurance programs can help mitigate the impact of droughts and build resilience among the affected communities. International organizations, national governments, and local stakeholders often collaborate to provide assistance during periods of severe drought and work towards long-term solutions.

Strategic objectives	Priority actions	Expected result /outcomes	Adaptation/mitigation	BUDGET	WHEN
Disaster (Drought and Flood) Risk Management **Reduce risks to communities and infrastructure resulting from climate-related disasters such as droughts and floods**	Increase the number of households and entities benefiting from devolved adaptive services, including HSNP and CCCFs	Enhanced climate-resilience of the vulnerable members of society. Improved Climate Information Services (CIS). Improved and increased early warning systems	■ Establishment of early warning systems ■Harvesting of flood water ■Food and nutritional supplements, such as school feeding programmes ■Protection of riparian areas along rivers ■Insurance systems for livestock's	125,000,000 150,000,000	2023-2027 2023-2027

	Improve the ability of people to cope with drought	Increased People able to cope with floods and damage to infrastructure by: a. Establishment of early warning systems b. Establishment of Dam Safety Control System Improved coordination of disaster management	■ Establishment of early warning systems ■ Afforestation and reafforestation	185,000,000	2023-2027
	Improve the ability of people to cope with floods	Improved resilience of households through livelihoods diversification	■ Strategic placement of dams / dykes ■ Drainage systems for storm waters / storm water harvesting	75,000,000	2023-2027

	Improve coordination and delivery of disaster management response	Disaster Risk Management Bill Enacted County Disaster Risk Management operationalized	Implementation and upscaling of disasater management bill Develop disaster management plan/policy	130,000,000	2023-2027

	Diversify livelihoods to adjust to a changing climate	Establishment of integrated model farm for livelihood diversification Improved Climate Information Services (CIS). Improved and increased early warning systems	Diversification of Livelihoods	20,000,000 **TOTAL 685,000,000**	2023-2027

Table 3: Climate Change Priority 1: Disaster (Drought and Flood) Risk Management

MAIN PRIORITIES AREAS FOR FY 2023-2024

SUB-COUNTY	PROPOSED PROJECTS	PROJECT LOCATION	BUDGET	BUDGET LINE	REMARKS
WAJIR WEST	**PROPOSED ESTABLISHMENT OF INTERGRATED MODEL FARM (Borehole drilling, fencing, irrigated, crop production, folder production, breed livestock farming, nursery propagation and planting of fruit tress) to reduce climate induced food insecurity and enhance community resilience**	**Athibohol**	**20,000,000**	**3110504**	**Planned**
1	Borehole Drilling, Equipping, water storage facilities and piping system	Athibohol	8,000,000	3110504	planned
2	Fencing, installation of approved irrigation system, sourcing of farms inputs for crop production, fodder production and construction of fodder storage facility, assorted livestock breed farming	Athibohol	8,000,000	3110504	planned
3	Trees nursery establishment, propagation and planting of fruit & shade tress	Athibohol	4,000,000	3110504	planned
TARBAJ	**PROPOSED ESTABLISHMENT OF INTERGRATED MODEL FARM (Borehole drilling, fencing, irrigated, crop production, folder production, breed livestock farming, nursery propagation and planting of fruit tress) to reduce climate induced food insecurity and enhance community resilience**	**Sarman**	**18,000,000**	**3110504**	**Planned**
1	Borehole Drilling, Equipping, water storage facilities and piping system	Sarman	7,200,000	3110504	Planned
2	Fencing, installation of approved irrigation system, sourcing of farms inputs for crop production, fodder production and construction of fodder storage facility, assorted livestock breed farming	Sarman	7,200,000	3110504	Planned
3	Trees nursery establishment, propagation and planting of fruit & shade tress	Sarman	3,600,000	3110504	Planned
WAJIR NORTH	**PROPOSED ESTABLISHMENT OF INTERGRATED MODEL FARM (Borehole drilling, fencing, irrigated, crop production, folder production, breed livestock farming, nursery propagation and planting of fruit tress) to reduce climate induced food insecurity and enhance community resilience**	**Bute**	**18,000,000**	**3110504**	**Planned**
1	Borehole Drilling, Equipping, water storage facilities and piping system	Adadijole	7,200,000	3110504	Planned
2	Fencing, installation of approved irrigation system, sourcing of farms inputs for crop production, fodder production and construction of fodder storage facility, assorted livestock breed farming	Adadijole	7,200,000	3110504	Planned
3	Trees nursery establishment, propagation and planting of fruit & shade tress	Adadijole	3,600,000	3110504	Planned

WAJIR SOUTH	**PROPOSED ESTABLISHMENT OF INTERGRATED MODEL FARM (Borehole drilling, fencing, irrigated, crop production, folder production, breed livestock farming, nursery propagation and planting of fruit tress) to reduce climate induced food insecurity and enhance community resilience**	**Habaswein**	**18,000,000**	**3110504**	**Planned**
1	Borehole Drilling, Equipping, water storage facilities and piping system	Habaswein	7,200,000	3110504	Planned
2	Fencing, installation of approved irrigation system, sourcing of farms inputs for crop production, fodder production and construction of fodder storage facility, assorted livestock breed farming	Habaswein	7,200,000	3110504	Planned
3	Trees nursery establishment, propagation and planting of fruit & shade tress	Habaswein	3,600,000	3110504	Planned
ELDAS	**PROPOSED ESTABLISHMENT OF INTERGRATED MODEL FARM (Borehole drilling, fencing, irrigated, crop production, folder production, breed livestock farming, nursery propagation and planting of fruit tress) to reduce climate induced food insecurity and enhance community resilience.**	**Eldas**	**18,000,000**	**3110504**	**Planned**
1	Borehole Drilling, Equipping, water storage facilities and piping system	Eldas	7,200,000	3110504	Planned
2	Fencing, installation of approved irrigation system, sourcing of farms inputs for crop production, fodder production and construction of fodder storage facility, assorted livestock breed farming	Eldas	7,200,000	3110504	Planned
3	Trees nursery establishment, propagation and planting of fruit & shade tress	Eldas	3,600,000	3110504	Planned
WAJIR EAST	**Proposed Planting of Drought resistance fruit trees, Tree planting, maintenance and removal of environmental pollutants within the Wajir Municipality towards achieve the mandatory 10% tree cove in Wajir Town**	**Wajir Town**	**18,000,000**	**3110504**	**Planned**
1	Planning of dates and other drought resistant fruit trees and enhance carbon sequestration in Wajir Town for assorted community farms for agroforestry and training of farms groups	Wajir Municipality	10,000,000	3110504	Planned
2	Propagating, Planting and maintenances of cum Arabica tree species of 5000 within the department HQ nursery Centre	Department of environment	5,000,000	3110504	Planned
3	Urban areas beautification and maintenances within Wajir municipality	Wajir municipality	10,000,000	3110504	Planned
County Wide	Projects Monitoring and evaluation and EIAs Cost	County wide	8,000,000	3110504	Planned

County Wide	El-Nino preparedness, mitigation and response to avoid interruption of adaptation gains made over years.	HQ	10,000,000	3110504	Planned
	Total		**137,000,000**		Planned

3.2.2 Climate Change Priority 2: Food and Nutrition Security

Climate change has the potential to prevent achievement of the third generation CIDP item on food and nutrition security. This sub-section highlights how food insecurity is increased by climate change and, the win-win solutions for the climate, agriculture, and food security.

A) increased food insecurity due to climate change

Wajir County experiences erratic and insufficient rainfall, leading to extended periods of dryness. These conditions result in water scarcity, reduced crop yields, and limited pasture for livestock, which are crucial for the livelihoods of the predominantly pastoralist communities in the area.

Agriculture is severely affected by prolonged droughts in Wajir. Insufficient rainfall leads to crop failures, affecting food production and exacerbating food insecurity. The lack of water also limits irrigation options, further hampering agricultural activities.

The majority of Wajir's population relies on pastoralism, where they raise livestock as their main source of income and sustenance. Droughts directly impact the availability of water and pasture, leading to livestock deaths, decreased milk production, and increased vulnerability to diseases. This, in turn, threatens the economic stability of the local community.

Prolonged droughts in Wajir have caused severe humanitarian crises in the past. Insufficient water resources lead to waterborne diseases, malnutrition, and displacement as communities search for alternative sources of water and grazing areas for their livestock. Additionally, it increases the risk of conflicts over scarce resource

Chronic droughts also have long-term consequences for the environment in Wajir. They contribute to desertification, soil erosion, and the degradation of natural ecosystems. Reduced vegetation cover and loss of biodiversity further exacerbate the challenges faced by local communities.

Strategic objectives	Priority actions	Expected result /outcomes	Adaptation/mitigation
Diversify livelihoodsto adjust toa changing climate	Improve livelihood diversification through value chain additions Enabling Action – technology and	Increased income Increased Market Access and Expansion Skill Developed Value Chain Developed Resilience improved Increased employment	■ Farm forestry / agroforestry ■ Drought tolerant crops ■ Climate-smart agriculture ■ Establishment of irrigation systems, such as construction of dams for irrigation, and up-scaling drip irrigation ■ Improved

	knowledge management		agricultural extension services ■ Soil and water conservation / conservation agriculture

Table 4: Climate Change Priority 2: Food and Nutrition Security

3.2.3 Climate Change Priority 3: Water

CCCAP 2023-2027 addresses one of Wajir County largest challenges, which is water scarcity. The decline in access to quality water in the county is exacerbated by climate change, and its associated droughts and reduction of glaciers. Lack of access to quality water has the potential to undermine achievement of the County economic.

a) Increased Water Scarcity:

A Major Challenge for Wajir County;

Water scarcity is a significant issue in Wajir County, primarily due to its semi-arid climate and limited water resources. Wajir County experiences low and erratic rainfall, resulting in limited water availability. The region relies heavily on rain-fed agriculture and pastoralism, both of which are highly dependent on adequate water resources. Inadequate rainfall leads to water scarcity for both human and agricultural needs.

The lack of proper water infrastructure compounds the issue of water scarcity in Wajir County. Many communities do not have access to reliable water supply systems, including piped water networks or functional boreholes. This forces people to rely on alternative, often unreliable, water sources.

In addition to scarcity, the quality of available water is also a concern in Wajir County. The limited water sources are often contaminated, leading to health risks for the population. The use of unsafe water can result in waterborne diseases and further exacerbate the challenges faced by the community.

Water scarcity directly affects livelihoods, particularly in the agricultural and pastoral sectors. Insufficient water availability hampers crop production and livestock rearing, leading to decreased agricultural yields and livestock losses. This, in turn, affects the income and food security of the local population.

Competition over limited water resources can lead to conflicts within communities in Wajir County. These conflicts can arise between different user groups, such as farmers and

Strategic objective	Priority actions	Expected results/ outcomes	Adaptation/mitigation
Enhance resilience of the water sector by ensuring access to and efficient use of water for agriculture, domestic, wildlife and other uses	Increase annual per capita water availability via development of water Infrastructure Climate proof water harvesting and water storage infrastructure and improve flood control Promote water efficiency (monitor, reduce, re-use, recycle and modeling	Increased water availability Improved Water quality a. Reduced Water-related Disasters Climate resilience infrastructure developed Household water access enhanced Increased percentage of people accessing good quality water	Water harvesting ■ Dams, boreholes, and water pans ■ Water storage ■ Capture of water run-off on roads ■ Management of ground waters

	Improve access to good quality water	Improved Water Governance	Protection of springs and water catchment areas ■ Water treatment ,recycling

Table 5: Climate Change Priority 3: Water

3.2.4 Climate Change Priority 4: Forests, Wildlife and Tourism

Wajir County, primarily known for its arid and semi-arid climate, has limited forest cover and wildlife compared to other regions in Kenya. However, there are a few notable areas of interest in relation to forests, wildlife, and tourism:

Wajir Forest, located near Wajir town, is one of the few forested areas in the county. It is a unique dryland forest ecosystem and is home to several plant and animal species adapted to arid conditions. The forest provides a habitat for various bird species and small mammals.

While Wajir County does not have abundant wildlife like other parts of Kenya, it is home to some unique species adapted to the arid environment. Wildlife species found in the county include reticulated giraffes, Somali ostriches, and various reptiles and bird species.

Wajir County has been exploring the potential for ecotourism, aiming to attract visitors interested in exploring its unique ecosystem. Ecotourism initiatives primarily focus on showcasing the arid landscape, cultural heritage, and local traditions of the region. Visitors can experience camel safaris, traditional dances, and interact with the local communities to learn about their way of life.

Strategic objective	Priority action	Expected results/outcomes	Adaptation/mitigation
Afforestation and reforest degraded and deforested areas in Counties	■Planting of trees initiatives •Revived Green Schools Programme school land areas planted with trees; •Tree planting with appropriate species, including indigenous species); •Forest management and planning;	Increased tree nurseries and production and availability of seedlings Increase forest cover and forest management. Improved drought resistance tree/crop	Restoration of water catchment areas ■ Soil conservation and control of erosion (terracing, gabions) ■ Promote the conservation of natural resources ■ Protection of wetlands ■ Rehabilitation of degraded rivers
Restore degraded forest landscapes	Enhanced natural generation of degraded lands through conservation and sustainable management; •establish Ecosystem-based adaptation through rangeland and forest landscape restoration	Enhance degraded lands Landscape restored Ecosystem- based adaptation established Enhance biodiversity Improved water quality	prioritize sustainable land management practices, support ecosystem restoration projects, promote renewable energy adoption, and foster awareness and education about the importance of land conservation and

	and sustainable management.		climate change mitigation
Conserve land areas for wildlife	Preserve wildlife conservancy	Biodiversity Conservation Hectares of wildlife habitats conserved Reduced Human wildlife conflict	Develop policy and legal framework for wild life conservancy

Table 6: Climate Change Priority 4: Forests, Wildlife and Tourism

3.2.5 Climate Change Priority 5: Health, Sanitation and Human Settlements

Sustainable human settlements and sanitation services are essential for human health, which is a pillar anchored in the third generation CIDP. CCCAP 2023-2027 proposes

(a) Climate-Related Threats to Human and livestock Health

Climate change poses significant threats to human and livestock health, affecting both directly and indirectly. Here are some climate-related threats to human and livestock.

Rising temperatures due to climate change increase the frequency and intensity of heat waves. Heat waves can lead to heat exhaustion, heatstroke, and even death in humans and animals. Heat stress also affects livestock productivity, causing reduced milk production, decreased fertility, and increased susceptibility to diseases.

Climate change contributes to an increase in extreme weather events such as hurricanes, floods, and droughts. These events can result in injuries, displacement, and loss of life for humans and livestock. Floods, for example, can contaminate water sources, leading to waterborne diseases such as cholera. Droughts, on the other hand, can result in food and water scarcity, malnutrition, and weakened immune systems.

Climate change affects the distribution and behavior of disease-carrying vectors such as mosquitoes and ticks. As temperatures rise, these vectors can expand their geographical range and transmit diseases to new areas. Diseases like malaria, dengue fever, Lyme disease, and Rift Valley fever pose significant threats to both human and livestock health.

Changes in temperature and precipitation patterns can impact food and water safety. Warmer temperatures can promote the growth of pathogens in food, leading to foodborne illnesses. Flooding and contamination of water sources during extreme weather events can also result in waterborne diseases like diarrheal diseases, typhoid, and hepatitis A

Climate change contributes to increased air pollution, primarily through the burning of fossil fuels and the release of greenhouse gases. Poor air quality can exacerbate respiratory conditions such as asthma and chronic obstructive pulmonary disease (COPD) in humans. Livestock housed in confined environments can also be affected by poor air quality, leading to respiratory problems.

Climate change-related events and their associated impacts, such as natural disasters and food insecurity, can

Strategic objective	Priority action	Expected result/outcomes	Mitagation/Adaption
Waste management	Promote recycling to divert collected waste away from disposal sites.	Reduced pollution Reduced Landfill Burden Improved public health and safety Waste management infrastructure improved	Reduce, Reuse, and Recycle (3R): The 3R approach. Source separation and waste segregation. Composting and organic waste management.

			Waste-to-energy conversion. Landfill management and methane capture. Extended Producer Responsibility (EPR): Public awareness and education.
	Climate proof landfills sites	Reduced methane emission Ecosystem protected Improved water quality and air system Dumpsites areas screened for vulnerability to climate change Plans developed to adopt extreme climate patterns Enhanced community resilience	Stormwater management: Design and implement effective stormwater management systems to handle increased rainfall and minimize the risk of flooding Landfill liner and cover systems: Ensure the integrity and effectiveness of landfill liner and cover systems to prevent the infiltration of rainfall and

			contaminants into the landfill
Reduce impact of floods in human settlement	Control/Reduced flooding in human settlements	Enhance safety Reduced property damaged Flood proof infrastructure built Improved public health Improved flood resilience infrastructure Reduced soil erosion Crop destruction and loss of livestock reduced	Floodplain zoning and land-use planning: Implement effective land-use planning measures, Infrastructure resilience Flood forecasting and early warning systems Education and community preparedness
improve livestock /human health	Reduced incidence of malaria and other vector- borne disease Reduced livestock diseases	Decreased Mortality Rates Increased Life Expectancy Reduction in Disease Prevalence Enhanced Animal Welfare	Enhancing healthcare infrastructure Disease surveillance and early warning systems: Establish robust disease surveillance systems to monitor and track climate-sensitive diseases

		Reduced Environmental Contamination Increased Vaccination Coverage Improved Nutrition Increased Income	Vector control and disease prevention Mental health support Livestock and animal health management

Table 7: Climate Change Priority 5: Health, Sanitation and Human Settlements

CHAPTER FOUR: DELIVERY MECHANISMS FOR CCAP

4.1 Enabling Factors

There are major enabling factors required to effectively deliver the adaptation and mitigation actions set out in the key priority climate change areas as described in Chapter 3. These actions will equip governments and stakeholders with the finance, knowledge, skills, and technologies needed to deliver and report on the adaptation and mitigation actions.

These actions take place in the following areas:

- Enabling Policy and Regulation
- Mainstreaming in the CIDP
- Multi-stakeholder participation processes
- Finance - County Climate Change Fund
- Governance - County Government Structures
- Governance - Climate Change Planning Committees
- Climate Information Services & Climate Data Access
- Resilience Planning Tools
- Measurement, Reporting and Verification
- Institutional Roles and Responsibilities

This section provides brief descriptions of the priority factors to be completed from 1st July 2023 to 30th June 2027. The descriptions identify the relevant institutions, stakeholders, processes and indicators to measure progress and mitigations.

4.1.1 Enabling Policy and Regulation

There exists a number of polices developed by the National and Wajir County Government with the support of partners. Key among them being; National Climate Change Policy 2018, Wajir Climate Change Act 2016 which establishes CCCF to support the operationalization of such administrative aspects of the Act as implementation and reporting requirements. There are other auxiliary polices which guide and support local climate change contexts at county level, they include; Wajir Disaster Act 2015, Rangeland Management Bill 2023, Wajir Disaster Management Policy, Wajir County Water Regulations, Wajir County Sectoral plan, Wajir County Spatial Plan, Wajir County Annual Plan, Wajir County Integrated Development Plan and

Wajir County Water Sector Development Strategy.

Table 8: Priority enabling actions: Enabling policy and regulatory framework

Enabling Actions	**Coordinating Institution and Relevant Partners**	**Expected Results (Process Indicator)**
Implementation of Ward Adaptation Plan, Climate Change Fund.	County Treasury and Economic Planning, CCCU, WFP, Mercy Corps, WAPC	Committing the 2% allocation to CAF per fiscal year. **By 30th January, 2025** Submission and implementation of project proposals from 30 wards by WAPC
Initiation and passing of Bills and Regulations related to climate change (any pending policy)	Executive, Wajir County Assembly	**By 30th June 2027** Number of Bills/Regulations initiated or passed **By 30th June 2027** Number of public participation forums
Establish robust mechanisms for monitoring and enforcing compliance with regulations to ensure effective oversight and enforcement actions.	WCA, CCCU, Finance Dept.	**By 30th June 2026** Reports generated

4.1.2 Mainstreaming in the CIDP

Mainstreaming of climate action plans with the CIDP ensures a coordinated and holistic approach to addressing climate change challenges while advancing sustainable development goals. It enables effective resource allocation and facilitates the achievement of both climate and development objectives.

There are 4 priority sectors namely water, agriculture, environment and disaster management that are captured in the county climate action plan that are strategic in achieving the following goals:

i. Harness and utilize the abundant renewable energy
ii. Conserve and sustainably manage rangelands
iii. Conserve environment and ecosystems
iv. Strengthen policy and legal framework for energy, conservation and climate change mitigation
v. Spearhead climate change mitigation efforts through policy and coordination
vi. Improving access to water and sanitation
vii. Embrace innovative and sustainable farming through adoptive technology, provision of drought tolerant crops and breeds
viii. Diversification of livelihoods through resilience projects and programs

The county climate action plan conforms to other National, Regional and County Plans in number of aspects. For instance, in the agriculture sector, SDG 1 & 2 remain the primary goals. This is achieved through implementation of the following:

i. Implementation of asset protection through livestock insurance
ii. Improved market prices for livestock and livestock products
iii. Food security through improved production and value addition
iv. Support fodder production for sustainable livestock production
v. Diversification of livelihoods to cushion the impact of food insecurity

Wajir faces acute water shortages and sanitation challenges. This plan therefore addresses SDG 6 in order to solve Wajir's water and sanitation crisis and improve the living conditions of the most vulnerable population and can be achieved through;

i. Provisions of clean, safe and portable water in a sustainable manner.
ii. Protection of water catchment areas.
iii. Improve the gaps in water governance and in collaborations with water regulatory body, national government, NGOS and other stake holders in capacity building of staffs.
iv. Extensive Hydrogeological survey to exploit groundwater in a sustainable manner.
v. To improve the efficiency of current infrastructure by upgrading and introducing of latest technology i.e. employing sensors at boreholes to detect failures and water levels.
vi. Employ Integrated Water Resources Management (IWRM) to harness surface runoff

during rainy season to avoid over reliance only on groundwater.

The county climate action plan under the department of Environment, Energy and Climate Change is perfectly in tandem with SDGs 7,10,11, 13 & 15. The plan focuses on addressing the need for efficient and sustainable energy sources, improving solid waste management systems, installing early warning systems, addressing inequalities and marginalization of minorities and curbing forest degradation to ensure sustainable living for all.

The county plans to undertake a number of actionable interventions to achieve the above goals which include:

i. Adoption of climate smart agriculture technologies.
ii. Capacity building on climate-smart technologies, innovations and management practices
iii. Environmental protection and safeguards.
iv. Improving Rangeland governance and management.
v. Adoption sustainable animal breeds and promotion of alternative livelihoods.
vi. Inclusion of youths, women, PLWDs, minorities and marginalized groups in county recruitment slots and development programs.
vii. Increase representation and voice in decision making.
viii. Initiate social protection programs and friendly policies like Revolving fund, medical cover for the elderly, cash transfer.
ix. Youth and women empowerment through training.
x. Increasing awareness and responsive action to the vulnerable population through participatory decision making processes.

4.1.3 Multi-stakeholder participation processes

A technical working group was constituted in February 2022. Considerations for appointment to the technical working group were: representation of climate change relevant sectors such as environment, water, agriculture and gender, special programs and county leadership; commitment to create time for the exercise, knowledge, skills and experience relevant to the task among others.

The Technical Working Group had a week long training on the PCRA process. The training involved understanding of the process, its relevance in development planning and implementation and how each step of the PCRA process should be conducted as described in the

PCRA guidance templates.

The stakeholders were identified by the Technical Working Group during the training session broadly categorized to represent: Individuals/organizations formally responsible for climate action and building resilience; 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.

The Climate Change Unit sensitized the citizens through barazas of the upcoming climate change risk assessment exercise and mobilized participants with the support of Ward Administrators. Due to the vastness of the county, the Technical WG adopted a process where each ward group was engaged for two days each giving consideration to locals with common climate change knowledge and the most vulnerable. The identified community participants were mobilized through the office of the respective ward administrators and the respective ward climate change planning committees. Programs, engagement tools and other materials relevant to the community engagements were prepared in advance. These materials include: the program, community guiding questions and the note takers feedback forms.

An average of 15 participants were mobilized from the wards in line with the mobilization criteria stated above. The participants mobilized consisted of different livelihoods groups such as livestock herders, small scale business owners, marginalized, youth and PWDs in addition to the members of the Ward Climate Change Planning Committees. Other participants included ward agriculture officers, ward administrators, foresters and other technical officers with ward level mandate.

The data from the wards was summarized into reports. The reports were consolidated from ward reports to sub-county reports and further to county level PCRA report. 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.

A validation workshop was held on 29th- 30th May, 2023 with the objective to validate the county PCRA report and County Climate Action Plan. The stakeholders incorporated their views into the Wajir County PCRA process and CCAP. The workshop had 50 participants who included the PCRA Task Team, Chief Officers, CECM's, government officers from departments such as water, agriculture, environment, climate change and public health.

4.1.4 Finance - County Climate Change Fund

Wajir county climate Fund Act 2016 was assented on 14th June 2016 and commenced at 16th June 2016. However, the principle Act was amended on June 2019.

The Act has provided establishment of climate fund called CAF in which annual 2% of Wajir county development budget is allocated through special account "CAF"

Through this Account CAF programs were implemented for the financial years:

i. 2017/2018 with 96M (80M from county and 16M from DFID).
ii. 2018/2019 with 75M.
iii. 2019/2020 with 75M.
iv. 2022/2023 with 85M.

The fund was implemented through climate change mitigation and adaptation programs as per the Act.

The fund shall be financedthrough:

(a) moneys appropriated by the County Assembly, constituting a minimum of two percent of;
(b) moneys from the National Government;
(c) climate finance from international sources;
(d) moneys received from Public Benefit Organizations;
(e) fees and charges rom climate finance activities; and
(f) grants and donations.

4.1.5 Governance - County Government Structures

Wajir county government has existing climate change structures at county, sub-county and wards levels as:

<u>County climate change steering committee structure</u>

(a) the Governor of Wajir County, or in his absence, the deputy Governor of Wajir County;
(b) the County Executive Committee Member m
charge of finance as the Secretary;
(c) the County Executive Committee Member m
charge of environmental matters;

(d) the County Executive Committee Member m
charge of public health;
(e) the County Executive Committee Member m charge of agriculture, livestock and Fisheries;
(f) two persons from Fund Participating Institutions;
(g) one person from a public benefit Organizations involved in Climate Change activities nominated by at least one participating institution.
(h) one persons from any National Government Agencies nominated by the county steering committee.
(i) one person who is a resident of the County appointed by the Steering committee to represent professionals in the county; and
(j) one person who is a resident of the County appointed by the Executive Member in charge of Environment to represent the business community.

Functions of County climate change steering committee

(a) provide overall guidance for the development of a Climate Finance Framework for the County;
(b) facilitate and monitor the implementation of the Climate Finance Framework at the ward level;
(c) develop necessary linkages for the Fund with the National Government and other relevant stakeholders outside the County;
(d) ensure compliance of the Fund administration to the public finance management principles under article 201 of the Constitution of Kenya ;
(e) ensure that projects approved for funding conform to the Climate Finance Framework;
(f) mobilize funding for projects, programs and activities listed m the Climate Finance Framework;
(g) facilitate the coordination of Climate Finance projects and programs with other programs in the County;
(h) prepare a Climate Change Awareness strategy for the County;
(i) approve the ward disbursement proposal by the Fund Administrator;
(g) regularly review of the Climate Finance Framework; and
(k) any other matter relevant to Climate Finance in the County.

County climate change planning committee structure

(a) one person, not being a public officer, appointed by the Governor, who shall be the chairperson ;
(b) the Chief Officer in charge of Finance and Development Planning;
(c) the Chief Officer in charge of Environment;
(d) the Chief Officer in charge of Agriculture, livestock and fisheries;
(e) the Chief Officer in charge of Public Health;
(f) the County Director of the National Drought Management Authority in the County;
(g) the County Director of the National Environment Management Authority in the County;
(h) the County Director of Meteorological Department in the County;
(i) one person representing Fund Participating Institution;

Functions of County climate change planning committee

(a) Develop a projects eligibility criteria under this Act;
(b) Compile the list of approved projects and prepare the County Climate Finance Budget;
(c) Ensure appropriate need based allocation of the moneys available in the Fund with regard to the projects received from the Ward Planning Committee;
(d) Manage the administrative costs of the fund including the costs of the meetings and sitting of the Steering Committee and the Ward Planning Committees;
(e) Oversee the execution of the County Climate Finance Budget;
(f) Provide monitoring and evaluation tools for projects financed by the Fund;
(g) Provide the essential linkages between the County Executive Committee and the County Assembly with regard to the Fund.
(h) Co-ordinate capacity building for Climate Change Awareness and Climate Finance in the County;
(i) Co-ordinate research and development for Climate Finance in the County;

(j) Mobilize funds for Climate Finance in the County;
(k) Design a Climate Change Awareness strategy for the County;
(l) Develop a Climate Finance research priority needs list for the county;
(m) Pre-qualify research consultants for Climate Finance research in the County;
(n) Assign and coordinate technical assistance from County departments to projects funded under this Act; and
(o) Assist the Steering Committee in developing the Climate Finance Framework;
(p) Any other matter relevant to the execution of the County Planning Committee's mandate.

Ward climate change planning committee structure

(a) Community representatives appointed by the County Planning Committee comprising of--

(i) one persons nominated by elders m the Ward;

(ii) one persons nominated by women m the Ward;

(iii) one persons nominated by the youth in the Ward;

(iv) one persons nominated by persons with disabilities in the Ward

(b) one person from a Ward based Public Benefit Organization;

(c) one person representing faith based institutions in the Ward;

(d) *ex officio* members with no voting rights comprising of--

i) the Sub -County Environment officer of the respective sub-county;

ii) Ward Administrator of the respective ward;

(e) a Secretary elected by the Ward Planning Committee from its members.

Roles of Ward climate change planning committee

(a) consulting with the community on the relevant Climate Finance activities;

(b) facilitating public participation at the Ward level;
(c) receiving project proposals from the community at the ward level;
(d) developing the technical components of project proposals;
(e) procuring goods and services for projects, including the development of procurement plans for each project;
(f) monitoring the implementation of projects at the ward level;
(g) preparing the budget at the ward level;
(h) preparing the Ward level project reports; and
(i) any other duty assigned by the County Planning Committee.

4.1.6 Governance - Climate Change Planning Committees

There is established a Ward Climate Change Fund Planning Committee in each Ward in Wajir County with structure, membership and functions as above.

12 wards planning committee were formed during the inception period of 2016/2017 FY. Subsequently, in the FY 2017-2018, the formation of the fund committee was implemented in Eight (8) wards. An additional Seven wards established their committees in 2018/2019 FY. The last 3 urban wards established their committees in 2019-2020 FY.

4.17 Climate Information Services & Climate Data Access

Wajir County Meteorological Office developed weather and climate information that supports decision making across the principal livelihood groups as well as strategic and sectoral county and national government planning will provide:

Seasonal, monthly, seven day, five day and daily forecasts, as well as summary versions for SMS transmission.
The seasonal forecasts will be combined with sectoral expertise to provide livelihood advisories.
Warnings of unusual or extreme weather events for transmission via national and county administration, departments and agencies and a full range of intermediary and media channels.
Weather and climate data, summaries and normals (Rainfall amount and distribution, maximum and minimum temperatures, wind speed and direction, sunshine hours and relative humidity). These products are useful to specific county and national governments agencies, NGO's and the community at large for planning for climate sensitive activities.
Climate change projections and scenarios. These products are important to support medium and long term development planning.

Products	Product Description	Channels for communication	Lead organization(s)
Unusual and extreme weather events	For example, very heavy rain likely to cause flash flood, landslide/mudslides, strong winds	All channels including via County Government Administration, churches, police, schools, local alarm systems, SMS to CIS intermediaries, via community, local and regional radio, social media	KMD direct to County Government and NDMA, police, CIS intermediaries and radio stations
Daily	Forecast of rainfall intensity, humidity and geographic location(s), Reported Rainfall Amount, Unusual weather-related events	Radio SMS	KMD to NDMA KMD to principal regional, local and community radio stations KMD to CIS intermediaries
Weekly	Forecast for next 7 days including rainfall location and intensity, temperature, cloud cover, fog, strong winds, advice on daily rate for irrigation	Radio SMS (including via schools) Email and KMD website	KMD to regional, local and community radios and CIS intermediaries on Saturday or Sunday
Monthly	Forecast for the next month on rainfall location and intensity, temperature, extreme weather events. Potentially include local knowledge	Radio and SMS Email and KMD website	KMD to regional, local and community radios and CIS intermediaries Included in NDMA monthly bulletins
Seasonal	Onset, quality, distribution, cessation of rains, extended dry spells Livelihood advisories developed with ASDSP and Ministries of Agriculture	Participatory scenario Planning (PSP)Workshop KMD website and via email Barazas and discussions led by	- KMD in collaboration with ASDSP and all key ministries and partners

	and Livestock Potentially include local knowledge	CIS intermediaries Phone-in radio shows Summary by SMS	- CIS intermediaries within ongoing activities - KMD with technical experts from County Ministries/research institutes - KMD to CIS intermediaries
Climatological Normals and Trends	Climatological Normals are averages of Climatological elements (temperature rainfall wind sunshine radiation cloudiness,) over specified long term periods (30yeras plus) and location. Climatological trends are temporal indications of long term changes of the averages of the Climatological elements.	Policy document	County government planning offices
Climate Change Projections	• Emission pathways projections scenarios. • Downscaled scenarios	Policy documents	Planning offices

Table 9: Wajir Climate products and communication channels

4.1.8 Resilience Planning Tools

Resilience planning requires a community to identify one or more hazards that could disrupt life and create hardship. Hazards of greatest concern will be unique to individual communities/utilities. Many factors will influence the types of hazards considered.

Risk assessment is an iterative process that requires a detailed asset inventory and a list of hazards. Action plans help chart strategies and policies that will increase resilience and reduce long-term

risks.

Engagement of stakeholders and experts is a critical task in resilience planning is community outreach. After identifying hazards and vulnerable assets, communities should engage residents and work with them to adopt practices that support broader goals in the community and specific actions that improve long-term resilience. Actions may include identifying evacuation routes and vulnerable residents, such as elderly, women and children or hospital populations that would need special assistance during a disaster.

Planning tools

Impact Assessment Tool

An Impact Assessment Tool is a tool used to evaluate and analyze the potential impacts of hazards and risk, such as the drought, flash floods, deforestation, diseases and insecurity/conflict. The purpose of this tool is to systematically assess and predict the potential positive and negative consequences of the risk or hazard, so as to inform the appropriate mitigation plans.

Vulnerability Matrix

In climate change vulnerability matrix is categorized into natural, physical, economic, social and human assets/resources against the main hazards with horizontal ranking for assets/ resources while vertical ranking for hazard such as drought, disease and animal menace. Economical assets that are most affected are livestock, farm produce and businesses. Other categories that are posed to risks are physical assets such as schools and hospital; this result high school dropout, influx of patients and insufficient drugs attributed to drought and disease respectively. However, the least affected categories in the assets are roads, slaughter house, offices, sports and religious activities.

Hazard mapping

A hazard is any source of potential harm or adverse effect on people, property, or the environment. Hazards can be natural and manmade, while a hazard map is a map that shows the distribution of potential hazards in a particular area. These maps are used to visualize the risks associated with natural or human-made hazards, such as drought, diseases, wildlife menace, deforestation, floods, bushfire floods, conflicts and soil erosion.

The main objectives of the map are to identify areas that are most at risk of experiencing the

impacts of a hazard. These hazard maps, is utilized by the emergency responders in decision-making to develop sound strategies for disaster preparedness planning, risk reduction mechanisms, as well as emergency response in timely intervention. In addition, hazard maps are used to identify vulnerable populations or critical infrastructure in high-risk areas, prioritize investments in risk reduction measures. They can also help to educate the public about potential hazards and encourage individuals to take steps to prepare for emergencies. Hazard maps can be incorporated with the GIS data available.

Adaptation plan

Residents urgently need to find more effective and sustainable adaptation strategies to manage the climate change risks. This is particularly the case in regard to the small holder farmers and herders working at or just above the subsistence levels.

The climate risks present are complex and none can solve them in isolation thus the need to join forces with different levels of governments and development partners in a more comprehensive approach.

- Enhancing and strengthening the capabilities and capacities of the key productive sectors and communities is paramount.
- Supporting resilience projects, agricultural decisions, products and services at ward level is equally useful in mitigating the impacts of climate change threats in the society.
- Flexibility and use of adaptive technologies ought to be embraced in order to upscale production and eradicate food in security related to climate change.
- Proper marketing especially livestock and livestock products, value addition and introduction of improved and drought/disease resistant breeding too ought to be accelerated so as to inspire economic growth and increase community's adaptability to the numerous potential threats associated with climate change.
- Destocking policy ought to be initiated, accepted and implemented so as to reduce further environmental degradation due to overstocking and overgrazing. This will also be a solution to the livestock farmers who occasionally lose large herds to drought and diseases as they could safe some cash for other purposes/or utilize them when climate uncertainties strike.
- Governments and partners should promote research, disease surveillance and control mechanisms
- Promote fodder production and initiate rangeland management systems
- Foster climate information access and earl warning systems

- There ought to be deliberate efforts to increase vegetation cover through tree planting campaigns to reduce impact of strong winds and degradation of environment
- Control sand harvesting along the lake pavements to reduce soil erosion and proper spatial planning of emerging settlements
- GIS mapping of wetlands to protect lakes' ecological set ups in the ward.

Mitigation Plan

To mitigate against effects of climate change and foster resilience communities. The county government deploys a number of mitigation measures, they include:

i. Dissemination and strengthening of early warning messages and information
ii. Access to accurate climate information systems
iii. Monitoring and risk assessment
iv. Promote disease surveillance
v. Enforcement of policies and laws.
vi. Intensive research and introduction of adoptive technology
vii. Emergency fund allocation and activation of Disaster Response Team(s)
viii. Public Civic engagement on implications of floods
ix. Proper engineering and design for infrastructural develop
x. Social support programs i.e. relief food distribution, rapid response and evacuations.

4.1.9 Measurement, Reporting and Verification

Developing a comprehensive M&E framework within the MRV system promotes good governance, integrity, accountability, transparency, and proper management of public affairs and assets. Ultimately, this promotes efficiency and effectiveness in the county's service delivery efforts.

The Measurement, Reporting, and Verification (MRV) framework serves as a vital delivery mechanism for the county's climate action plan. It encompasses various key components, including measurement, reporting, verification, performance tracking, adaptive management, and accountability.

Conducting value for money and management audits ensures optimal resource allocation. By studying county government policies and programs, the MRV framework aids in future planning and designing for continuous improvement. Additionally, follow-up evaluations help ensure the

prompt implementation of policies, programs, and projects.

The project verification process involves the collaboration of teams comprising of county environmental experts, technical teams from key sectors (water, agriculture, environment and special program), working together to implement monitoring and evaluation (M&E) practices. These teams ensure the adherence to project specifications and standards, conducting thorough assessments to verify the project's compliance. The M&E component plays a crucial role in tracking progress and measuring the effectiveness of the project.

Enabling Actions	**Coordinating Institution and Relevant Partners**	**Expected Results (Process Indicator)**
Formation and capacity building of MRV Team	CCU County M&E Unit WFP	Constitution of technical teams Trainings and workshops
Design of data collection, data verification template and reporting format.	CCU County M&E Unit	Adaptation of reporting formats Generated reports
Stakeholder engagement	CCU Technical teams CSO's County Executive	Validation workshops
Impact assessment	CCU DRM	Field verification and reports Number of households benefitting/affected

Table 10: Measurement, Reporting and Verification

4.1.10 Institutional Roles and Responsibilities

Institutional roles and responsibilities for climate action are crucial in driving effective and coordinated efforts to address the challenges of climate change. Various institutions, including governments, national and international organizations, NGO's and businesses, play distinct roles

in combating climate change and transitioning to a sustainable future.

The National Government has a primary responsibility in setting policies bills and regulations as well as providing the necessary legal and regulatory frameworks to support climate action. International organizations and NGO's provide technical expertise, and support capacity-building initiatives. The County government being the host and custodian of CCU, coordinate climate change efforts on the ground. Each institution's roles and responsibilities are interconnected and require collaboration, knowledge sharing, and a multi-stakeholder approach to effectively address climate change and achieve sustainable development goals. The following are key institutions in Wajir.

S/No	Institution	Roles
1.	Climate Change Unit	Coordinate Climate Change related activities, plans, policies and related measurement, monitoring, and reporting Implement the necessary mitigation measures and give responsive feedback Carry out community sensitization and mobilization on climate change matters
2.	Wajir County Environment, Energy and Natural Resources Department.	Climate information. Seedling production. Tree planting. Community trainings on climate change. Formation of Ward planning committees on Rangeland restoration.
3.	Department of Agriculture Livestock and Fisheries	Fruit and tree planting. Food and fodder production pest and disease control administer essential drugs and vaccines provide extension services capacity building of farmers and maintaining community resilience projects.
4.	FAO	Stakeholders involved in climate action and responsive and resilience building Foster diversification of livelihoods through food

		production services Undertakes social security net programs i.e relief food and other special programs as cautionary measures to food insecurity
5.	GIS/ICT	Provide expertise and technical support Host and provide climate data/information
6.	Adaptation Consortium	Facilitated formation of Ward planning committees
7.	ALDEF	Climate information data mapping Formation of Ward planning committees
8.	CBO's, CSO's and CFA's	Collection of gums and resins Sale and Export of gums and resins Discouraging adulteration of gums and resins ensuring Wajir produces high quality gum. Promotion of alternatives sources livelihood an energy
9.	Department of Decentralized Unit	Provide administrative assistance to CCCD and enforcement of laws and policies that safeguard environment
10.	Department of Education	Promote environmental education and action to the relevant stakeholders
11.	Department of Health	Promote food and nutritional support Disease control
12.	Department of Water	Enhance access to clean, safe, adequate and affordable water for both human and livestock. Rehabilitate, develop, conserve and protect water resources
13.	Department of Economic Planning	Preparation of County Plans (CIDP,ADP) Stakeholder engagement and public participation
14.	DRM	Strengthening humanitarian coordination Monitoring Drought response activity Dissemination of early Warning ,climate information and advisories

15.	Ewaso Ngíro North Development Authority.	Tree planting. Value addition of gums and resins
16.	Farmers	Promote agroforestry
17.	ICPAC	Climate Prediction & Early Warning
18.	KALRO	Agricultural and livestock research
19.	KEFRI	Have knowledge and expertise Stakeholders providing data Carry out Research Dealers in certified forestry seeds
20.	Kenya Forest Service	Stakeholders impacted by climate change Conservation, Management and Protection of forests. Enforcement of laws Seedling production Community sensitization Tree planting and growing Permit issuance
21.	Kenya Metrological Department	Weather forecast. Climate information services. Collection of climate information data
22.	Kenya Wildlife Service	Conserve and manage Kenya's wildlife Provide wildlife education and extension services to the public for their support in wildlife conservation Handle human/wildlife conflict Coordination of national conservation programs
23.	Mercy Corps	Formation of Ward planning committees Capacity building of small scale farmers Undertake resilience projects
24.	NDMA	Coordinates actions on drought management and

		disaster risk reduction Mainstreaming and reinforcing climate change disaster risk reduction into strategies and actions
25.	NEMA	Monitoring and enforcing compliance of climate change interventions Integrating climate risk and vulnerability assessment into all forms of assessment Conduct EIA
26.	The Adan Keynan Foundation (TAKF	Tree planting. Improvement of the livelihoods of pastoral communities and poverty eradication through afforestation.
27.	JIMA Wildlife Conservancy.	Wildlife and forest conservation
28.	Sabuli Wildlife Conservancy.	Wildlife and forest conservation
29.	National Government Administration Officers (NGAO)	Ensure smooth operations of the national government at the grassroots, Improve security, Fight crime
30.	Red Cross Society	Social Emergency Response Volunteer (SERV) Programme. Improving Flood Early Warning Alert System. Education and Training Program. Livelihood program. First Aid.
31.	Save the Children	Provide children with healthcare, food and shelter child protection services Social protection services
32.	Water User's Association	Prudent management of water resources Collection of revenue
33.	WCCPC	Compile the list of approved projects and prepare the County Climate Finance Budget. Ensure appropriate need based allocation of the moneys available.

34.	WFP	Capacity building of technical staff and Facilitation of support services Training and support to agroforestry farmers. Social protection services
35.	World Bank	Provides financing Global knowledge **Technical assistance** **Support local programs (KUSP,KDSP)**
36.	Islamic Relief	Undertake Qurbani programs (social protection program) Orphan families economic strengthening

Table 11: Institutional Roles and Responsibilities in Wajir County

4.2 Implementation and Coordination Mechanisms

4.2.1 Directorate of Climate Change

The County Government of Wajir has established a fully-fledged directorate of Climate Change Unit with at least seven personnel headed by a substantive director who coordinates climate change activities and reports on them. Equally, there is a CECM and CCO members who are responsible for Environment , Energy and Climate Change.

In addition, there is Climate Change Action Fund 2016 which establishes three level structure and contractual Fund Administrator in its secretariat. The Fund Administrator holds office for a period of three years and is eligible for a second and final term of three years.

Fund Administrator functions:

(a) prepare a framework receiving and evaluating project proposals;
(b) prepare and publish yearly projects and program evaluation and implementation schedule stating-
(i) the key activities in a financial year;
(ii) the persons responsible for each task; and
(iii) the time frame for each process;
(c) organize access to the services of the County Planning Committee at the ward level;
(d) implement the decisions of the County Planning Committee;

(e) publish the eligibility criteria for projects under this Act;

(f) organize and coordinate the disbursement of moneys allocated to approved projects;

(g) co-ordinate capacity building for the Ward Planning Committees;

(h) keep custody of the accounts of the Fund;

(i) establish, coordinate and implement a monitoring and evaluation framework for projects under this Act;

g) develop a complaints mechanism;

(k) facilitate the functions of the institutions created under this Act where appropriate;

(l) prepare a budget for the administrative costs per quarter for each institution under this Act; and

(m) perform any other duty assigned by the County Planning Committee.

4.2.2 County Climate Change Planning Committee

County climate change planning committee structure

(a) one person, not being a public officer, appointed by the Governor, who shall be the chairperson ;
(b) the Chief Officer in charge of Finance and Development Planning;
(c) the Chief Officer in charge of Environment;
(d) the Chief Officer in charge of Agriculture, livestock and fisheries;
(e) the Chief Officer in charge of Public Health;
(f) the County Director of the National Drought Management Authority in the County;
(g) the County Director of the National Environment Management Authority in the County;
(h) the County Director of Meteorological Department in the County;
(i) one person representing Fund Participating Institution;

Functions of County climate change planning committee

(a) Develop a projects eligibility criterion under this Act;
(b) Compile the list of approved projects and prepare the County Climate Finance Budget;
(c) Ensure appropriate need based allocation of the moneys available in the Fund with regard to the projects received from the Ward Planning Committee;
(d) manage the administrative costs of the fund including the costs of the meetings and sitting of the Steering Committee and the Ward Planning Committees;
(e) oversee the execution of the County Climate Finance Budget;
(f) provide monitoring and evaluation tools for projects financed by the Fund;
(g) Provide the essential linkages between the County Executive Committee and the County Assembly with regard to the Fund.
(h) Co-ordinate capacity building for Climate Change Awareness and Climate Finance in the County;
(i) Co-ordinate research and development for Climate Finance in the County;

(j) mobilize funds for Climate Finance in the County;
(k) design a Climate Change Awareness strategy for the County;
(l) develop a Climate Finance research priority needs list for the county;
(m) pre-qualify research consultants for Climate Finance research in the County;
(n) assign and coordinate technical assistance from County departments to projects funded under this Act; and
(o) assist the Steering Committee in developing the Climate Finance Framework;
(p) any other matter relevant to the execution of the County Planning Committee's mandate.

4.3 Implementation Matrix

Strategic Objectives	Priority Actions	Expected Outputs/Outcomes	Key Performance Indicators	Responsible Institutions	Targeted Groups
Disaster (Drought and Flood) Risk Management Reduce risks to communities and infrastructure resulting from climate-related disasters such as droughts and floods	Increase the number of households and entities benefiting from devolved adaptive services, including HSNP and CCCFs Improve the ability of people to cope with drought Improve the ability of people to cope with floods Improve coordination and delivery of disaster management response	Enhanced climate-resilience of the vulnerable members of society. Improved Climate Information Services (CIS). Improved and increased early warning systems Increased People able to cope with floods and damage to infrastructure by: c. Establishment of early warning systems d. Establishment of Dam Safety Control System Improved coordination of disaster management Disaster Risk Management Bill Enacted	Number of households and entities benefiting from devolved adaptive services Number of groups accessing climate information % of people that able disaster risks No. of Dams with safety control system established No.of disaster responses undertaken No. of bills developed No. of mitigation measures developed No. of household with increased income	Ministry of Labour and Social Protection and secretariat; CoG and CG ,National Social Protection Council , National Social Protection Council Ministry of Devolution and ASAL Areas; Ministry of Interior and Coordination of National Government NDMA; KRCS County Governments; WRMA; Kenya Metrological Department County Governments; WRMA; MWS; MOH; NDMA; KMD; CCU,NGOs/CBOs; KMD;	Women, PWD, Youth, Elderly people, Minority group

	Diversify livelihoods to adjust to a changing climate	County Disaster Risk Management operationalized Improved resilience of households through livelihoods diversification			
Diversify livelihoodsto adjust toa changing climate	Improve livelihood diversification through value chain additions Enabling Action – technology and knowledge management	Increased income Increased Market Access and Expansion Skill Developed Value Chain Developed Increased employment	No. of households living the poverty line No.of SME increased No. of traiinings held for Small scale farmers and SMES No.of processing plants Established No.of jobs created	County Governments; CBOs / NGOs; KMFRI; WFP FAO MERCY CORPS ASDEF RACIDA	Women, PWD, Youth, Elderly people, Minority group
Enhance resilience of the water sector by ensuring access to and efficient use of water for agriculture, domestic, wildlife and other uses	Increase annual per capita water availability via development of water Infrastructure Climate proof water harvesting and water storage infrastructure and improve flood control	Increased water availability Improved Water quality b. Reduced Water-related Disasters	No of households accessing water No. of reversed osmosis plant Established No. of climate resilience infrastructure developed	County Governments; MWS; Kenya Waters Towers Agency Department of water WAJWASCO	Women, PWD, Youth, Elderly people, Minority group

	Promote water efficiency (monitor, reduce, re-use, recycle and modeling Improve access to good quality water	Climate resilience infrastructure developed Increased percentage of people accessing good quality water Improved Water Governance	No of households accessing safe and clean No. of bills and policies developed		
Afforestation and reforest degraded and deforested areas in Counties	Planting of trees initiatives •Revived Green Schools Programme school land areas planted with trees; •Tree planting with appropriate species, including indigenous species); •Forest management and planning;	Increased tree nurseries and production and availability of seedlings Increase forest cover and forest management. I improved drought resistance tree/crop	No of trees planted hectares of lands afforested No.of indigenous/drought tolerant trees planted	Ministry of environment ,forestry, KFS KEFRI ,CCU,CGW WFP, MERCY CORPS , RACIDA	Women, PWD, Youth, Elderly people, Minority group
Restore degraded forest landscapes	Enhanced natural generation of degraded lands through conservation and sustainable management; •establish Ecosystem-based adaptation through rangeland and forest landscape restoration and sustainable management.	Enhance degraded lands Landscape restored Ecosystem- based adaptation established Enhance biodiversity Improved water quality	No. of hectares of restored degraded landscapes No. of ecosystems restored	Ministry of environment ,forestry, KFS KEFRI ,CCU,CGW WFP, MERCY CORPS , RACIDA	Women, PWD, Youth, Elderly people, Minority group
Conserve land areas for wildlife	Preserve wildlife conservancy	Biodiversity Conservation Hectares of wildlife habitats conserved Reduced Human wildlife conflict	No. of wildlife species conserved No. of hectares conserved	KWS, CG, KFS, CFA, DP	Women, PWD, Youth, Elderly people, Minority group

			No. of wildlife watering point constructed No. of sensitizations exercise undertaken		
Waste management	Promote recycling to divert collected waste away from disposal sites.	Reduced pollution Improved public health and safety Waste management infrastructure improved	No. of waste trucks purchased/ dumpsites constructed No. treatment plants established No. of incinerator constructed	CG, NEMA, Wajir municipality, Private Sector and DP	Women, PWD, Youth, Elderly people, Minority group
	Climate proof landfills sites	Reduced methane emission Dumpsites areas screened for vulnerability to climate change Plans developed to adopt extreme climate patterns	No of climate proof landfills constructed No of dumpsites screened No. of plans developed	CG, NEMA, Wajir municipality, Private Sector and DP, CCU	Women, PWD, Youth, Elderly people, Minority group
Reduce impact of floods in human settlement	Control/Reduced flooding in human settlements	Enhance safety Reduced property damaged Flood proof infrastructure built Reduced soil erosion	No. of safety measures in place No. of damaged infrastructure repaired No. of flood proof infrastructure developed	County Governments; WRMA; MWS; MOH; NDMA; KMD; CCD; NTP; NGOs/CBOs; KMD; WSTF;	Women, PWD, Youth, Elderly people, Minority group

		Crop destruction and loss of livestock reduced	No. gabions constructed No. of Climate information and Early Warnings system		
Improve livestock /human health	Reduced incidence of malaria and other vector- borne disease Reduced livestock diseases	Decreased Mortality Rates Reduction in Disease Prevalence Reduced Environmental Contamination Increased Vaccination Coverage Improved Nutrition	No. of deaths reported No. of disease surveillance carried out No. of health safety measures in place No. individuals vaccinated No. of nutrition exercise support program conducted	DALF DEPT HEALTH NATIONAL GOVERNMENT COUNTY GOVERNEMNT The DPs	Women, PWD, Youth, Elderly people, Minority group
Energy and Transport Climate-proof energy and transport infrastructure; encourage renewable energy development; increase uptake of clean cooking solutions; and develop sustainable transport systems	Increase renewable energy for electricity generation	GHG emission reductions	No. of clean energy projects implemented	Ministry of Energy (MOE); Geothermal Development Corporation (GDC); Energy Regulatory Commission (ERC); KenGen; PPPs; Kenya electricity Transmission Company (KETRACO	Women, PWD, Youth, Elderly people, Minority group

Table 12: Implementation Matrix

REFERENCES

RCMRD -Wajir County Hazard Atlas, June 2022

Wajir County Climate Change Profile,

County Integrated Development Plan 2018-2022

County Annual Development Plan 2021-2022

Wajir CIS Plan November 2016

Wajir County Climate Change Act 2016

Wajir County Disaster Management Act 2014

Climate Risk Profile for Wajir County, Kenya Climate Changes Risk Profile Series- Ministry of Agriculture, Livestock and Fisheries Kenya 2018.

Kenya Metrological Department

NCCAP 2018-2022- Jan 19

Mid-term plan MTP4 2017-2022

Kenya National Adaptation Plan 2015-2030

Karienye, D& Warfa P.O. (2020). Dynamics of clan based conflicts in Wajir County, Kenya Budapest International Research and Critics Institute journal humanities and socials sciences 3,(2), 692-702

Green Fiscal Incentive Policy Framework

Annexes

A) Task Force

COUNTY GOVERNMENT OF WAJIR

Department of Environment, Energy and Natural Resource
Directorate of Climate Change Unit

THE WORLD BANK

TECHNICAL/ REVIEW AND FINAL COMPILATION OF PARTICIPATORY CLIMATE RISK ASSESMENT (PCRA) & COUNTY CLIMATE CHANGE ACTION PLAN WORKSHOP

PARTICIPANT LIST

Activity: Technical Review of final compilation of PCRA Venue: Wajir County Guest House Date: 31-05-2023

S.No	Name	Dept/Org	DESIGNATION	ID NO	PHONE NO	SIGN
1	Mohamed Bashir	Environmental	Environmental Officer	29557040	0726141403	
2	Adan Salat	Natural resource	Director	22911419	0726141403	
3	Ahmed Mohamed	Tourism & wildlife officer	Environment	29339263	0727862372	
4	Ahmed I. Kusow	Special Prog	Senior PPO	29596066	0720127560	
5	Mohamed Ahmed Madey	E-Planning	Economist	26636939	0792610118	
6	Adan Billow	Environment Principal Accountant	Principal Accountant	27256089	0710880850	
7	Abdullahi Osman	KFS Wajir	RMA	29858800	0710637043	
8	Dakane Shurie	CEO	WCG	21639393	[illegible]	
9	Sharuun Iman	Education	BS / Director	23751054	0726681575	
10	Jimale Mohamed	Environment	Director	22578389	0722993022	

COUNTY GOVERNMENT OF WAJIR

Department of Environment, Energy and Natural Resource
Directorate of Climate Change Unit

THE WORLD BANK

TECHNICAL/ REVIEW AND FINAL COMPILATION OF PARTICIPATORY CLIMATE RISK ASSESMENT (PCRA) & COUNTY CLIMATE CHANGE ACTION PLAN WORKSHOP

PARTICIPANT LIST

Activity: Technical Review & compilation of PCRA & CAP Venue: Wajir county Guest House Date: 31-05-2023

S.No	Name	Dept/Org	DESIGNATION	ID NO	PHONE NO	SIGN
1	Fahya Dahir	CCU	Ag. County Director	26911407	0725848039	
2	Said Mohid	Vet.	Vet. O	27791877	0720091672	
3	Halima Abdulla	Wildlife	D/Director	11224469	0720880811	
4	Ahmed Abdille	Decentralized Director Unit	Director	22828623	0720336954	
5	Hassan I. Ahmed	NDMA	SDI O	23633848	0716059923	
6	Maimuna Adan	SDTONEMA	E:O	36572624	0742042646	
7	Mohamed Rashid A	DRM	SDMO	26875495	0720012597	
8	SADIK UGass	Agriculture	SCAO	36415063	0724268606	
9	Halima Mohamed	Economics & Planning	SCPO	30985713	0724652684	
10	Mohamed Ahmed	Wajir	SWO	33741000	0722786063	

B) Stakeholder participants list

COUNTY GOVERNMENT OF WAJIR

THE WORLD BANK

HARAMBEE

DEPARTMENT OF ENVIRONMENT, ENERGY & CLIMATE CHANGE

VALIDATION OF WAJIR COUNTY PARTICIPATORY CLIMATE RISK ASSESMENT (PCRA) & COUNTY CLIMATE CHANGE ACTION PLAN WORKSHOP

PARRTICIPANT

Activity: Validation of PCRA & CCAP ..**Venue** ..Wajir County Guest House **Date:** 2nd - 5th - 2023

SNO	NAME	DEPT/ORG	DESIGNATION	ID NO	PHONE NO	SING
1.	Khalif Mahamud	Protocol	Camerman	30962447	0722951881	Khamud.
2.	Halima Abdullahi.	Kalwal resource	D/Director	11224469	0720880811	HA
3.	Sijad Ali Shakure	NEMA	Driver	24434837	0708048793	
4.	Abdi Ahmed	Agriculture	A-O	29443740	0720768840	
5.	Syad Abdulle	Vet.	Vet. officer	28403432	0728428258	
6.	MOHAMED MAALIM	Environment		07672761	13404043	
7.	ABDI ADAN	ENV Activist	Environmental Activist	0720884110	0217452	
8.	Tahya Dahir	CCU	Ag. Deputy Director	36911407 0720884110	072584 8184	
9.	Ahmed I. Kusow	Special Proj.	Senior PPO	29596066	0720127560	
10.	Shamun Iman	Education Asst. Director	Asst director	25751054	0726822279	

COUNTY CLIMATE CHANGE UNIT

COUNTY GOVERNMENT OF WAJIR

THE WORLD BANK

HARAMBEE

DEPARTMENT OF ENVIRONMENT, ENERGY & CLIMATE CHANGE

VALIDATION OF WAJIR COUNTY PARTICIPATORY CLIMATE RISK ASSESMENT (PCRA) & COUNTY CLIMATE CHANGE ACTION PLAN WORKSHOP

PARRTICIPANT

Activity: Validation of PCRA & CAP **Venue** Wajir county guest House **Date:** 30-05-2023

SNO	NAME	DEPT/ORG	DESIGNATION	ID NO	PHONE NO	SING
1.	Mohamed A Madey	E-Planning	Economist	26636939	0792610118	[signature]
2.	Jimale Hassan	KDRDIP	C.P.C	8691678	0723339993	[signature]
3.	Hussein Ali	NEMA	EO	31009184	0710552357	[signature]
4.	Hussein Mohamed	LIVESTOCK/CGW	LPO	33948914	0722597563	[signature]
5.	Adan Billow	Environment	Accountant	24633964	0710880850	[signature]
6.	Yussof Omar	Environment	Procurement	27483437	0722698254	[signature]
7.	MOHAMED Bashey	Climate change	E-O	29557040	0726141403	[signature]
8.	Abdi' Salat Deeow	KWS	KWS	9746773	0715045777	[signature]
9.	ABASS SALAT	Environment	Admin	24636538	0722407003	[signature]
10.	Garad Saney	Protocol office	Director	30303364	0720092679	[signature]

COUNTY CLIMATE CHANGE UNIT

COUNTY GOVERNMENT OF WAJIR

THE WORLD BANK

HARAMBEE

DEPARTMENT OF ENVIRONMENT, ENERGY & CLIMATE CHANGE

VALIDATION OF WAJIR COUNTY PARTICIPATORY CLIMATE RISK ASSESMENT (PCRA) & COUNTY CLIMATE CHANGE ACTION PLAN WORKSHOP

PARRTICIPANT

Activity: Validation of PCRA & CAP **Venue** Wajir County Guest House **Date:** 30-05-2023

SNO	NAME	DEPT/ORG	DESIGNATION	ID NO	PHONE NO	SING
1.	Mohamed Rashid D.A.	DRM	SDMO	26675495	0720012597	
2.	Ali Omar Abdullahi	D.Intergovernmental	Ag Director	20170064883	0724782626	
3.	Farah Hassan Bulle	Directorate of Peace	Pr. P.O	27475259	0721112828	
4.	Evans Odhor	Islamic Relief	Program	24084335	0725909041	
5.	Mohamed Ali Yonis	Department of Environment	Env Officer	32491796	0729680995	
6.	Adan A. Salat	Dept of Env	Director	22911419	0722208100	
7.	Ahmed Mohamed	Dept of Env	Technical officer	29339263	0727862372	
8.	Hillary Koech A.K.	Internal Security NAT	DCC	20222214	0706732448	
9.	Adan A. Ahmed	Merycorps	CPC	27280099	0711695696	
10.	MEIMUNA ADAN	Youth Rep	Youth leader	36572624	0742042646	

COUNTY CLIMATE CHANGE UNIT

COUNTY GOVERNMENT OF WAJIR

THE WORLD BANK

HARAMBEE

DEPARTMENT OF ENVIRONMENT, ENERGY & CLIMATE CHANGE

VALIDATION OF WAJIR COUNTY PARTICIPATORY CLIMATE RISK ASSESMENT (PCRA) & COUNTY CLIMATE CHANGE ACTION PLAN WORKSHOP

PARRTICIPANT

Activity: Validation of PCRA &CAP Venue Wajir county guest house Date: 30-05-2023

SNO	NAME	DEPT/ORG	DESIGNATION	ID NO	PHONE NO	SING
1.	Dakane Shimoy	WCG-Envmt ccu	CCO-Envmt ccu	21639758	0720340326	[signature]
2.	Ahmed Hussein	Office of Governor	CCO	24785481	0726953267	[signature]
3.	Shallow Adan	Town Administration	Director	3452665	0720438085	[signature]
4.	Abdon Kerow	Decentralized Units	D/Director	24459305	0726141820	[signature]
5.	Issa Bman Mohd	Devolve unit & town	Ceo	29336909	0725773251	[signature]
6.	Jimale Diis Ahmed	BOMA PROJECT	FO	28887501	0720903069	[signature]
7.	Khatra Hussein	DALfi	CCO	29604557	0712179401	[signature]
8.	Fatuma OLOW	Cooperative	CCO	0427914	0728489112	[signature]
9.	RUKIYA M. KAHIYA	CCO EXECUTIVE	CCO	13404775	0722944484	[signature]
10.	Rahmya Abdulle		CEC	25313703	0722810098	[signature]

COUNTY CLIMATE CHANGE UNIT

COUNTY GOVERNMENT OF WAJIR

THE WORLD BANK

HARAMBEE

DEPARTMENT OF ENVIRONMENT, ENERGY & CLIMATE CHANGE

VALIDATION OF WAJIR COUNTY PARTICIPATORY CLIMATE RISK ASSESMENT (PCRA) & COUNTY CLIMATE CHANGE ACTION PLAN WORKSHOP

PARRTICIPANT

Activity: Validation of PCRA & CAP Wajir county Venue Wajir County Guest House Date: 30-05-2023

SNO	NAME	DEPT/ORG	DESIGNATION	ID NO	PHONE NO	SING
1.	KHARIF A. ALI	ENE & Climate	CEC	042576	0728311150	[signature]
2.	Ahmed Warder	EDUCATION	CEC	25313206	0725869064	[signature]
3.	Farah A. Sama	CECM-AAAF	CEC	9567731	0729343650	[signature]
4.	Mohamud A Abdi	CECM-WATER	CEC	8491305	0721785304	[signature]
5.	ISSA GAROPE ABE	CEC-ICT/Trade	CEC	37124	0723475525	[signature]
6.	Birik O. Abdille	CCO-water	CCO	21060298	0723877691	[signature]
7.	Abdinoor M. Hussein Isse	Municipal Manager-Hbr	Manager	9084704	0720245050	[signature]
8.	HASSAN GODANA	KWS	ADVIII	11303746	07[illegible]25817827	[signature]
9.	ABDULLAHI OSMAN	KFS	RMA	29858806	0710637043	[signature]
10.	Juma Julo	KEFRI	O.I.C	34160778	0796409644	[signature]

COUNTY CLIMATE CHANGE UNIT

C) Photos

Validation workshop- Stakeholders participate in a group photo

CCCAP Validation workshop

Sarman Ward Community members and the CCCAP team participate in a group photo

Lagboghol Ward Community members and the CCCAP team participate in a group photo

Wargadud Ward Community members and the CCCAP team participate in a group photo

Basir/Lakole Ward Community members and the CCCAP team participate in a group photo

Arbajahan Ward Community members and the CCCAP team participate in a group photo

Dela Ward Community members and the CCCAP team participate in a group photo

Wagalla Ward Community members and the CCCAP team participate in a group photo