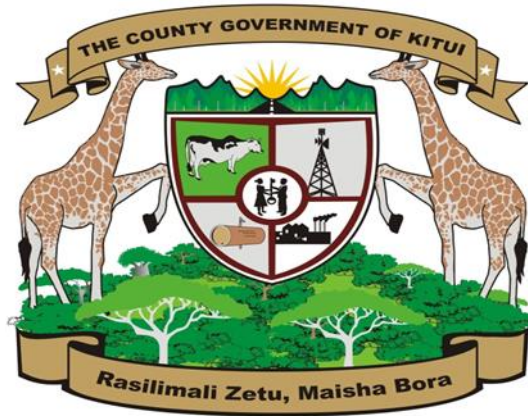


Kitui County



PARTICIPATORY CLIMATE RISK ASSESSMENT REPORT (PCRA)

May, 2023

Table of Contents

DEFINITION OF TERMS.....	6
ACRONYMS	9
FOREWORD	10
ACKNOWLEDGEMENT	11
EXECUTIVE SUMMARY	13
1.0 CONTEXT OF THE PARTICIPATORY CLIMATE RISK ASSESSMENT (PCRA).....	16
1.1 Background.....	16
1.1.1 Snapshot.....	19
1.1.5 Environment and Natural resources Sector.....	24
1.1.6 Agriculture and Water Sector	25
1.1.7 Energy Sector.....	31
1.1.8 Health Services Sector	34
1.1.9 Social Protection and Education Sector.....	36
1.1.10 Transport, ICT, Trade and Industry Sector	38
1.1.11 Land and Urban Development Sector.....	41
1.2 Policy Context.....	42
1.2.1 International Policy Framework.....	42
1.2.2 National Policy Framework.....	43
1.2.3 County Policy Framework.....	45
1.3 Purpose of the PCRA Report	46
1.3.1 Purpose of the PCRA.....	46
1.3. 2 Key steps in the County’s PCRA process	49
2.0 KITUI COUNTY CLIMATE HAZARD PROFILE	Error! Bookmark not defined.
2.1 Current and Historical Climate Hazards and Trends.....	Error! Bookmark not defined.
2.1.1 County Overview	Error! Bookmark not defined.
2.1.1.1 Topography and Demographics.....	Error! Bookmark not defined.
2.1.1.2 Poverty and Livelihoods	Error! Bookmark not defined.
2.1.1.3 Land Tenure.....	Error! Bookmark not defined.
2.1.1.4 Access to Water Services	Error! Bookmark not defined.
2.1.1.5 Household Energy Sources.....	Error! Bookmark not defined.

2.1.1.6 Current Climate Context.....	Error! Bookmark not defined.
2.2 Exposure and vulnerability profiles of the County	Error! Bookmark not defined.
2.2.1 Crop Farming.....	Error! Bookmark not defined.
2.2.2 Livestock, Horticulture Farming, and Apiculture.....	Error! Bookmark not defined.
2.3 Differentiated impacts of climate trends and risks	Error! Bookmark not defined.
2.4 Spatial Distribution of Risks.....	Error! Bookmark not defined.
2.4.1 Drought.....	Error! Bookmark not defined.
2.4.2 Environmental Degradation	Error! Bookmark not defined.
3. FUTURE CLIMATE SCENARIOS FOR THE COUNTY.....	Error! Bookmark not defined.
3.1 National Climate Change Projections.....	Error! Bookmark not defined.
3.1.1 Temperature.....	Error! Bookmark not defined.
3.1.2 Rainfall	Error! Bookmark not defined.
3.2 Downscaled Climate Change Projections for Kitui County.....	Error! Bookmark not defined.
3.2.1 Future Change in Temperature	Error! Bookmark not defined.
3.2.2 FUTURE CHANGE IN RAINFALL.....	Error! Bookmark not defined.
4. Analysis of Existing Resilience/Adaptation Strategies to Current and Future Climate Risks	Error! Bookmark not defined.
4.1 Overview of existing adaptation/resilience strategies and their effectiveness to current climate risks.....	Error! Bookmark not defined.
Effectiveness of adaptation/resilience strategies to future climate risks ...	Error! Bookmark not defined.
5. Kitui County Climate Strategic Adaptation Investment/Action Priorities	241
6. CONCLUSION AND RECOMMENDATIONS.....	367
References	369

List of Tables

Table 1: Distribution of Population by Sex and Sub-County	22
Table 2: Analysis of different stakeholders.....	Error! Bookmark not defined.
Table 3: Exercise procedure and activities	55
Table 4: Mapping of Risks	Error! Bookmark not defined.
Table 5: Risk Analysis	Error! Bookmark not defined.
Table 6: changes in temperature	Error! Bookmark not defined.
Table 7: Climate Change projections of rainfall and temperature	Error! Bookmark not defined.
Table 8: Environmental hazards I different countries.	Error! Bookmark not defined.
Table 9: Drought hazard	Error! Bookmark not defined.
Table 10: Environmental Degradation.....	Error! Bookmark not defined.
Table 11: crop and livestock pests and diseases.....	Error! Bookmark not defined.
Table 12: Human diseases	Error! Bookmark not defined.
Table 13: Strategies to future climate risks.....	122
Table 14: Climate Strategic Adaptation Investment/Action Priorities.....	241
Table 15: Ward Specific Action Priorities.....	250

List of Figures

Figure 1: A map of Kitui County	21
Figure 2: Mean monthly precipitation climatology 1983-2018	Error! Bookmark not defined.
Figure 3: Mean monthly minimum temperature climatology 1983-2010... ..	Error! Bookmark not defined.
Figure 4: Drought hit areas in Kitui County.....	Error! Bookmark not defined.
Figure 5: Environmentally degraded wards in Kitui County.....	Error! Bookmark not defined.
Figure 6: Livestock and crop invested areas in Kitui County	Error! Bookmark not defined.
Figure 7: Environmental degradation in Kitui County.....	Error! Bookmark not defined.
Figure 8: IPCC Representative Concentration Pathways.....	Error! Bookmark not defined.
Figure 9: Historical and projected average temperature for Kenya (1986 to 2099).....	Error! Bookmark not defined.
Figure 10: Projected change in summer days (Tmax >25°C).....	Error! Bookmark not defined.
Figure 11: Annual average precipitation trends & projections for Kenya (1986 – 2099).....	Error! Bookmark not defined.

DEFINITION OF TERMS

Adaptive capacity: Adaptive capacity is the property of a system to adjust its characteristics or behavior, in order to expand its coping range under existing climate variability, or future climate conditions.

Climate Change: Means a change of weather patterns which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Coping: refers to the use of existing resources to achieve desired goals during and immediately after climate-induced hazards.

Disaster: A disaster can be defined as a serious disruption of the functioning of the society causing widespread human, material or environmental damage and losses which exceed the ability of the affected community to cope using their own resources.

Hazard: Hazard is the potential for harm or an adverse effect (for example, to people as health effects, to organizations as property or equipment losses, or to the environment).

Impacts: Specific effects of hazards or disasters also referred to as consequences or outcomes.

Mitigation: Short and long-term actions, programs or policies implemented in advance of a natural hazard or in its early stages, to reduce the degree of risk to the people, property, and productivity capacity.

Preparedness: Pre-disaster activities designed to increase the level of readiness or improve operational capabilities for responding to an emergency.

Response: Actions taken immediately before, during or directly after a disaster to reduce impacts and improve recovery.

Risks: Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. It may also apply to situations with property or equipment loss, or harmful effects on the environment.

Vulnerability: The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

Representative Concentration Pathways: This is a greenhouse concentration (not emissions) trajectory adopted by the IPCC. These are RCP2.6, RCP4.5, RCP6, and RCP8.5.

ACRONYMS

CCISP-County Climate Information Service plan.

CCU-Climate Change Unit

CIDP-County Integrated Development plan.

CSOs-Civil Society Organizations.

ECDE-Early Childhood Development Education

GHG-Greenhouse gas

KIMWASCO-Kiambere-Mwingi Water and Sewerage Company.

KITWASCO-Kitui Water and Sewerage Company.

NCCAP-National Climate Change Action Plan.

PCRA-Participatory Climate Risk Assessment.

SDG-Sustainable Development Goals

SEKEB-South Eastern Kenya Economic Block

RCP: Representative Concentration Pathways

IPCC: InterGovernmental Panel on Climate Change

FOREWORD

Climate Change has negatively impacted the livelihoods of the Kitui community. The increase in climate related disasters such as droughts are some of the much-felt impacts of Climate Change in the County. These climatic related disasters coupled with high deforestation rates; improper waste management; unsustainable sand harvesting; watershed degradation; outbreak of pests and diseases and general land degradation have compromised the adaptive capacity of the people.

It is necessary to have the involvement of all the stakeholders including the affected communities in the PCRA process. Participatory Climate Risk Assessment (PCRA) is one of the approaches which tries to involve all key players and stakeholders in collecting their views, aspirations, concerns and wishes during the design and execution of any program. This PCRA was developed through an extensive consultation process. All the forty wards in Kitui County were involved and engaged and they were guided in identifying key climatic risks and hazards and potential interventions. The collective contributions of the National Government Institutions and agencies, County Government of Kitui departments, the civil society, faith-based organizations, other non-state actors, and individual citizens to this PCRA process has helped to deliver the expected transformational outcomes. PCRA has been an important tool in the development of the Kitui County Climate Change Action Plan.

Richard John Mwendandu

CECM for Energy, Environment, Climate Change, Forestry, Natural and Mineral Resources.

ACKNOWLEDGEMENT

County Government of Kitui has employed various measures to address impacts of Climate Change. The Kitui County Climate Change Unit and the establishment of the Kitui County Climate Change Fund are some of the measures. This PCRA report presents an opportunity for identifying County hazards and developing adaptive strategies; compliments and strengthens community participation.

I wish to thank the departmental technical committee led by the Director for Environment and Climate Change, Mr. Fredrick Kimwilu; Deputy Director for Environment, Energy and Mineral Resources - Mr. Benjamin Mukulo; Assistant Director for Environment– Mr. Dominic Mumbu; Environment Officer, Ms. Marian John; and Climate Change Desk Officer, Mr. Jackson Mwendwa. Much appreciation to our stakeholders namely, Anglican Development Services Eastern (ADSE), Caritas Kitui; Kenya Meteorological Department (KMD), Meteorological Department of South-Eastern Kenya University (SEKU) and National Drought Management Authority (NDMA). I also thank all Ward and Village Administrators for their support throughout the PCRA process.

David Soi Masai

Chief Officer for Environment, Climate Change and Forestry

EXECUTIVE SUMMARY

Building climate resilience is a multifaceted action involving various actors and disciplines. It revolves around preparedness and capacity building in anticipation of climatic risks and shocks. Resilience is the ultimate measure of adaptive capacity of any community. A successful climate action will require involvement and participation of all the stakeholders, understanding the context of the action and the role of each actor. To achieve this end, a participatory climate risk assessment was done in all the 40 wards within the County and whose findings are discussed in this report.

The impact of Climate Change is being felt by people, ecosystems, and economies. In fact, the United Nations' synthesis report on SDG 6 raises a similar warning, that the maximum effect of Climate Change will be experienced through changes in hydrological cycle, such as overall water availability, water quality and frequency of extreme weather events such as floods and droughts. This is the case at hand in Kitui County with data from the 40 wards pointing at drought cycles being more frequent and severe.

Climatic hazards presented in chapter two ranks drought as the biggest challenge in Kitui County impacting water availability and food insecurity. Since 1960 communities have reported severe droughts that even transited to famine, resulting in loss of livestock and human life. This assessment has discovered an increasing frequency of widespread drought events affecting more people and livelihoods. This major hazard

has been exacerbated by other compounding hazards that succeed droughts such as flash floods and emerging pests and diseases as reported by communities in the field. Climatic condition trends have demonstrated a downward trend with rainfall decreasing in both time and space. Data from the Kenya meteorological department has predicted decrease in rainfall across the County and increasing temperature. These changes set in a new climate for Kitui and adaptation mechanisms become necessary to the communities.

The assessment analyzed the existing adaptation strategies across the different wards that transverse livelihood zones. The assessment identified various strategies supporting the adaptation to Climate Change by both the County Government, non-state actors and communities. Some of the strategies include legal and regulatory frameworks, climate smart agriculture, water harvesting technologies, environmental protection and conservation among others. The effectiveness of the measures has also been discussed at length and subjected to climatic future scenarios to inform the development of the climate action plan.

This report presents the proposed investment actions and priority areas that need to be implemented to strengthen the adaptive capacity of the communities. The priority actions have addressed the specific needs of each ward and the proposed actions reflect on the aspirations of the County as alluded to by the County integrated

development plan and contribute to the national Climate Change action plan priority areas as well.

In conclusion the report draws lessons learnt from the exercise and in depth understanding of the communities involved. It presents the fragile nature of Kitui County and the severe impacts of Climate Change. It recommends coordinated effort in addressing the impact of Climate Change across sectors and implementation of the priority actions that are geared towards improving the resilience of the communities and call for resource allocations to deliberately finance these priority actions and build the adaptive capacity of the communities in Kitui County.

1.0 CONTEXT OF THE PARTICIPATORY CLIMATE RISK ASSESSMENT (PCRA)

1.1 Background

Several decades have already passed while the world is still struggling to address the issues concerning Climate Change. With protocol and agreements being ratified and adopted with little or no success. Actions on Climate Change have been undertaken both at the global arena, continental, regional and national levels.

The Kyoto Protocol was adopted on 11 December 1997. Owing to a complex ratification process, it entered into force on 16 February 2005. Currently, there are 192 Parties to the Kyoto Protocol. The Kyoto Protocol operationalized the United Nations Framework Convention on Climate Change by committing industrialized countries and economies in transition to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets. The Convention itself only asked those countries to adopt policies and measures on mitigation and to report periodically.

The Paris Climate Agreement of 2015 replaced the Kyoto Protocol and included commitments from all major GHG-emitting countries to reduce their climate-altering pollution. Over the last several decades, Governments have collectively pledged to slow global warming. Despite intensified diplomacy, the world is already facing the

consequences of Climate Change, and it is expected to get worse. Through the Kyoto Protocol and the Paris Agreement, countries agreed to reduce greenhouse gas emissions, but the amount of carbon dioxide in the atmosphere keeps rising, heating the Earth at an alarming rate.

At COP 16, in 2010, Parties established the Green Climate Fund (GCF) and in 2011 designated it as an operating entity of the financial mechanism. Since 2009, global climate talks have agreed on mobilizing \$100 billion a year for developing countries to take climate action, both to adapt to Climate Change and cut emissions. While every country will need to work towards net-zero emissions, each country and community also must adapt to Climate Change. Adaptation is the foremost priority in countries with lower emissions and acute vulnerability to climate fallout, as is the case for many developing States and countries.

The Government of Kenya is fully committed to addressing Climate Change domestically, as well as demonstrating leadership in the global fight against Climate Change. Kenya submitted an ambitious Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change (UNFCCC). Further, the Kenyan Government enacted the Climate Change Act 2016, which established the Climate Change Fund, the Climate Change Council and created the

Climate Change Directorate under the Ministry of Environment and Natural Resources to spearhead climate actions.

Through the Climate Change Finance mechanisms, the Government of Kenya is implementing various Climate Change response projects including the Financing Locally Led Climate Change Action Programme Funded by the World Bank, Danida, and the Government of Germany.

The County Government of Kitui formulated the Kitui County Climate Change Fund Regulations in 2018 supported by the ADA Consortium. The regulations established Climate Change structures to support the County in implementing Climate Change projects. In 2019 the ADA consortium supported pilot Climate Change projects in 11 wards in the County under the regulations. For the smooth running of the Climate Change projects the County established the Climate Change unit. A unit to spearhead the implementation of the Climate Change projects and enhance Climate Change mainstreaming across other County departments. A follow-up to the pilot project is the FLLoCA programme that is being implemented under the Climate Fund regulations. The FLLoCA programme encompasses two support grants; the Climate Change institutional strengthening grant and the Climate Change investment grant. The institutional grants are made to support counties in developing structures and systems, policy and legal frameworks in readiness to access the conditional Climate

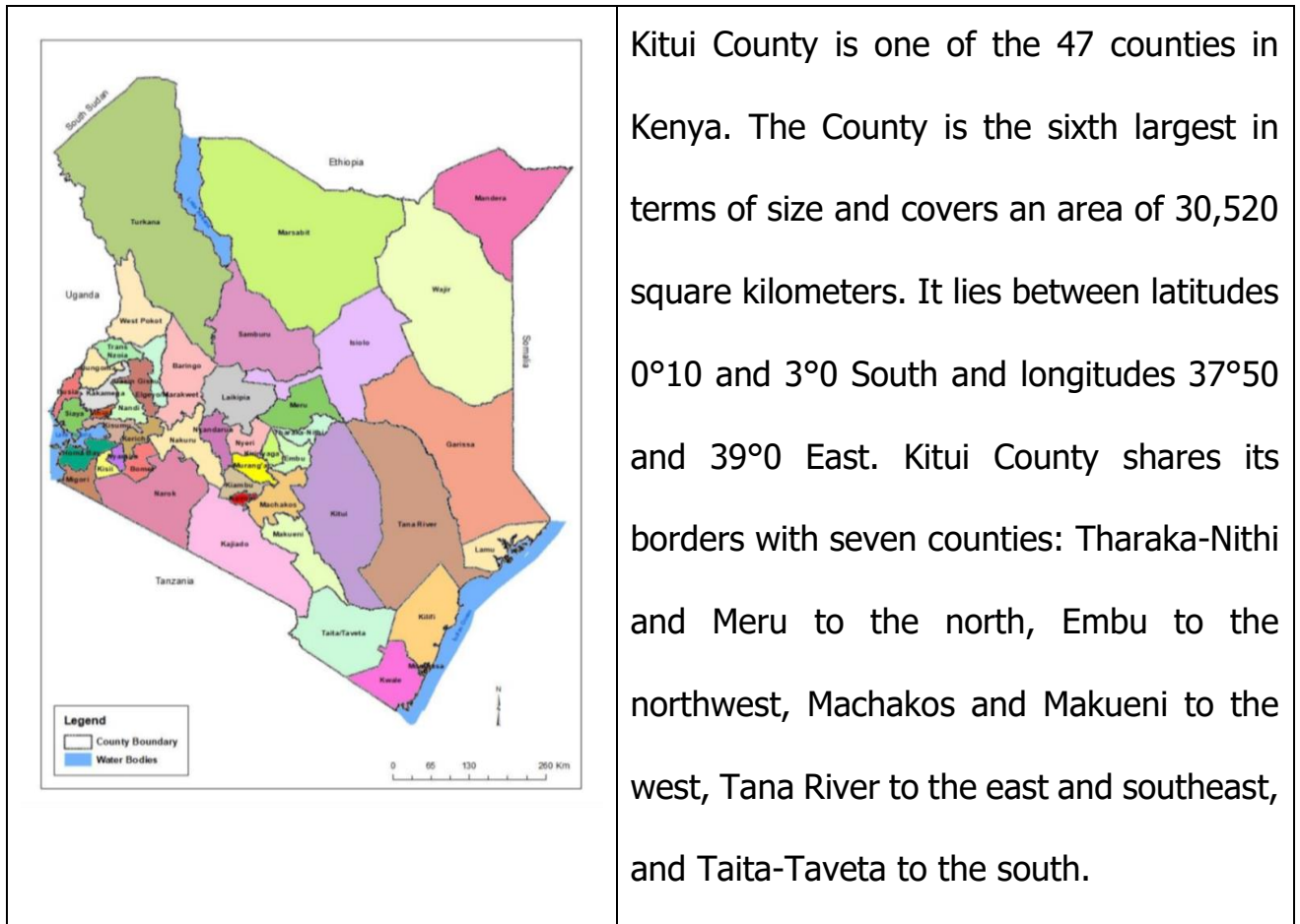
Change investment grant. Kitui County received the first CCIS grant for the development of the County Participatory Climate Risk Assessment (PCRA) that will support the development of the County Climate Change Action Plan 2023-2027.

The PCRA process was a public consultative undertaking involving five key steps that ensured all the relevant local stakeholders were involved and all the locally-led climate action principles were adhered to. The County public participation guidelines that provide for equal participation and access to information were critical considerations in the planning and undertaking of the PCRA process.

1.1.1 Snapshot

Kitui County is characterized by a rapidly growing population, water scarcity, falling food production, and low resilience to Climate Change. The combined effects of Climate Change and rapid population growth are increasing food insecurity, environmental degradation, and poverty levels in the County. The adaptive capacity of the community is low and aggravates the situation by the negative coping mechanisms practiced.

1.1.2 Location and Administrative Structure



County Administration

Kitui County headquarters is situated in Kitui town which hosts both the County Government of Kitui head offices and the National Government County Offices.

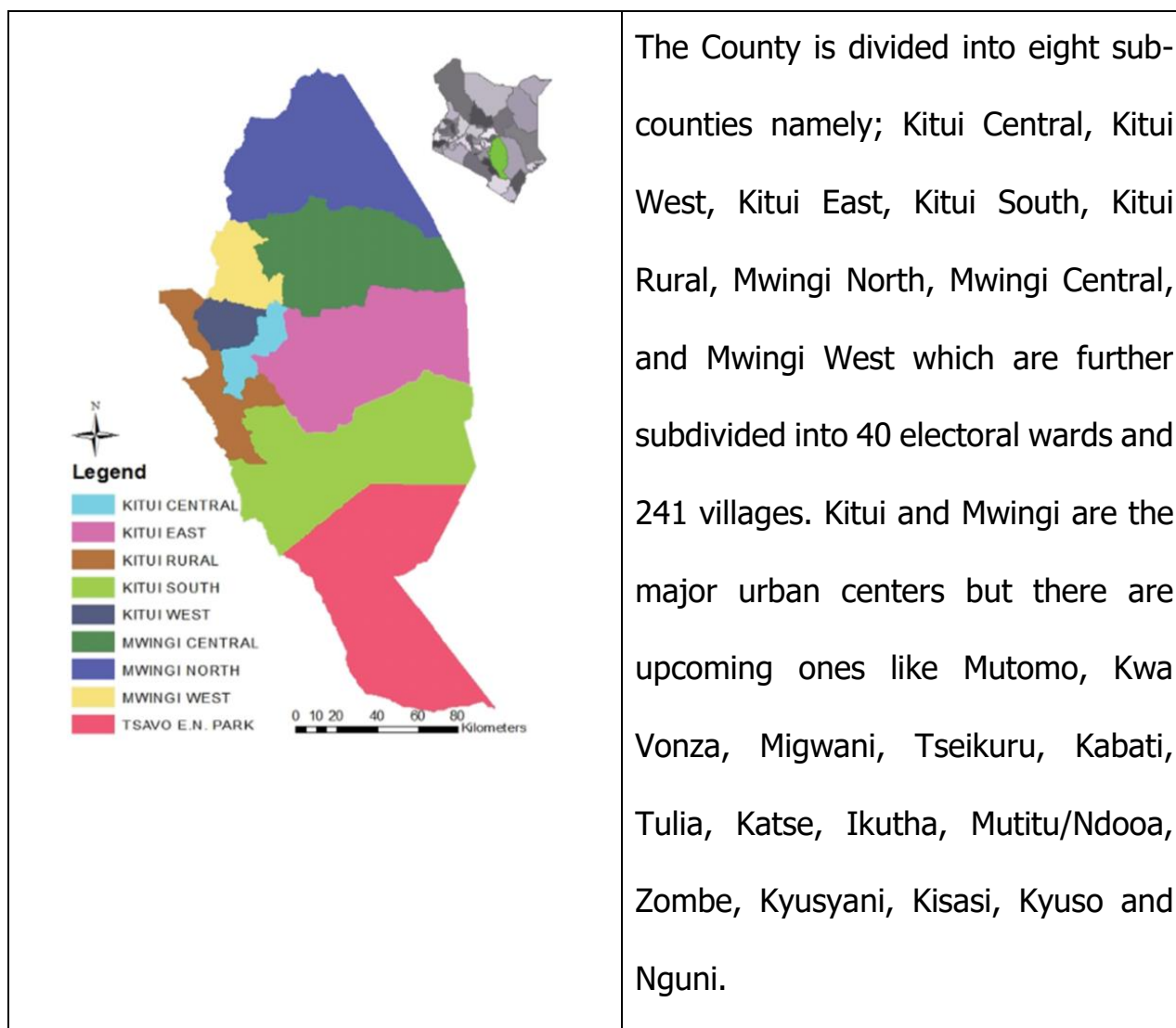


Figure 1: A map of Kitui County

1.1.3 Demography

Based on data obtained from the National Census (KNBS, 2019, Volume II), the population size was 1,136,187 people and has steadily grown. The population comprises 549,003 (48%) males and 587,151 (52%) females, Intersex 33 (0%) and the growth rate is at 1.2%. The population density average was 37 people per Km²

and a total of 262, 942 households. Kitui County is predominantly inhabited by the Akamba community which forms approximately 97% of the total number of inhabitants as captured by the County Integrated Development Plan (CIDP) 2018-2022. There is a substantive percentage of people from other communities such as Tharakas in Tharaka ward and Somali community especially in the major towns. The County has a large population of dependents 54% being children, adolescents, and the elderly.

Table 1: Distribution of Population by Sex and Sub-County

Distribution of Population by Sex and Sub-County				
Sub-County	Male	Female	Intersex	Total
Ikutha	39,986	42,976	2	82,964
Katulani	23,150	23,957	1	47,108
Kisasi	22,646	23,496		46,142
Kitui Central	52,123	53,863	5	105,991
Kitui West	33,887	36,983	1	70,871
Kyuso	36,789	40,077	1	76,867
Lower Yatta	31,701	31,628		63,329
Matinyani	23,362	24,448	1	47,811
Migwani	33,525	41,726	4	79,255

Mumoni	13,748	15,596		29,344
Mutitu	26,388	28,896	3	55,287
Mutitu North	10,337	10,877	1	21,215
Mutomo	54,819	58,531	6	113,356
Mwingi Central	52,339	56,174		108,713
Mwingi East	40,314	44,820	5	85,139
Nzambani	22,929	23,857	2	46,788
Thagicu	7,141	7,994	1	15,136
Tseikuru	19,619	21,252		40,871
Total	549,003	587,151	33	1,136,187

1.1.4 Climate and Topography

The central part of the County is characterized by hilly ridges separated by wide low-lying areas and has a slightly lower elevation of between 600m and 900m above sea level. There are two annual rain seasons. The Long-rains fall between March to May (MAM) and the Short-rains between October to December (OND). The highest areas in the County are Mumoni Hills, Kitui Central, Mutitu Hills, and Yatta Plateau. Due to their altitudes, they receive more rainfall than other areas in the County and are the most productive areas. On the western side, the main relief feature is the Yatta

plateau, which stretches from the north to the south of the County and lies between the Athi and Tiva rivers. The plateau is characterized by plain wide shallow-spaced valleys. Rainfall distribution is erratic and unreliable, ranging from 500mm to 1050mm per annum. Temperature and evaporation rates are generally high with February and September being the hottest months of the year. The maximum mean annual temperature ranges between 26°C and 34°C and the minimum between 14°C and 22°C with July being the coldest month of the year.

1.1.5 Environment and Natural Resources Sector

Kitui County economy primarily depends on natural resources where over 95% of the population live in rural areas and derive their livelihoods mainly from these resources. According to the CIDP 2018-2022 (2018, p. 52), forests, pastures, wildlife, underground water, and mineral resources are the main natural resources in the County, with accompanying opportunities and constraints for their optimal utilization. The CIDP also highlights the need for appropriate technologies, an improved regulatory environment, proper legal frameworks, and more public-private partnerships to ensure sustainable management of the County's natural resources.

The environment and natural resources have in the past years been under threat due to overexploitation to meet basic needs, negative coping mechanisms such as charcoal production, and shift cultivation practices. The situation is aggravated by the rising

poverty levels which currently stand at 63.1% as per the Kitui County Annual Development Plan (ADP) for 2023/2024. The situation is even worse within the rural population. The migration into marginal areas from high potential areas has contributed to unsuitable land use practices often resulting in resource use conflicts, especially water and pasture. Poverty often leads to over-use and destruction of the environment where short-term development goals and practices are passed at the expense of long-term environmental sustainability. According to the Forest and Landscape Restoration Implementation Plan (FOLAREP, 2022-2027), the County forest cover stands at 15.74% compared to national cover of 12.13%. A ban on charcoal trade outside the County has helped stem some of the reduction in forest cover, although the County needs to come up with a more sustainable, long-term solution to forest management. According to Makee *et al.* 2016, rural communities in Kitui County engage in charcoal production as a fallback strategy for income generation especially during years of severe drought.

1.1.6 Agriculture and Water Sector

Crop Production.

The economy of the County is dependent on agriculture, which contributes to rural employment, food production and rural incomes. The level of food self-sufficiency in the County is at 57%, however, approximately 27% of the entire population is

absolutely food insecure as per the 2022 short rains assessment report. The sector plays a major role by contributing about 87.3% of income earned by the rural population. The main food crops grown in the County include cereals such as maize, sorghum, and millets; pulses such as green grams (Ndengu), cowpeas and pigeon peas; root crops such as cassava, sweet potatoes and arrow roots; industrial crops such as cotton, sisal and sunflower, and horticultural crops represented mainly by fruits such as mangoes, pawpaw, and watermelons as well as vegetables such as tomatoes, kales, onions and bullet chilies.

Agriculture is mainly subsistence in the County with 215, 322 households practicing farming. According to data from the 2019 census, 199,459 households practice crop production while 177,701 households are in the livestock production sector. Other agriculture practices such as aquaculture, and irrigation are practiced by 570 households, 863 households, and 6,716 households respectively. The total annual average crop production is 80,680MT for cereals valued at Kshs. 4.24 billion, 771MT for industrial crops valued at Kshs. 29.04 million and 36,950MT for horticultural crops valued at Kshs. 990 million. Crop farming in Kitui is family-owned, providing the highly needed agricultural labour. Farm sizes differ from region to region with the largest farm sizes in the more arid areas and the smallest sizes in Kitui highland areas around Kitui Central. As reported by the Ministry of Devolution, the average acreage (hectares) under food production is 192,325 compared to a potential of 400,000 for

cereal crops; 298,277 compared to a potential of 380,000 for pulses; 350 compared to a potential of 2,000 for cassava; 907 compared to a potential of 170,000 for industrial crops (sisal, cotton and sunflower); 2765 compared to a potential of 16,500 for fruits, and 1170 compared to a potential of 84,500 for vegetables, respectively. The County agricultural potential is diverse with some areas being semi-arid and mostly dry, while others are arable. Kitui County Semi-arid farming zone has good potential for agricultural development and is currently either cultivated or under woodlands. The semi-arid ranching areas are less fertile and are used for drought-tolerant crops (DTCs) and livestock keeping. The Arid-agro-pastoral areas are generally suitable for grazing.

Livestock production

Livestock is a key potential sector as demonstrated by the 177,701 households that practice it. The main livestock types kept in the County are cattle (beef and dairy), goats (meat and dairy), sheep, and poultry (indigenous and exotic). Farmers have also ventured into apiculture. According to the 2019 census, very few households keep beef and dairy cows with 88,486 households keeping indigenous cattle. Small livestock breeds such as goats and chicken are kept by 149,306 and 147,023 respectively. A total of 103,497 households keep donkeys, and 30,134 households have beehives. Livestock cushions farmers during periods of drought. However, livestock farmers face several which are attributed to institutional framework, lack of pasture and quality

feed, scarcity of water resources, Climate Change, undeveloped breeding and management of livestock, poor marketing and trade, and other socioeconomic constraints.

The sector largely contributes to income generation and food security in main livestock zones. In LM4, LM5, IL5, and IL6 it contributes approximately 40-50% of total household incomes while in UM3 and UM4 it contributes 20-30% of household incomes. The County annual average production levels for various livestock enterprise products are as follows; 3,077 tonnes of beef, 1466.6 tonnes of goat meat (Chevon) and 70 million eggs, 4.2 million liters of milk, and 960 tonnes of honey against the estimated potential annual local demand of 32,120 tonnes of meat, 100.4 million liters of milk and 171.6 million eggs. Rangeland and pastures occupy about 1,048,728 hectares, which is about 80% of the County. The livestock carrying capacity is approximately 4.4 hectares per Livestock unit (LU). The Zebu constitutes 97% of the breed kept while Boran and Sahiwal account for 3%. Over 55% of beef cattle are found in AEZ IL6 and 40% in UM 4 and IL5. The balance of 5% are found in UM3 and UM4. The preferred dairy breeds are Ayrshire, Friesian, Guernsey, and Jersey, and their crosses in that order.

Apiculture

Beekeeping in Kitui is still largely practiced under traditional beehives and poor management practices with honey produced being marketed through middlemen and

with no value addition. Beekeeping is a viable and sustainable form of farming because of the amount of land considered rangeland standing at over 70% and rainfall that supports adequate vegetation necessary for bee foliage. Most beekeeping activities are concentrated in Kitui South, Kitui East, Mwingi North, West, and Central. The bulk of beekeeping and honey production equipment are log hives which account for 95% of honey produced locally. Modern hives are few and account for a paltry 5% of honey production. There are 120,000 traditional hives and 10,387 modern hives in the County. The bulk of the honey estimated at 960 tonnes per annum valued at Ksh 290 Million is harvested from traditional hives. The modern hives produce an estimated 94 tons of honey with a value of Ksh. 28 million according to 2013 to 2015 average production figures. Honey from Kitui is still held in high regard. Small-scale value addition is being undertaken by Mwingi Honey Cooperative. The County Government is also promoting production and processing of honey through the establishment of 16 honey processing units. Beekeeping is an enterprise with a lot of potential for improvement in honey production and income generation. The enterprise can be an important base for the sustainable development of cottage industries in the County.

Water Supply

Kitui County current water supply and demand calculated using an average consumption of 50 liters per person in urban and 25 liters per person in rural areas stands at 32,176 cubic meters and 12,586 cubic meters respectively. The shortage in

urban areas is even worse than in rural with access to piped water standing at 36.1 % urban and 41.1 % rural. Water management in Kitui is under KITWASCO which is primarily in charge of Kitui sub-counties and KIMWASCO Companies in charge of Mwingi sub-counties. KITWASCO is in charge of managing water supplies from the Masinga-Kitui water which is an inter-County project while KIMWASCO is in charge of the Inter sub-County project of Kiambere-Mwingi. The service providers face numerous challenges resulting from high non-revenue water (NRW), dilapidated water supply systems, lack of planning and budgetary allocation for water and sanitation infrastructure rehabilitation and development, high cost of pumping systems, lack of enough water to supply, uncoordinated development of water and sanitation infrastructure and inadequate technical institutional capacity. Other water points producing between 10 and 100 cubic meters daily are managed by Community Management Committees or by individuals. To increase the accessibility of water to the residents of Kitui the water companies have the following plans to increase the piping network and rehabilitate old ones. The County has two sets of borehole drilling rigs. Excavators and other machinery for dam excavation and desilting are done using AMS machines and equipment. While the management of these companies is supposed to be self-funding there are challenges, particularly in managing water losses and in collecting revenues. The community-managed water points are also self-

financing, and a few have financial problems rendering the water source unsustainable.

Kitui County water sector is constrained by increasing domestic and agricultural water requirements. The provision of safe and affordable water is one of the priorities of the Kitui County Government as detailed in Kitui CIDP (2018-2022). This commitment has been demonstrated by the huge budgetary resources allocated to the water sector from the County coffers. Contrary, the County is still grappling with the challenges of unreliable, expensive, and unsustainable water systems to support its steadily growing population and various sectors. Kitui County faces numerous challenges regarding the provision of water and improved sanitation services to the people. The majority of the people in the County still lack access to potable water and sanitation despite the numerous efforts by the County to promote efficient and reliable water harvesting and storage technologies. These efforts have been compromised by the fact that Kitui still relies to a greater percentage on its erratic rainfall patterns for water and in some instances, diesel and on grid-powered water sources. Other challenges that curtail the sustainable management of water resources in the County include; degradation of water catchment areas, rapid siltation of surface reservoirs, and poor skills in the operation and maintenance of water schemes. The urban areas in Kitui County still lack adequate water and sanitation services.

1.1.7 Energy Sector.

Kenya's Climate Change Action Plan 2018–2022 has prioritized the enhancement of energy efficiency as one of the priority actions to mitigate Climate Change in the country. The demand for electricity in Kenya has been growing at an annual rate of approximately 4% and it is forecasted that demand will exceed 23,000MW by 2030. The energy sector is considered a key enabler in achieving the country's development blueprint Vision 2030. Energy efficiency can be a major contributor to delivering energy access as well as climate action through mitigation, and other co-benefits associated with efficiency improvements. The SDG 7 efficiency target aims to double the rate of improvement in energy efficiency by 2030.

The core source of energy in Kitui County is biomass, which is mainly in the form of firewood particularly within rural areas while in urban centers it is sold and used as charcoal. There are other Petroleum products such as kerosene/paraffin, liquefied petroleum gas (LPG), motor gasoline, diesel oil, fuel oil, and electricity.

Biomass is mainly consumed in the form of firewood and charcoal but there are also other forms like crop residues, pellets, briquettes, or animal dung which provide energy needs for cooking, heating, drying, or electricity production. Biomass energy resources are derived from forests - closed forests, woodlands, bushlands, grasslands, farmlands, and plantations as well as from agricultural and industrial residues. According to SEAF-K 2017 (p. 43), there is a growing imbalance between biomass energy supply and demand in Kitui, with a deficit of almost 60%. This imbalance

exerts considerable pressure on forest and vegetation stocks and accelerates the processes of land degradation and desertification.

Slightly over 7.4% of all households in Kitui County use different forms of improved or clean fuels and cooking technologies, according to the 2019 Census. About 35.4% of households using charcoal utilize traditional metallic charcoal stoves. About 64.6% of households use a certain form of improved charcoal stove (SEAF-K, 2017, p. 17), most commonly, the Kenya Ceramic Jiko (which is owned by 87.6% of households with improved cookstoves). It is important to note that most of these households (82%) do not use the improved cookstoves on a daily basis, citing the high price of charcoal as the main barrier (Groots Kenya, 2017).

Kerosene stoves are either pressurized or have wicks. According to SEAF-K (2017), households using kerosene fuel and stoves have raised concerns regarding its use, including changes in color, smell, and the production of large quantities of soot during its use which affect breathing. However, there is a lack of data on such health impacts, and on the specific types of kerosene stoves owned or used by households in Kitui.

Kitui County has made considerable strides in addressing the key energy gaps. This has been guided by the Kitui County Energy Outlook, Kitui County Energy master plan. The plan documents the status of energy access in Kitui and identifies priority areas of action proposing strategies to effectively provide access to clean energy solutions.

1.1.8 Health Services Sector

Service Providers

Kitui County has several hospitals and health centers both public and private to meet the health needs of residents. Public hospitals include the Kitui County Referral Hospital, Mwingi Level 4 Hospital, Kyuso, Tseikuru, Nuu, Migwani, Katulani, Zombe, Mutomo, and Ikutha Level-4 hospitals. Private Hospitals include Kitui Nursing Home, Neema Hospital, Jordan Hospital, and Liberty Hospital. Mission-run hospitals such as Muthale Mission Hospital and Mutomo Mission Hospital and some private health centers such as Equity Afia among many others. The County health facilities are supported by 1086 health workforce across the County. The health services are organized into three tiers, various services can be accessed at different tiers of care. Tier 1 encompasses community strategy where health promotion, community hygiene, and sanitation, Ambulance linkage, and referral to health facilities and disease prevention services are provided. Tier 2 comprising health centers and dispensaries provide health promotion, curative, preventive, ambulance services, HIV and TB services, maternal and child health services, etc. Tier 3 comprising Sub-county and County hospitals provides all the services provided by tier 2 and in addition, it provides specialized services such as surgical services, Dental services, Ophthalmology services, Psychiatry care, Physiotherapy, Occupational therapy,

Orthopedics therapy, specialized pediatrics services, Specialized Medical services, Radiology services, Obstetrics and Gynecological and Ambulance services.

There are 309 functional public health facilities in the County, accounting for 6% of the country's 4, 000 public health facilities. This exceeds the national average of 85 health facilities per County by 145 (63%) facilities. However, a health facility distribution analysis conducted by the former Commission for Implementation of the Constitution (CIC) showed that the 309 health facilities were unevenly and inequitably distributed in the County. In three Sub-Counties, Kitui Central, Kitui West, and Mwingi West, over 95% of the residents live within an average distance of 5 kilometers from their homes to the nearest health facility.

Morbidity

The five main common diseases in the County are malaria 49%, diarrhoea 3.4%, stomach aches 5%, Flu 4.1% and Upper respiratory tract infection 7.7%. The main causes of morbidity for children under 5 years in the County are: URTI, diarrhea, skin diseases, intestinal worms, confirmed malaria, and pneumonia. Patients over 5 years of age die due to URTI, skin diseases, confirmed malaria, diarrhea, URTI, rheumatism, and hypertension. Additionally, HIV/AIDS is also a prevalent disease, especially in urban centers with a prevalence rate of 6.1%. The main Non-Communicable Diseases (NCDs) include cancer, diabetes, hypertension, benign prostrate hypertrophy (BPH) and arthritis.

Nutritional status.

The nutrition status of the population in Kitui County remains poor as a result of frequent droughts resulting in food insecurity at the household level, sub-optimal infant and young child feeding practices, poor childcare practices, inadequate access to health services, and poor hygiene and sanitation practices in the communities. Wasting rates among children less than five years are at 4.9%. Stunting is currently at 25% (Kitui Nutrition Survey Sept 2023) which presented Kitui as the most improved County on stunting status. The prevalence of underweight is 13.9% while wasting is at 4.9%.

1.1.9 Social Protection and Education Sector**Social safety nets**

A large percentage of the very poor escape extreme poverty because of social safety nets including cash transfers, in-kind transfers, social pensions, school feeding programs, and school fees bursary programmes providing clear evidence that social safety net programs contribute a substantial impact to their well-being. Kitui County in collaboration with other development partners is implementing such safety nets. Cash transfers by World Vision Kenya (WVK); cash transfers were disbursed to 2671 households (KES 18,531,164), in December 2022. Each household receives KES 6500. Cash transfer by World Food Program (WFP); through Lisha Jamii program, 4734

households have been receiving cash monthly since October 2022. Each household receives KES 6500. Nutrition Improvements through Cash and Health Education (NICHE) -It is a Component of the Kenya Social Economic Inclusion Programme (KSEIP) that combines social protection, nutrition, and child protection programming to ensure multi-sectoral and integrated service delivery. The County Government of Kitui disbursed KES 86,400,000 for the school fees bursary programme with each ward receiving KES 2,160,000.

The National Government supports three cash transfer programmes in Kitui County. These are Older Persons Cash transfers (OP-CT), Orphans and Vulnerable Children (OVC-CT), and Persons with severe disabilities (PWSD-CT).

Law Enforcement and public prosecution.

There are five public prosecution offices located in Kitui Central, Kitui South, Mwingi North, Mwingi West, and Mwingi Central. Community policing activities The community policing activities are active in the following sub counties; Kitui central, Kitui East, Kitui South, Kitui West, Kitui Rural, Mwingi North, Mwingi South, Mwingi West, and Mwingi Central.

Basic Education Services.

The County Government of Kitui recognizes the importance of Early Childhood Development, as one of the most important levers for accelerating the attainment of

Education For All (EFA) and the Sustainable Development Goals (SDGs). The EFA goal number one obligated states' Governments to expand and enhance comprehensive Early Childhood Development Education programmes which are essential to the achievement of the basic education goals. Similarly, the World Fit for Children Conference in 2002 called for every child to have a good start to life by promoting quality nurturing, care, and a safe environment. The County has 1850 ECDE centres and 52 youth Vocational training centres of which 3 are not operational. Some centres are hosted within existing primary schools and other centres are located within the villages as feeder schools where children access with ease. The County has employed xxx preprimary education teachers on permanent and pensionable terms.

The County Government of Kitui as per Sessional Paper No. 1 of 2019 recognizes the importance of integrating child health and nutrition in the Early Childhood Development Education programme. To enhance school readiness and children's health, the County Government remains committed to addressing malnutrition, especially at the pre-primary level through a multifaceted approach. At present, some centers provide a centre based feeding programme, and carry home programme while others do not have any programme. Various stakeholders have in the recent past supported feeding programmes in pre-primary education.

1.1.10 Transport, ICT, Trade and Industry Sector

Road and Air transport.

The County has two Class A roads passing through the County; the A3 Thika-Garissa Road and A9 Kibwezi-Mutomo-Kitui-Mwigwani road. The just completed Kibwezi-Kitui-Mwingi Road connects to the road leading to Machakos (Kitui- Machakos road) and subsequently connects to the Thika-Garissa highway. There are other roads proposed in the Road Sub-Sector Investment Programme (RISP) 2010-2024 including D478-Kola to A3-Nguni; B6-Kitui to A3-Ngooni; D507-Nuu to A3-Nguni; D507-Voo to B7-Ikutha; B7-Chuluni to D507-Mwitika; and E731-Miambani to D509-Mikuyuni. The County has Class E earth road network covering about 1,172.20 Kms. Upgrading of major roads to all-weather status and open more feeder roads in the County will enhance connectivity and open the region for businesses and economic opportunities. There are three airstrips in the County, namely, Ithookwe, Tseikuru and Mutomo airstrips. Refurbishment and routine maintenance will enhance connectivity. The County can also benefit significantly from T-Junction of the SGR at Kibwezi town via Mutomo.

Information, Communication Technology

The County Government recognizes the potential of ICT as an enabler of social economic development through delivery of public services and governance. The County is served by mobile telephone service providers namely Safaricom, Airtel, and

Telecom but the quality of coverage varies from location to location with network stability experienced in urban centers. The County is served by 12 post offices run by the Postal Corporation of Kenya (PCK) which oversees mail and parcel delivery as well as offering data communication services in addition to other Courier service providers such as G4S, Wells Fargo, and other public transport Saccos. Kitui County has fiber optic connection, but it is yet to be extended to serve all key departments in the County.

Trade and industry.

The County boasts various trade and industrial parks including the famous KICOTEC factory engaging in the production of garments and has won recognition and traded in the production of uniform for the Kenya disciplined forces. There are other established industries supporting youth in the production of construction materials and leather works within the County. Major trades include livestock trade, gums and resins, mineral gems, and other products. Kitui is known for its good quality honey and has so far supported the processing of honey through various honey cooperatives across the County such as Mwingi beekeepers and Kamaki farmers' cooperative society. The private sector has also established processing and manufacturing plants in the County such as the gypsum production in Mwingi, flour millers, and mineral mining companies for limestone and clay. The tourism sub-sector has also contributed

immensely to the economic trade in Kitui supported by the various touristic sites like the Nzamabi rock, Ikoo valley scenery, Mumoni Hills bird sites, Kora game reserve, Kitui south game reserve, and Tsavo East national parks which have improved out the number of visitors and tourists.

Kitui County had 200 shopping centers in 2014. The number of registered traders has more than doubled within three years from 5,532 in 2014 to 13,060 in 2017. Similarly, the number of registered wholesale traders stood at 1,530 in 2017 up from 142 in 2014. The number of registered jua kali artisans increased from 75 in 2014 to 420 in 2017. This is mainly attributed to improved measures by the County Government to enhance the registration of businesses and partly due to an increase in the number of new businesses operating in the County. During the period, a total of 7 modern markets, 104 market sheds, 84 boda boda sheds and 26 public toilets were operational.

1.1.11 Land and Urban Development Sector.

The land tenure system is divided between family and individual (private) land tenure. The family system grants access to land based on one's qualification as a family member. This land is inherited from family lineage. Under individual tenure, an individual owns the land permanently, free from any third-party claims. Most of the inhabitants in Kitui County lack title deeds: only about 25% of landowners in the

County have them (County Government of Kitui, 2018). Kitui County has Kitui and Mwingi municipalities, and the urban centers are rapidly growing in population and expanding. There are other upcoming towns such as Mutomo, Kyuso, kabati, Nzombe, Nguni, and Mutito/Ndooa.

1.2 Policy Context

1.2.1 International Policy Framework

Climate Change is the most indisputable challenge to socio-economic development and environmental sustainability the world over. Its effects have a bearing on people's lives and livelihoods. The devastating effects of Climate Change prompted the states to come up with a way of dealing with the menace hence the birth of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. The aim was to prevent further anthropogenic effects on the climate system through the stabilization of the level of GHG concentrations in the atmosphere. The Paris Agreement currently adopted by 196 countries is a legally binding international treaty on Climate Change which Kenya has ratified and has been the anchor of Kenya's climate-related laws and policies. The main aim of the treaty is to strengthen the global response to the threat of Climate Change with an emphasis on reducing the global temperature rise below 2 degrees.

The UNFCCC secretariat (UN Climate Change) is the United Nations entity tasked with supporting the global response to the threat of Climate Change. Both Kyoto Protocol and the Paris Agreement fall under the UNFCCC framework. Kenya is a signatory to both agreements and hence has come up with strategies for mitigating Climate Change.

In the lead-up to the Paris meeting, the UN tasked countries to submit plans detailing how they intended to reduce greenhouse gas emissions commonly known as the nationally determined contributions (NDCs).

1.2.2 National Policy Framework

The dedication by Kenya to the UNFCCC, just like other member states, is demonstrated by her commitment to the Nationally Determined Contributions (NDCs). The main objective of Kenya's NDC was to express her commitment to lower greenhouse gas emissions by 30% by the year 2030. Most specifically, Kenya's key commitments in the NDCs under the Paris Agreement include: -(i)Greenhouse gas (GHG) emissions reduction by 30% by 2030; (ii) mainstreaming of Climate Change adaptation into Government planning processes and (iii) implementation of adaptation actions

In follow up to the 2015 Paris conference, Kenya took it over to immediately put her NDCs into action. Some of the key achievements include the enactment of a

comprehensive law (Climate Change Act, 2016) and a policy to guide national and sub-national (County) climate actions. The Climate Change Act of 2016 and the National Climate Change Action Plan (NCCAP) 2018–2022 guide low-carbon and climate-resilient development pathways. The Act creates the national Climate Change council which is chaired by the president and directs Climate Change actions and commitment at the national level. The development of the Kenya National Adaptation Plan (2015-2030) geared towards enhancing climate resilience in the realization of Vision 2030, the National Climate Change Action Plan (2018-2022), and the National Climate Change response strategy 2010 have guided the climate actions in Kenya. The Act established the Climate Change directorate to spearhead Climate Change matters and provide a regulatory mechanism towards building the resilience of communities and guide in the aspirations of low carbon development pathway. Section 19(1)-(5) of the Act outlines that a County Government in the performance of her duties shall “mainstream Climate Change actions into County Government functions, integrate and mainstream Climate Change actions, interventions and duties as set out in the Act, and the National Climate Change Action Plan into various sectors. The National Adaptation Plan (2015-2030) integrates Climate Change into national and County level development planning and budgeting, as well as enhancing the resilience of vulnerable populations to climate shocks through adaptation and Disaster risk reduction programs.

1.2.3 County Policy Framework

The County Government Act (2012) has mandated counties to develop a County Integrated Development Plan (CIDP) which is a five-year plan to guide the development across the County. The CIDP (2022-2027) underdevelopment has identified Climate Change with all its manifestations as a key hindrance to the County development and mainstreamed in various County plans such as the County Spatial Plan (CSP) as well as Cities and Urban Areas Plan which are the basis for County budgeting and expenditures.

In addition to this, the County Government of Kitui enacted the Kitui County Climate Change Fund Regulations in 2018 to give effect to section 19 of the national Climate Change Act. This operationalized Kitui County Climate Change Fund (KCCCF) and put in place structures for implementing County specific climate actions. The regulations established the County Climate Change Steering Committee (KCCCSC), County Climate Change Technical Committee (KCCCTC), and Ward Climate Change Planning teams (WCCPTs) in the County wards. Later in 2023, the County put in place the Kitui County Environment and Climate Change Policy (KCECCP) to give impetus to the existing frameworks. These structures have placed Kitui County in a vantage position to mobilize resources and/or build partnerships for the implementation of adaptation and mitigation programs and projects to build the resilience of her citizens against the effects of Climate Change.

The Kitui County Environment and Climate Change Policy 2023 recognizes the impacts of Climate Change on the key sectors of development namely water, health, education, agriculture, livestock, infrastructure, transport, and communication including sports and culture as been greatly affected by Climate Change. The policy outlines inadequate policies and regulatory frameworks in addition to low community adaptive capacity to Climate Change as the biggest challenge in building resilience to climatic shocks. The policy recommends structured community capacity building including strengthening human and ecosystem resilience and deliberately moving to mobilize resources towards Climate Change actions.

1.3 Purpose of the PCRA Report

1.3.1 Purpose of the PCRA

Devolved climate finance is a relatively new concept in the Climate Change arena. It is, however, the best thing to have happened because the grassroot community bears the brunt of Climate Change related disasters and risks directly affecting their lives and livelihoods. Some of these risks are long-term shifts in climate patterns including unreliability of rainfall and chronic heat waves, soil erosion, loss of biodiversity, upsurge of diseases and pests, and extreme and frequent droughts among others.

The NCCAP 2018-2022 set out initiatives that foster the movement towards achieving Kenya's NDCs through the reduction of GHG emissions, mainstreaming Climate

Change adaptation into Government planning processes, and implementation of adaptation actions. Further, Climate Change Act 2016 through Section 19 calls for mainstreaming Climate Change action into County plans and programs. This formed the basis for the establishment of County structures for addressing Climate Change in the County. Kitui County was one of the first five counties to put in place Climate Change structures. Counties that had put in place structures for addressing Climate Change were given priority in signing into the Funding of Locally Led Climate Action (FLLoCA) program.

FLLoCA program is a partnership between the Government of Kenya (GoK) and the International Development Association (IDA), seeking to deliver locally-led climate resilience actions and strengthening County and national Government capacities to manage climate risks with the long-term aim of increasing communities local- level resilience to Climate Change and other environmentally induced hazards. This will contribute to building a low-carbon development pathway with enhanced climate resilience toward the attainment of Vision 2030. The program is being implemented as a hybrid of Performance for Result (PfR) and Investment Project Financing (IPF) respectively. Whereas PfR supports the GoK program to address Climate Change at County level through financing climate resilience actions and building enhanced County risk management capacities, the IPF component will support climate risk management capacities at the national level. As a requirement for Climate Change

Investment grants (CCIR), participating counties are expected to undertake Participatory Climate Risk Assessment (PCRA) at the ward and County level. The PCRA report will later feed into the Kitui County Climate Change Action Plan (CCCAP). Through a three-phased process, the approved CCCAP, will inform into the National Climate Change Action Plan (NCCAP) 2023-2027. The upcoming plan is informed by a wholly consultative participatory process starting from community-generated PCRA as stipulated in section 4(2)(f) of the Act. Climate Change Action Plans both at the National and County Government level play a catalytic role that enables Governments to deliver climate action results through appropriately structured interventions by responding to existing challenges that promote locally led climate action.

The PCRA process presents an opportunity for the grassroot communities to be at the center of designing and making decisions on how they intend to respond to Climate Change within their context and for what works best for them.

The PCRA process provided a platform on which the community took time to reflect on the past climatic events and phenomena, how the events were managed within the community and their impacts on livelihoods and people. Further, the process took account of the current climatic conditions and projects the future scenarios on which the adaptation strategies for climate actions are supposed to be anchored, unlike the normal planning processes that rarely look into the future.

The PCRA report will feed into the development of the County Climate Change action plan. The action plan will carry with it the aspirations and proposals from the grassroots communities and strategies that are contextualized. Once implemented, the actions will be highly embraced by the communities enhancing ownership of projects and a key sustainability feature.

The PCRA process has deliberately devolved decision making processes to the grassroots communities; the communities have become the project initiators unlike in other planning processes existing in the County. It further provides avenues to address community inequalities manifested by the use of other County planning tools by promoting the inclusion of women, youth, children, elderly, disabled, marginalized, and vulnerable groups. The process has in addition built the capacity of County Governments and local community structures to address climate-related risks and shocks.

1.3. 2 Key steps in the County's PCRA process

Step 1: Constituting The Technical Working Group

The Climate Change Unit (CCU) identified the composition of the consultative group to provide information for inclusion in the PCRA process and to form a team to be engaged during the data collection exercise at the ward level to enhance public participation. The consultative group was composed of technical officers from the

various sectors within the County Government (Health, water, Agriculture, Gender, Culture, Tourism, Livestock, Energy, Mining, Forestry and Environment) and national Government entities that are within the County jurisdiction (NDMA, NEMA, WRA, KFS, KMD, KEFRI and Department of Social Services). Further, the consultative group also included non-state actors (Caritas, ADSE, and civil society) and South Eastern Kenya University. Community representatives drawn from the ward level also formed part of the consultative group.

Under the coordination of the Climate Change Unit, the consultative group underwent a three-day workshop held in Mutomo Capital Inn hotel from 19th -21st April 2023. During the workshop definition of the key terms used in the PCRA process and clarity on the process of field data collection were adequately done. This guided each section of the PCRA and the tools to be used in each. This guaranteed data consistency, relevance in the field data, and reduced errors and misinformation. It further provided equitable access to information as provided for under the principles of public participation.

Finally, the technical working group drawn from the consultative group was appointed by the Chief Officer in charge of Environment, Climate Change, and Forestry to steer the PCRA process. Members included sectoral directors from Environment, Climate Change, Agriculture, water, health, livestock and economic planning. In addition to

the appointed sectoral directors were also technical officers from KMD, NDMA and SEKU. The technical working group reviewed the PCRA and Action Planning guidance, constituted the data collection teams, developed approaches to enhance participation of the vulnerable and marginalized community members, budgets for the entire process, and calendar of activities. Under the coordination of the CCU, the technical working group rolled out the PCRA process from 11th to 24th May 2023 which eventually culminated in this PCRA report.

Step 2: Mapping Stakeholders and Analysis.

The main aim was to identify all key stakeholders at the County, sub-County, and ward level who can contribute to the PCRA process including the historically marginalized and those vulnerable to the impacts of Climate Change, and further develop a stakeholder engagement strategy for the process. To achieve this, the exercise was facilitated using the Venn diagram to identify key stakeholders relevant to the Climate Change action and the task ahead.

Through the use of the Venn diagram the TWG was able to undertake the stakeholder analysis; identifying all the stakeholders that are within the community and will be of importance in the PCRA process. The stakeholders were further categorized based on their influence in society, their interests either social or economic interests, or the impact of their activities on the communities, and their strengths and capacities. This

analysis guided the TWG in developing approaches and schedules for stakeholder participation in the PCRA process. The following stakeholders were identified as outlined in Table 2 below.

Table 2 Stakeholder Analysis

STAKEHOLDER ANALYSIS		
Stakeholder	Sector	Description of actions related to PCRA
National Drought Management Authority	Disaster management	Early warning bulleting/drought response
Kenya Meteorological department	Climate information	Climate forecasts
South eastern kenya university	Research	Dryland research
Kenya forestry research institute	Research	Dryland forestry
Chamber of commerce	Trade and industry	markets and trade
Department of agriculture	agriculture	Livelihoods support
Department of social services	Social	social protection
Department of public participation	Public	public participation initiatives
Department of water	water	water provision services
Water resources authority	water	Catchment protection and water regulation
Department of disaster management	Disaster management	development of contingency plans
Department of environment	environment	Environment conservation activities
Aglican development services eastern	NGOs	Climate change projects
Kitui development centre	NGOs	livelihood projects
Caritas kitui	FBOs	Climate/livelihood projects
Inades formation	NGOs	Climate projects
Community forest associations	CBOs	community forest management
Water resource user associations	CBOs	water catchment management
Chiefs, Sub chiefs, village elders	Provincial administration	Community organization
Ward and village administrators	County administration	Community mobilization and administration
Member of parliament/county assembly	Representation	Community representation
Religious groups	churches	community social welfare
Community organized groups	Selfhelp groups	Community social development

Step 3: Preparation of Ward Level Community and Stakeholder Engagement

The TWG informed the ward administrators of the planned PCRA process, its objectives, the process of the exercise, the days for the exercise, and the participants to participate in the process. Through the village administrators and public meetings, the participants were mobilized for participation in the process with clear communication on what the process was all about, who to be involved, the venue, and the objectives. This mobilization process provided equitable access to information, an opportunity to collect community views, and provided appropriate feedback as guided under the Public Participation Act, 2016. In addition, the technical team reviewed and customised the data collection tools such as the matrices and guiding notes for the field teams; materials, and time schedules before the start of the exercise.

Step 4: Community Engagement and Data Collection

Field data collection and community engagement meetings were held from 11th – 24th May 2023. The lowest unit of data collection was the ward level in all 40 wards. Participants engaged at the ward level were made aware of their roles and contributions to the PCRA process. The TWG constituted data collection teams from the consultative group which had earlier on undergone the three-day training.

The ward administrators in collaboration with the village administrators mobilized the participants guided by a list that was developed by the TWG. The list included the village administrators, 2 representatives of youth of both genders, 2 women representatives, 2 elderly representatives, 2 religious group representatives, 2 representatives of community-based organizations, a representative of the member of County Assembly (CA), a representative of People With Disability (PWD), a representative of the minority group, village elders, chair of the ward development committee, 5 representatives of community groups, 2 representatives of the 2 key economic activities in the ward and a representative from each village.

The methodology for data collection was organized in form of group discussions and sharing and plenary for inputs and building consensus on areas of prioritization as guided by the County public participation guidelines. The facilitators were guided by the tools shared during the consultative group training workshop and additional tools developed by the TWG.

The findings from the ward consultations were presented in form of tables, charts, and illustrations and were well-recorded by the data collection team in preparation for data analysis. The social and resource maps formed part of this document, as the historical calendar, community adaptive strategies, and action plans developed at the field level informed the PCRA report.

Table 3: Exercise procedure and activities

Activity	Description
Activity 1	Introduction of community members, WCCPTs, Ward Officers, and Technical working group
Activity 2	Identification of resources and input into the map; Mapping of risks
Activity 3	Climate information discussion on historical, current, and projected scenarios
Activity 4	Identification of Climate risks, Direct and Indirect Impacts; Identification of vulnerable groups
Activity 5	Group work on priority Climate Risks, discussion on adaptation strategies, effectiveness of the strategies, actions that support the strategies, Factors undermining the strategy, and new adaptation
Activity 6	Action Planning

Step 5: Ward Level Data analysis and development of the Ward PCRA report

The ward data collection teams were allocated two days to analyze the data from the field and develop the ward PCRA report. The PCRA report template had earlier been shared during the consultative PCRA group training. The product of this exercise was the ward PCRA report. This was done by ward team leaders and the note-takers from the respective forty wards. The report was developed with information captured through the ward resource map, historical profile, seasonal calendar, gender daily calendar, and access and control of resources.

The ward data collection team compiled a ward PCRA report whose key components were:- the ward background information, climatic history, key climatic events and phenomena, prioritized climatic hazards and identified, differentiated risks and current adaptive strategies and proposed adaptive measures. The report also presented a ward-level climate action plan with proposed interventions, locations for the action, and associated budgets. The ward-level PCRA report was used to inform the County PCRA report.

Step 6: Development of County PCRA Report

A team of five technical officers was appointed to lead the process of writing the PCRA report. The team consisted of technical staff drawn from key climate-sensitive sectors and of individuals with vast knowledge in their area of specialization. This made data

analysis from the field ward PCRA reports easy and presented in a way that does not distort the meaning making the report palatable and user-friendly. The report development team interrogated the ward PCRA reports categorizing the wards with similar hazards, associated risks, and adaptative strategies according to livelihood zones. Further, the team ranked the County hazards and differentiated the associated risks. The team engaged key stakeholders in triangulating the climate information from the ward and developing the future climate scenarios. The team compiled this information to form the County PCRA report with key sections on County hazard profile, Climate information, and climate future scenarios, existing adaptive strategies, and proposed adaptation plan.

Step 7: Multi-sector Engagement on County PCRA Report

The CCU convened a multi-sector workshop to refine the key findings captured under the County PCRA report. The participants drawn from various sectors both national and County Government, civil society groups, community representatives, and non Governmental organizations were involved in this validation process. The CCU presented the PCRA report highlighting the outcomes in each of the chapters. The participants gave their views on areas of omission, inclusion, and consideration for the final PCRA report. The inputs from this workshop were incorporated into the County PCRA report.

2.0 KITUI COUNTY CLIMATE HAZARD PROFILE

2.1 Current and Historical Climate Hazards and Trends

2.1.1 County Overview

Kitui County has an arid and semi-arid climate, with erratic and unreliable rainfall distribution and extreme temperature variations. The rainfall received is bimodal with two main seasons namely March–April–May (MAM) long rain season and October–November–December (OND) short rain season. OND is usually more reliable in terms of agricultural productivity. Severe drought events have been recurring in most parts of the County while occasional flash floods have been experienced along major seasonal rivers. The total number of months with an average temperature greater or equal to 25°C serves as an indicator of heat stress. Historically, the months of January to May, October, and November, are months that experience heat stress.

2.1.2 Historical and Current Climate Hazards

During the Participatory Climate Risk Assessment process, the Historical Calendar Tool was used to identify key climate-related events that have occurred in the last 20 years and left a significant negative/positive impact on community livelihoods and resources. Other climate-related data collection tools used were Resource maps, gender daily calendars, seasonal calendars and leaky bucket. The risks and hazards

were identified from the tools, and thereafter, the hazards were characterized based on causes and the impacts at the individual and community level through analytical decisions. The data analysis tools used were hazard cause-effect, capacity assessment as well and vulnerability assessment tools that differentiated the impacts as high, medium, or low on different key interest groups within the County.

Based on the ward-level climate risk assessment report, 4 climate hazards were identified and ranked as follows;

1. Drought
2. Environmental degradation
3. Floods
4. Extreme temperatures

2.1.3 Historical Climate Hazards and Risks Profile

Period	Hazard	Risks
1980-1981 2007-2011	Drought	<ul style="list-style-type: none"> - Famine (nikwa ngwete) - water scarcity

2012 - 2022		<ul style="list-style-type: none"> - human-human conflict (Ngomeni, Nguni and Mutha) - human-wildlife conflict (ikutha, endau malalani, Voo Kyamatu, tseikuru)
2000 - 2022	Environmental Degradation	<ul style="list-style-type: none"> - Loss of biodiversity - degradation of environmentally sensitive ecosystems
1993 1997 2002 2006	Floods	Low crop yield, destruction of infrastructure/property, destruction of farming lands, loss of lives, outbreak of waterborne diseases

1998 – 2004	Extreme high temperatures	Heat stress
2006 – 2008		
2014 – 2016		
2020 - 2022		

2.1.4 Rainfall Distribution

(i) Long Term Mean OND Rainfall for the Period 1982 - 2022

The following chart focuses on average OND rainfall based on historical values covering a period of 40 years. *(Data source; Kitui County Meteorological Office)*

Description	Map

The map illustrates long term mean rainfall distribution in Kitui County for OND, typically with highest mean rainfall record between 450 – 600mm received in Miambani, Township, Kyangwithya East, Matinyani, MutoNguni and some parts of kyangwithya west while lowest mean rainfall record between 250 – 300mm in peripheral areas of Mutha and athi wards.

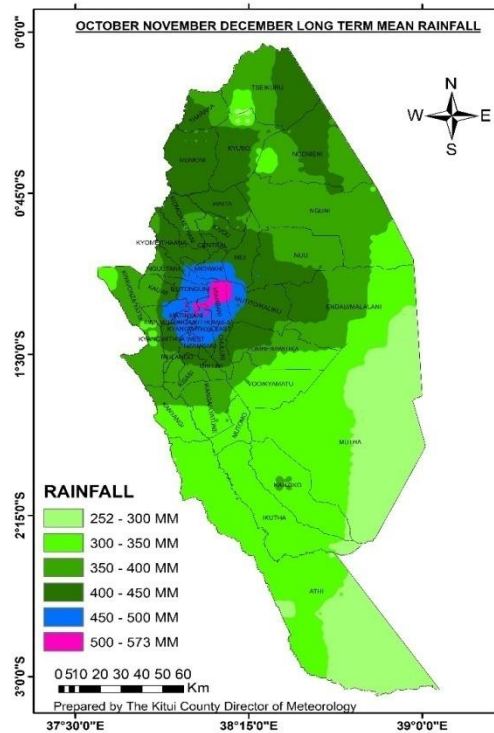


Fig. 1: Average rainfall for OND for the period 1982 – 2022

(ii) Long Term Mean MAM Rainfall for the Period 1982 – 2022

The following chart focuses on average MAM rainfall based on historical values covering a period of 40 years. *(Data source; Kitui County Meteorological Office)*

Description	Map
-------------	-----

The map illustrates long-term mean rainfall distribution in Kitui County for MAM, typically with the highest mean rainfall record greater than 350mm received in Mumoni and Tharaka wards while the lowest mean rainfall record below 200mm in areas of Nguni, Endau/Malalani, Ngomeni, Mutha, Zombe/Mwitika, Voo Kyamatu, Mutomo, kanziko, Ikutha, Athi wards.

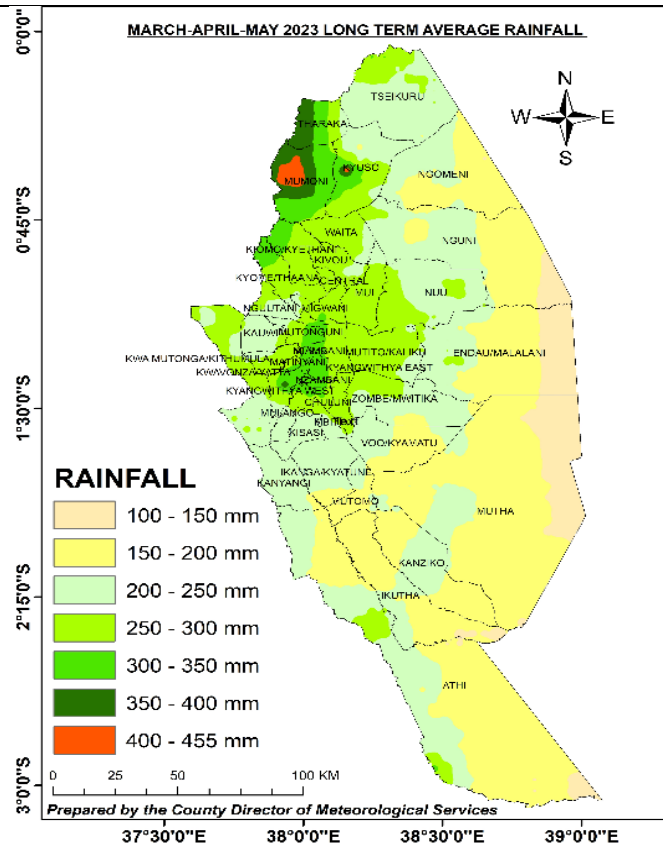
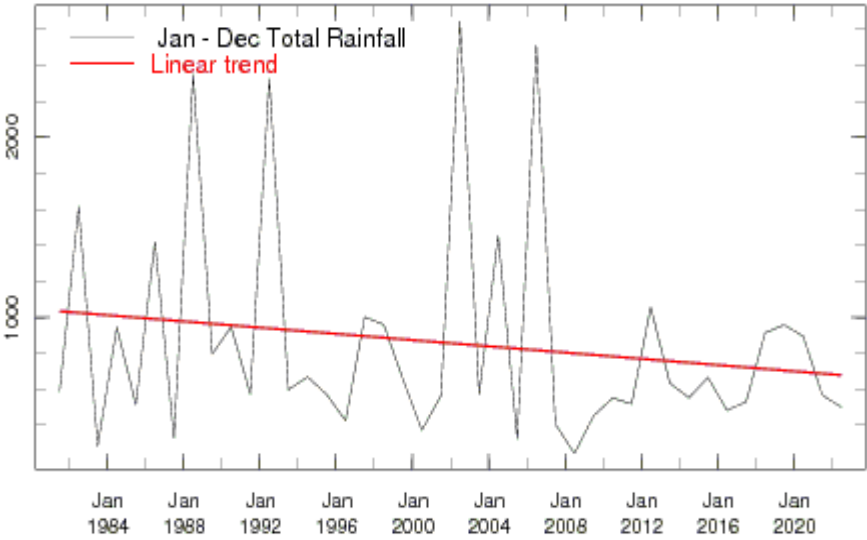


Fig. 2: Average rainfall for MAM for the period 1982 - 2022

1.4 Annual Rainfall Trends

Description	Map
<p>The rainfall time series (1981-2022) was reconstructed from station observation, remote sensing, and other proxies. This graph allows users to view rainfall seasonal trends expressed per year over the selected period. The linear trend shows declining</p>	 <p>The graph displays the annual total rainfall (Jan - Dec) from 1981 to 2022. The y-axis represents rainfall in millimeters (mm), ranging from 0 to 2000. The x-axis represents years, with labels every four years from 1984 to 2020. A black line shows the annual total rainfall, which is highly variable, with several peaks exceeding 1000 mm. A red line indicates the linear trend, which shows a consistent decline in rainfall over the period, starting around 1000 mm in 1981 and ending around 700 mm in 2022.</p>

mean rainfall over the selected period.	
---	--

Fig 3: Annual rainfall trends for the Period 1981 – 2022

Discussion

The long-term annual mean (over 20 years) rainfall for OND indicates reliability during a normal season in most parts of the County. At sub-county level, analysis of the mean rainfall record is as follows;

- High (Above 450mm); Kitui Central
- Medium (between 350 – 450mm); Kitui West, Mwingi West, parts of Mwingi North, and parts of Mwingi Central
- Low (below 350mm); Kitui Rural, Kitui south, and Kitui east

The long-term annual mean (over 20 years) rainfall for MAM indicates unreliability during a normal season in most parts of the County. At sub County level, analysis of the mean rainfall record is as follows;

- High (Above 550mm); Part of Mwingi North (around Mumoni Hills)
- Medium (between 250 – 350mm); Kitui West, Mwingi West, parts of Mwingi North, Kitui Central, and Mwingi Central
- Low (below 250mm); Kitui Rural, Kitui South, Kitui East.

The trend in the long-term annual mean rainfall distribution has been decreasing for both the MAM and OND seasons. This has caused recurrent events of drought followed by flash floods and environmental degradation in different seasons of every year.

2.1.5 Monthly and Annual Mean Temperature

Monthly Mean Temperature

Description	Graph

The monthly mean temperature (1981-2022) was reconstructed from station observation, remote sensing, and other proxies. This graph allows users to view the monthly mean temperature expressed per month over the selected period on the 50th percentile graph. The highest monthly mean temperature record is indicated in March while the lowest monthly mean temperature record is indicated in July.

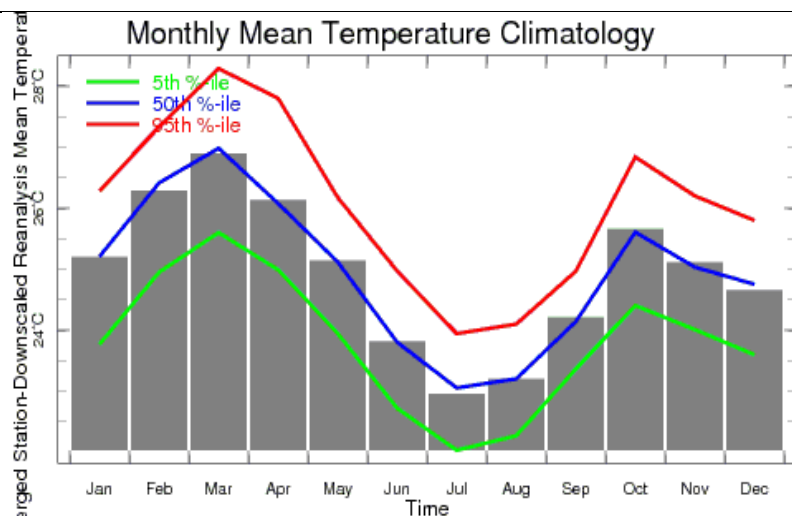


Fig 4: Monthly mean temperature climatology

Annual Mean Temperature Trend

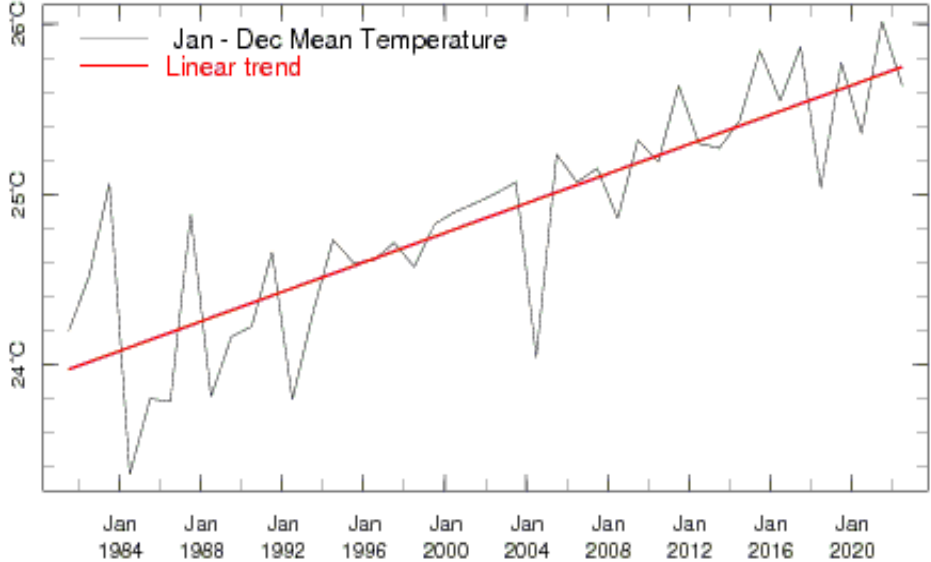
Description	Graph
<p>Temperature time series (1981-2022) was reconstructed from station observation, remote sensing, and other proxies. This graph allows users to view mean temperature seasonal trends expressed per year over the selected period. The linear trend shows rising mean temperature over the last 40 years by 1.7°C</p>	 <p>The graph displays the Jan - Dec Mean Temperature from 1981 to 2022. The y-axis represents temperature in degrees Celsius, ranging from 24°C to 26°C. The x-axis shows years from 1984 to 2020, with labels every four years (Jan 1984, Jan 1988, Jan 1992, Jan 1996, Jan 2000, Jan 2004, Jan 2008, Jan 2012, Jan 2016, Jan 2020). A jagged grey line represents the annual mean temperature, showing significant seasonal fluctuations. A solid red line represents the linear trend, indicating a steady increase in mean temperature over the 40-year period. The legend identifies the grey line as 'Jan - Dec Mean Temperature' and the red line as 'Linear trend'.</p>

Fig 5: Annual temperature trend for the period 1981 - 2022

Discussion

The long-term monthly mean temperature climatology analysis;

- High – recorded in February, March, April, October and November
- Medium – recorded in May, June, September, and December
- Low – recorded in July

The annual temperature trend indicates a constant increase in temperature every year. Over the selected period, the graph for long-term annual temperature trend shows an increase in temperature by 1.7°C.

Increasing temperatures above average have led to severe events of drought due to the drying up of water wells, seasonal rivers, and water reservoirs. Extreme temperature-related risks such as heat stress have reoccurred significantly over the decades. An increase in warmer days has been noted in Mwingi North, Kitui South, and Kitui East Sub-counties.

2.2 Exposure and Vulnerability Profiles

The identified vulnerable groups were women, youth, PWD, children, elderly and children-headed families. Climatic conditions dictate the livelihoods of the people and their exposure to climatic hazards. According to participatory climate risk assessment at the wards, the main livelihood enterprises in the County are;

- Marginal mixed farming
- Mixed farming
- Formal/unskilled employment.

The table below shows the vulnerable groups and their livelihoods that have been exposed to the hazards;

S/N	Hazard	Vulnerable groups exposed	Livelihoods affected
1.	Drought	Women, youth, PWD, elderly	<ul style="list-style-type: none"> - Crop farming - Livestock keeping

			<ul style="list-style-type: none"> - Horticulture farming - Kitchen garden - Poultry farming - Boda boda
2.	Environmental Degradation	Women, youth, PWD, elderly	<ul style="list-style-type: none"> - Crop farming - Livestock keeping - Horticulture farming - Kitchen garden - Poultry farming

3.	Floods	Women, youth, PWD, elderly	<ul style="list-style-type: none"> - Crop farming - Horticulture farming - Boda boda - Retail businesses - Market days
4.	Extreme temperatures	Women, youth, PWD, elderly	<ul style="list-style-type: none"> - Crop farming - Livestock farming - Boda boda and retailing

2.3 Differentiated Impacts of Climate Trends and Risks

Hazard	Direct and Indirect Impacts	
	Impacts on community	Impacts on ecosystems/biodiversity
Drought	<ul style="list-style-type: none"> - Low crop yields - Death of livestock - Loss of household incomes - Rural-urban migration - Family conflicts and breakups - Increased crime (theft issues) 	<ul style="list-style-type: none"> - Drying of springs - Loss of vegetation and forest cover - Extinct of indigenous tree species - Lowered water table - Migration of wildlife (wild animals) - Destruction/loss of natural habitats

	<ul style="list-style-type: none"> - Human-human conflict - Human-wildlife conflict 	
Environmental degradation	<ul style="list-style-type: none"> - Low crop yields - Death of livestock - Loss of household incomes - Human-human conflict - Human-wildlife conflict 	<ul style="list-style-type: none"> - Drying of springs - Loss of vegetation and forest cover - Extinct of indigenous tree species - Lowered water table - Migration of wildlife (wild animals) - Destruction/loss of natural habitats

Floods	<ul style="list-style-type: none"> - Destruction of crops - Destruction of farming lands - Loss of lives - Destruction of infrastructure - Outbreak of waterborne diseases 	<ul style="list-style-type: none"> - Loss of aesthetic value of landscapes - Destruction of wildlife - Soil erosion - Siltation of water reservoirs
Extreme temperature	<ul style="list-style-type: none"> - Drying of crops - Low yields - Loss of income - Heat stress - Headaches and human suffering 	<ul style="list-style-type: none"> - Migration of wildlife - Drying of water springs and reservoirs - Drying of vegetation - Emergence of invasive species

	- Increased snake bites	
--	-------------------------	--

2.4 Spatial Distribution of Hazards and Risks

The following table shows the hazards, associated risks, and the affected wards. Maps for each hazard and spatial risk distribution have been developed and attached below the table.

Source of spatial maps: Digitized spatial map by Kitui County GIS department relying on ward-level risk assessment reports developed during the PCRA process conducted in May 2023.

2.4.1 Hazards and Associated Risks

S/N	Hazard	Associated Risk	Ward
1.	Drought	Water scarcity	Most hit areas (Mui, Ikanga, Kauwi, Chuluni, Ikutha, Kanyangi,

			<p>Kiomo/Kyethani, Yatta/Kwa Vonza, Kyome/Thaana, Endau/Malalani, Voo/Kyamatu, Kanziko/Simisi, Athi, Mutomo/Kibwea, Kyuso, Tharaka, Ngomeni, Tseikuru, Mumoni, Mutha).</p> <p>Moderate hit areas (Mutitu/Kaliku, Nguni, Waita, Nzombe/Mwitika, Kivou, Nu, Ngutani, Mui, Nguni).</p> <p>Low Hit Areas (Kyangwithya East, Kyagwithya West, Kithumula/Kwa Mutonga, Kisasi, Mulango, Miambani, Mwingi Central, Nzambani, Mbitini, Kitui Township, Matinyani, Migwani).</p>
		Lack of pasture	<p>Most hit areas (Ngomeni, Mutha, Kanziko, Endau/Malani, Mumoni, Tharaka, Tseikuru, Nguni, Athi,</p>

			<p>Ikutha, Nzombe/Mwitika, Mutitu/Kaliku, Yatta/Kwa vonza)</p> <p>Moderate hit areas(Chuluni, Ikanga, Kanyangi, Mutomo, Waita, Ngutani)</p> <p>Low hit areas(Miambani, Kyangwithya east, Kyangwithya west, Mulango, Kisasi, Mbitini, Nzamabni and Kitui township).</p>
		Low crop yields	<p>Most hit Areas (Mui, Ikanga/Kyatune, Kauwi, Chuluni, Ikutha, Kanyangi, Kiomo/Kyethani, Yatta/Kwa Vonza, Kyome/Thaana, Endau/Malalani, Voo/Kyamatu, Kanziku/Simisi, Athi, Mutomo/Kibwea, Kyuso, Tharaka, Ngomeni, Tseikuru, Mumoni, Mutha).</p>

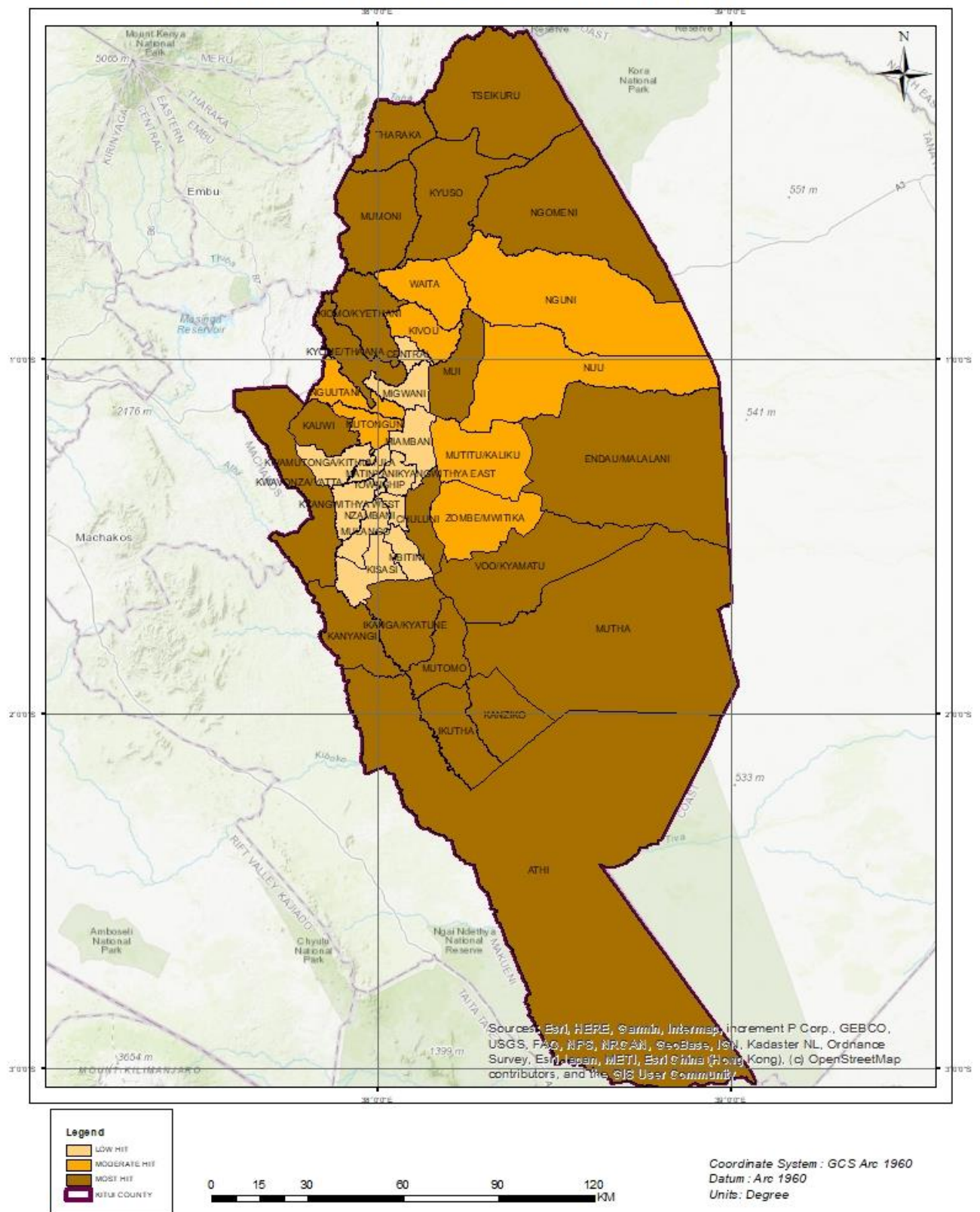
			<p>Moderate hit areas (Mutitu/Kaliku, Nguni, Waita, Nzombe/Mwitika, Kivou, Nu, Ngutani, Mui, Nguni).</p> <p>Low hit areas (Kyangwithya East, Kithumula/Kwa Mutonga, Kisasi, Mulango, Miambani, Mwingi Central, Nzambani, Mbitini, Kitui Township Matinyani, Migwani, Kyagwithya West).</p>
		Human/wildlife conflict	<p>Areas: Ngomeni, Endau/Malalani, Tseikuru, Mutha, Athi, Ikutha, Kanyangi, Chuluni, and Mutomo.</p>
2.	Environmental degradation	Degrading ecosystems/habitats	<p>(Mui, Ikanga/Kyatune, Chuluni, Ikutha, Kanyangi, Kiomo/Kyethani, Yatta/Kwa Vonza, Kyome/Thaana, Endau/Malalani, Voo/Kyamatu, Kanziku, Athi, Mutomo/Kibwea,</p>

			Ngomeni, Tseikuru, Mumoni, Mutha Nuu and Nguni.
		Pollution of air, water, and soils	Kitui Township, Mwingi Central, Mutomo/Kibwea, Kyuso, Kauwi, Kyagwithya West, Kyangiwthya East, Mulango, Yatta/Kwa Vonza.
3.	Flash Floods	Landscape changes	Nguni, Chuluni, Voo/Kyamatu, Mutha, Athi.
		Soil erosion	Areas:- Nguni, Chuluni, Voo/Kyamatu, Mutha, Athi.
4.	Extreme temperatures	Emergence of crop pests and diseases	Ngomeni, Kyuso, Mumoni, Tseikuru, Tharaka, Waita, Nguni, Mwingi Central and Kivou ward.

--	--	--	--

1. Drought

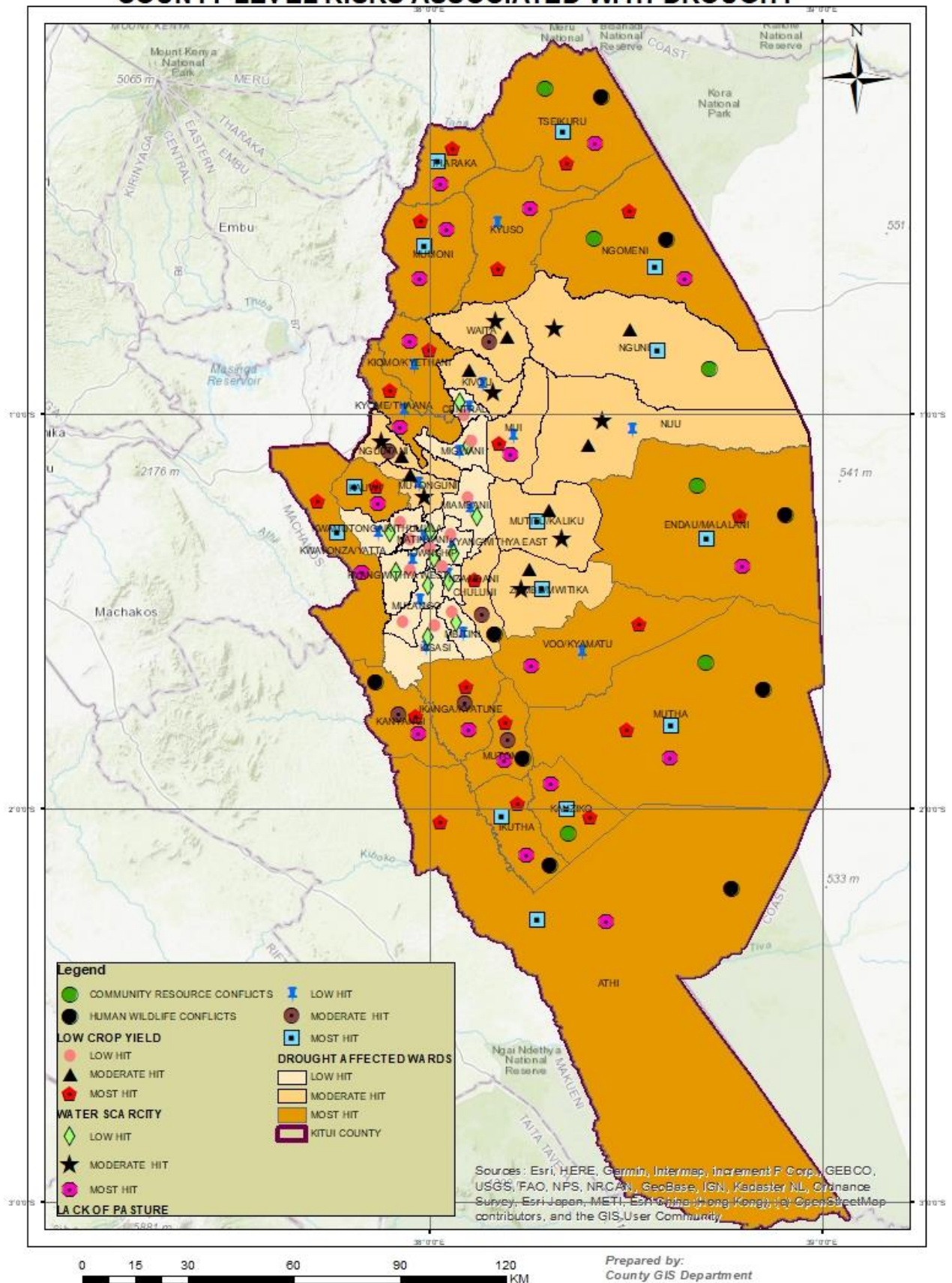
DROUGHT AFFECTED AREAS KITUI COUNTY



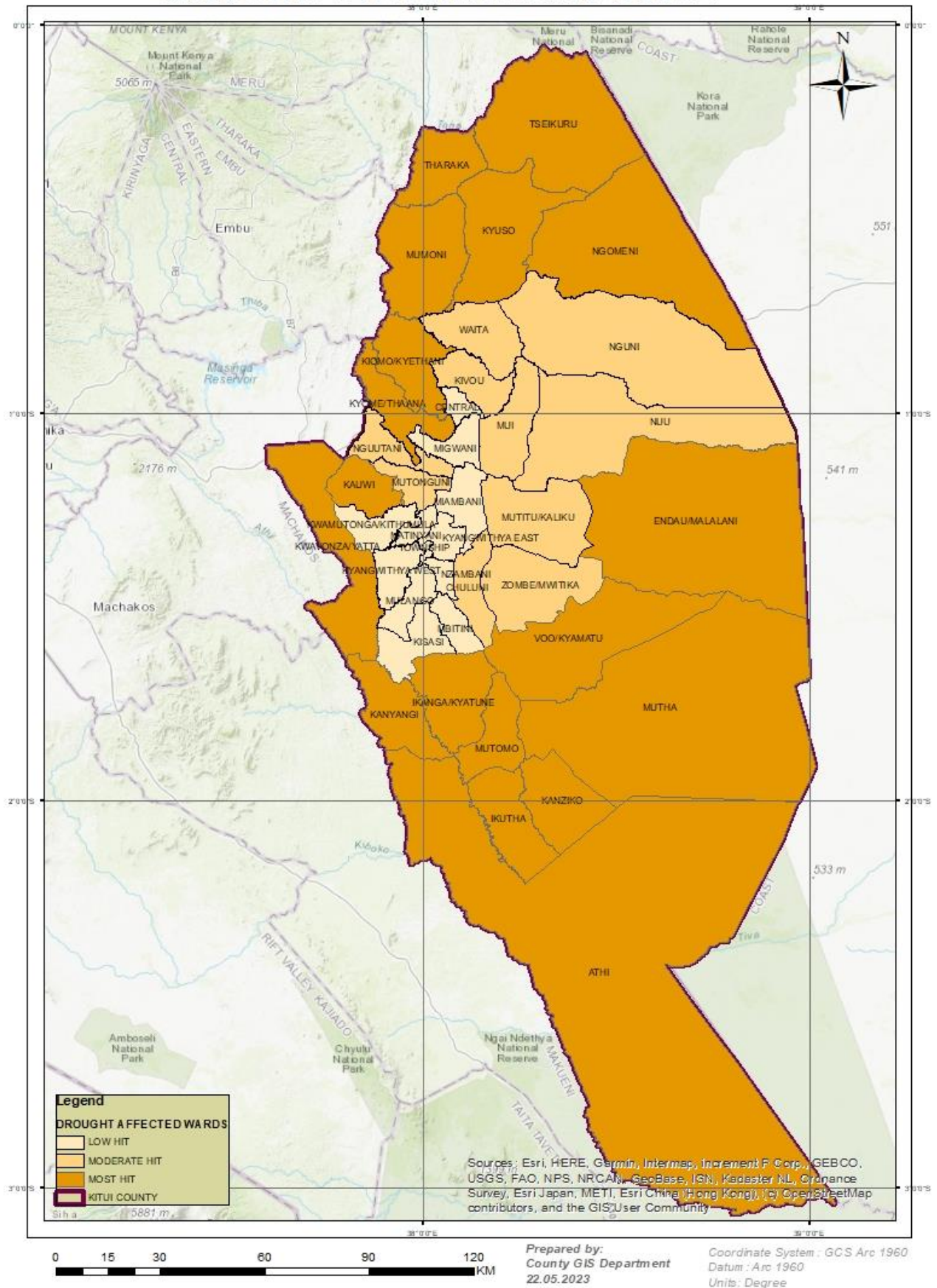
The map illustrates the intensity of drought across the County.

County-level risks associated with drought

COUNTY LEVEL RISKS ASSOCIATED WITH DROUGHT



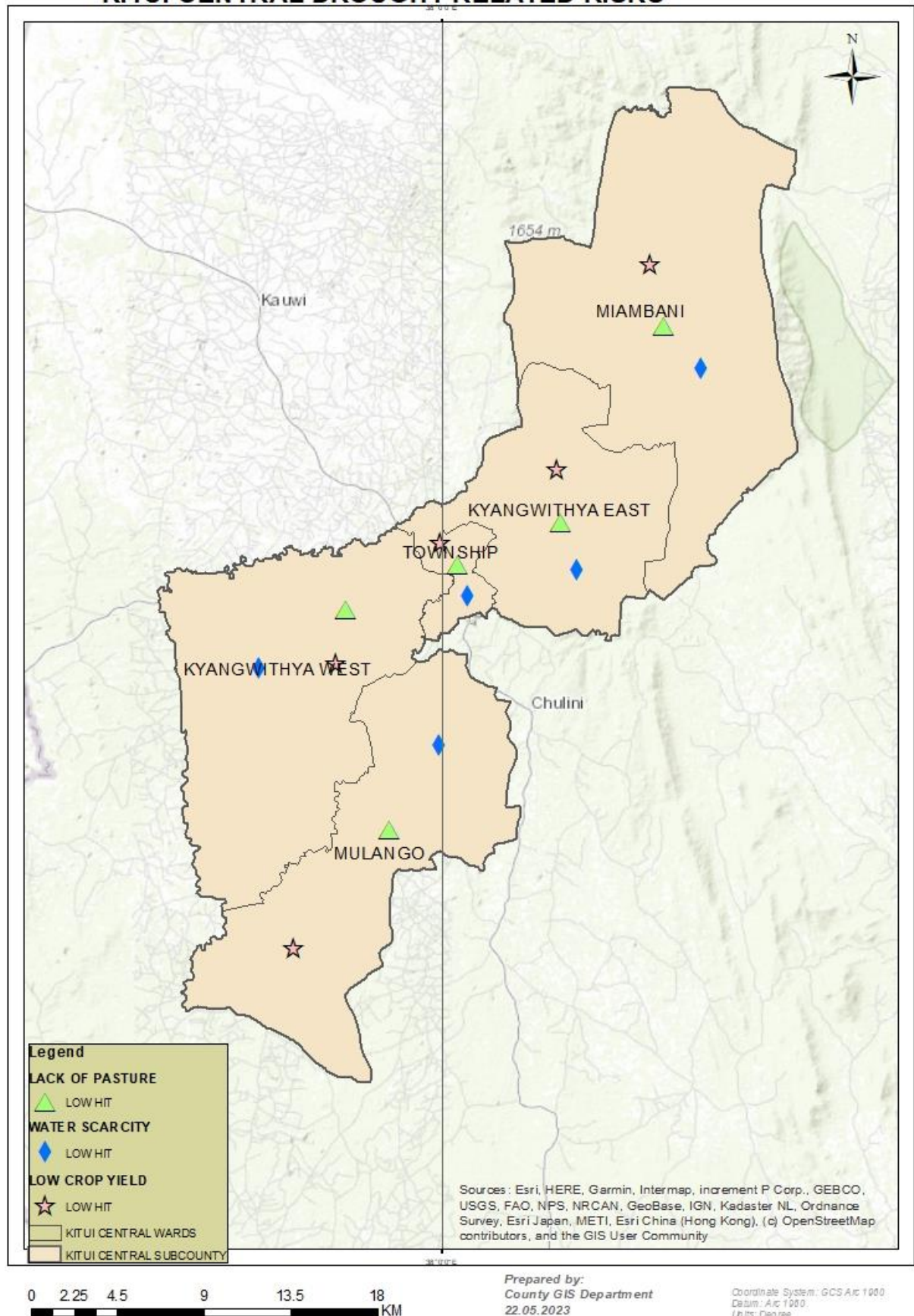
DROUGHT AFFECTED AREAS KITUI COUNTY



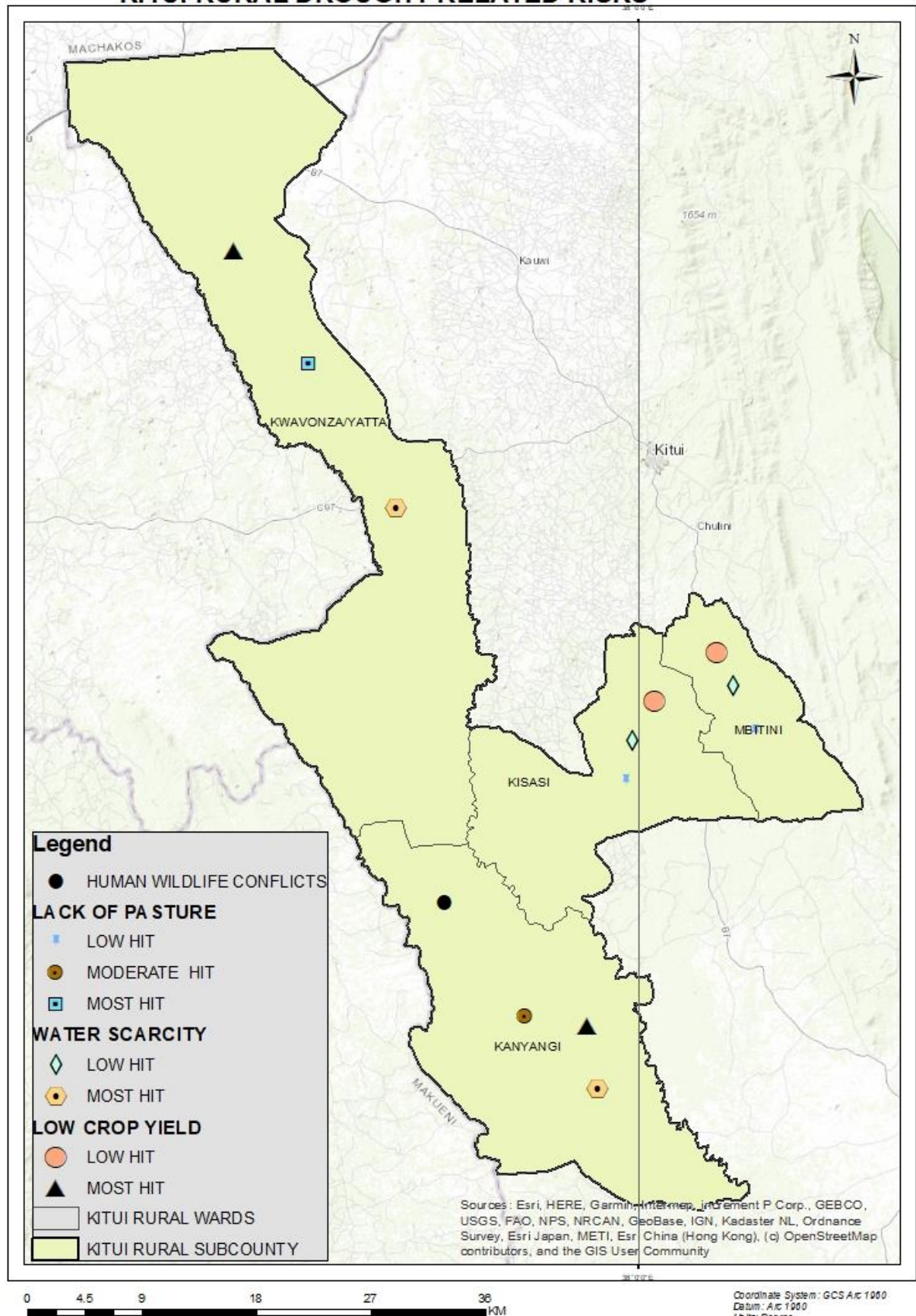
The map shows County-level spatial distribution of drought-related risks

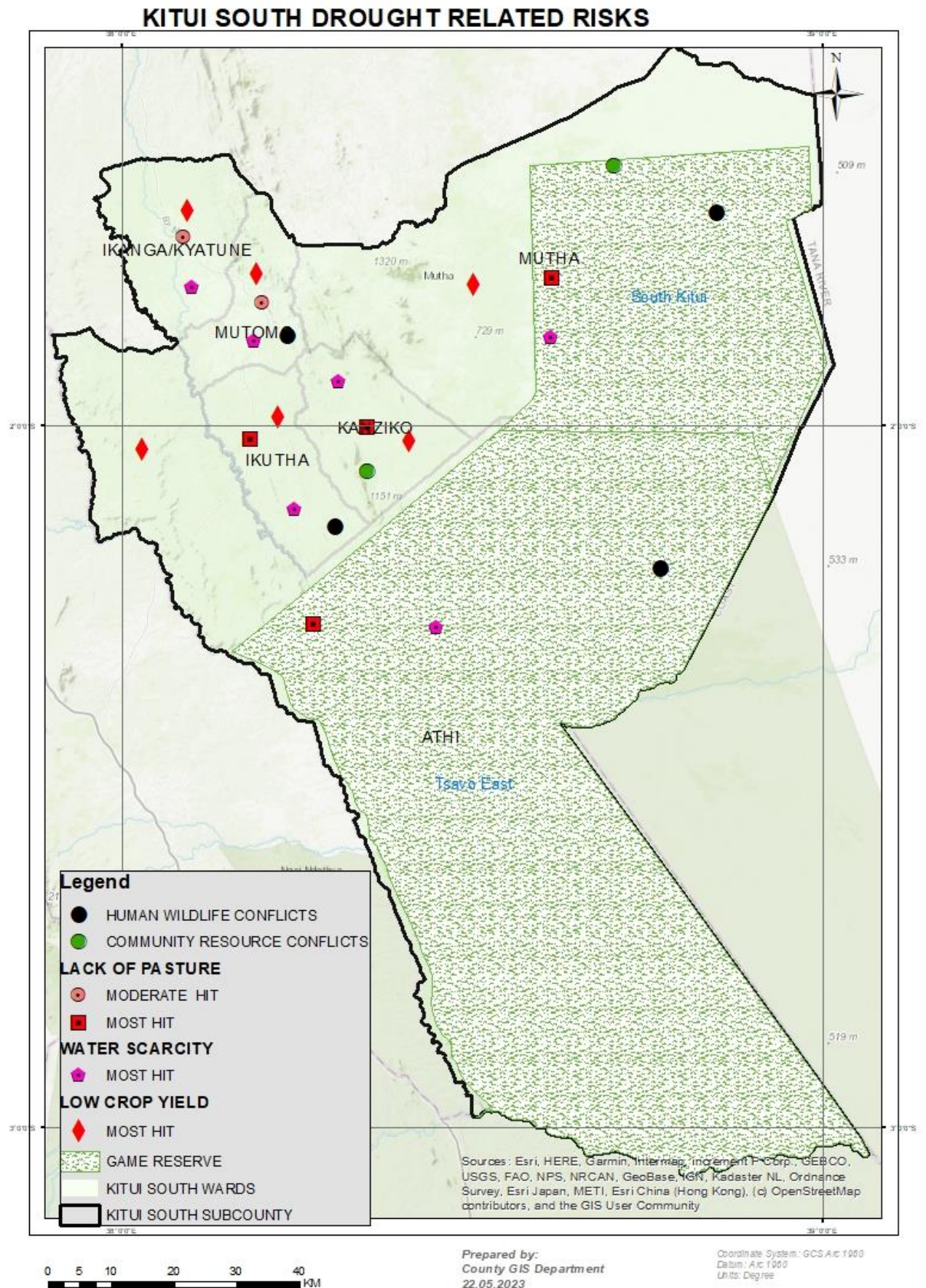
Sub-county level risks associated with drought

KITUI CENTRAL DROUGHT RELATED RISKS

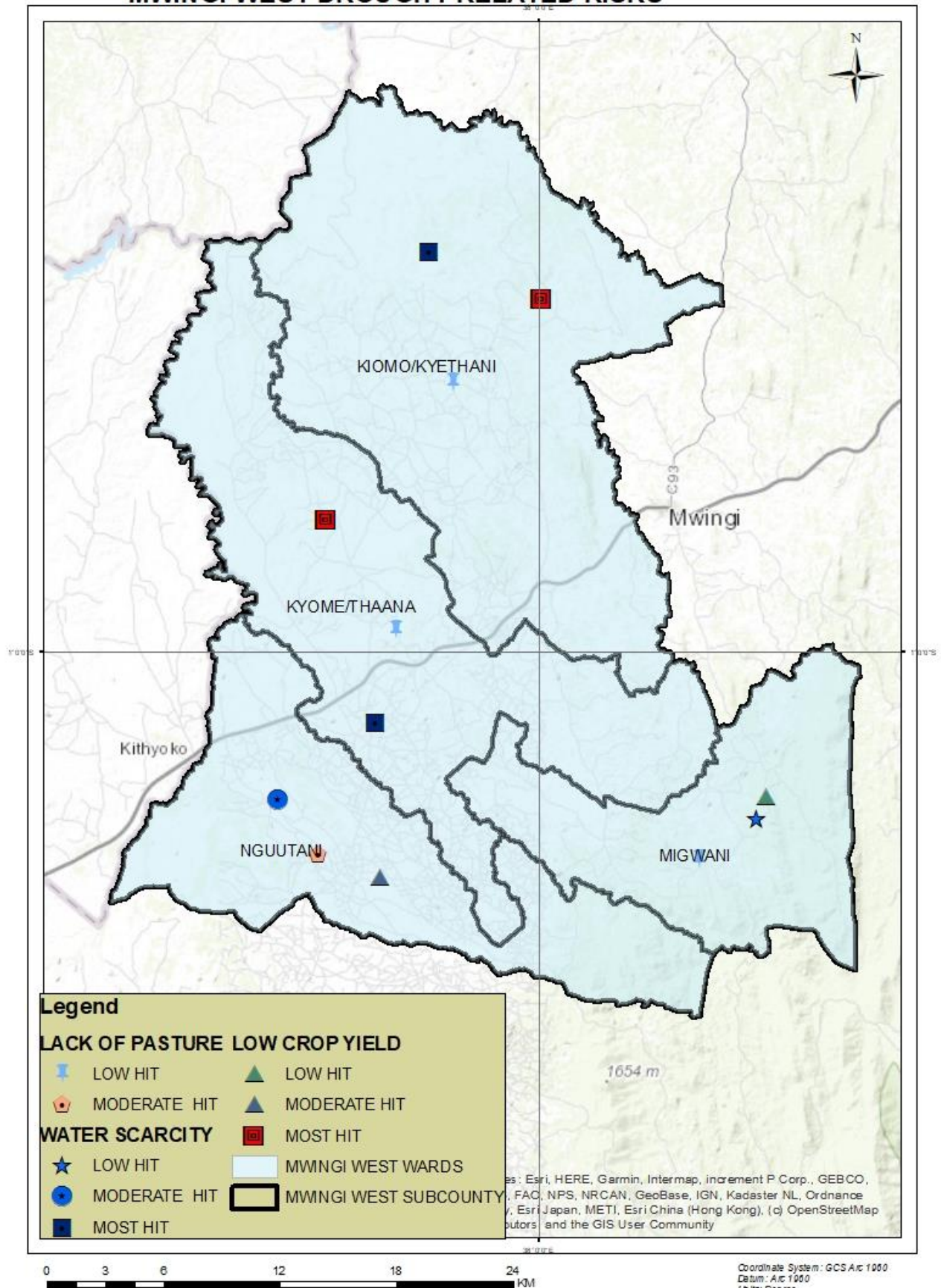


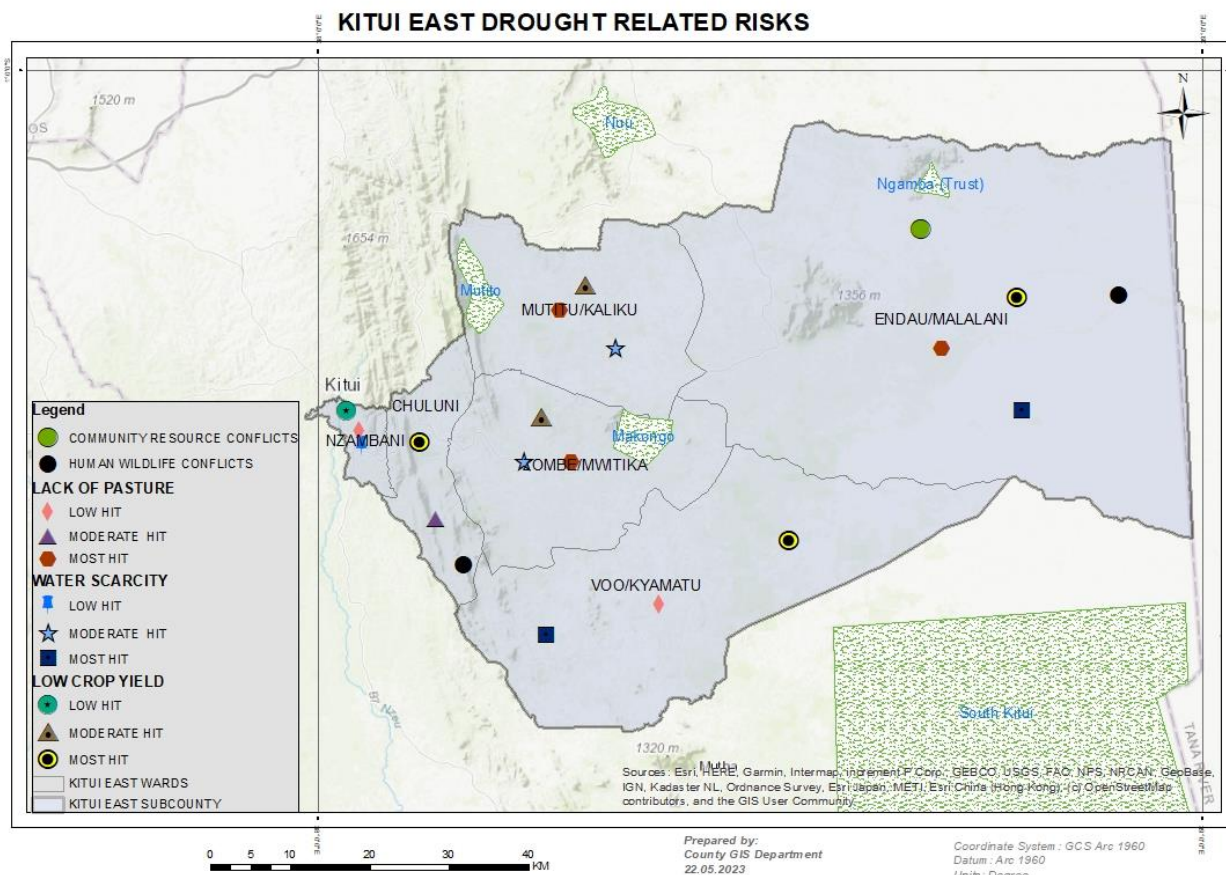
KITUI RURAL DROUGHT RELATED RISKS

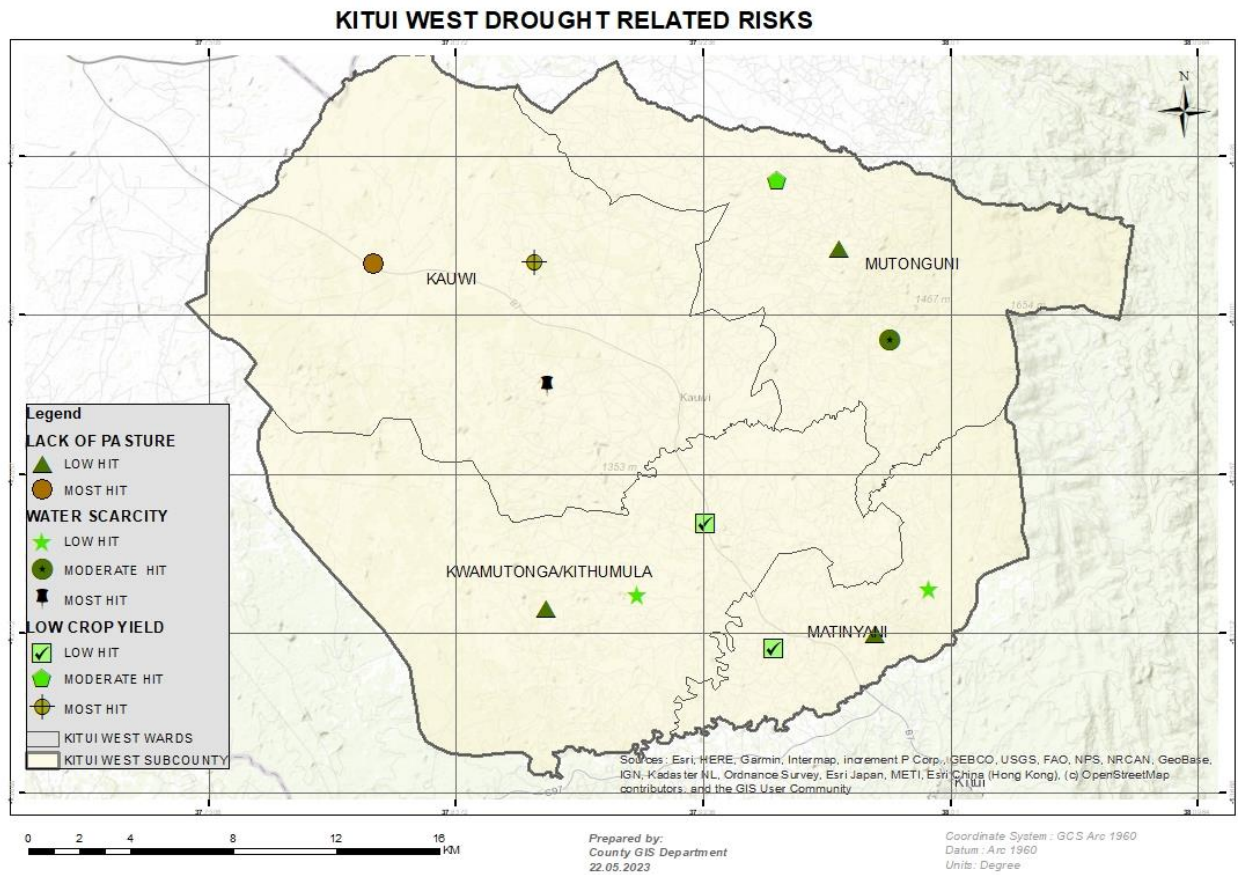




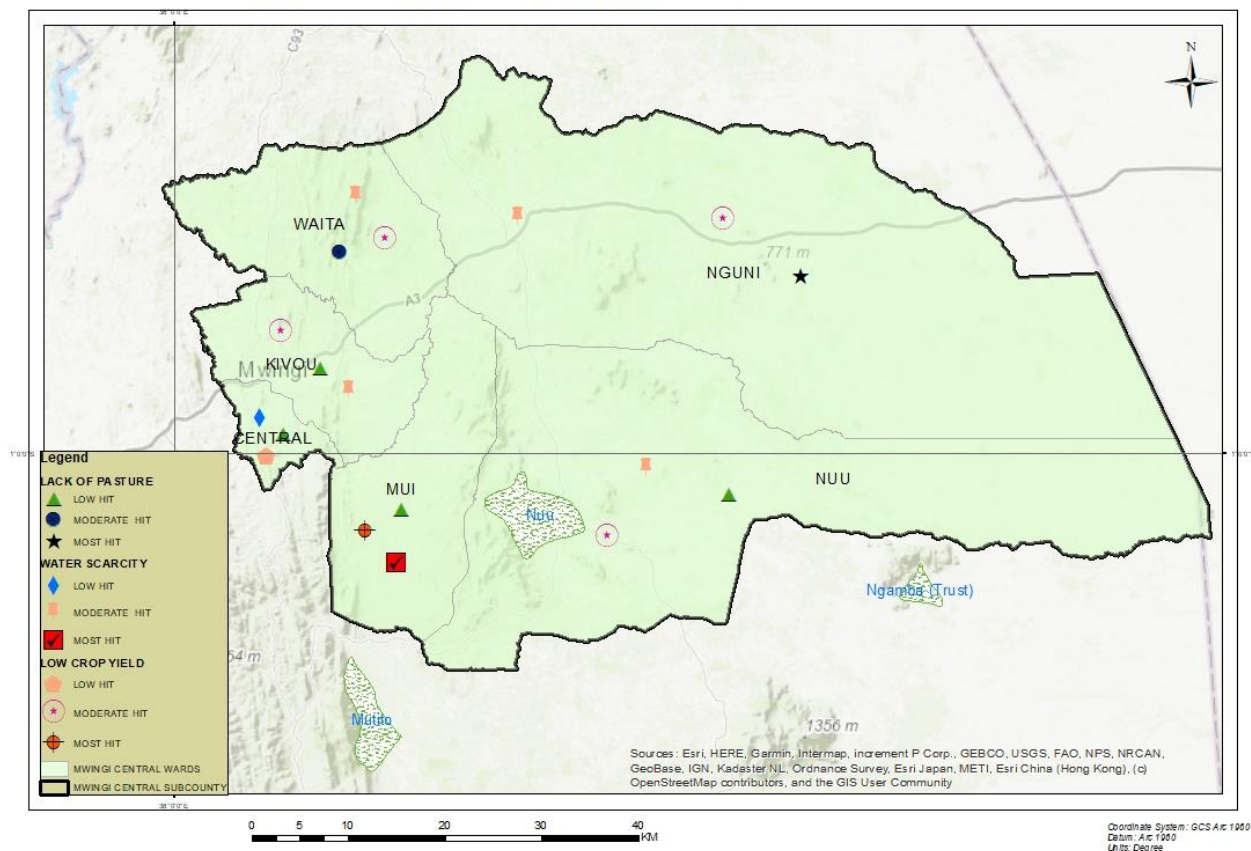
MWINGI WEST DROUGHT RELATED RISKS

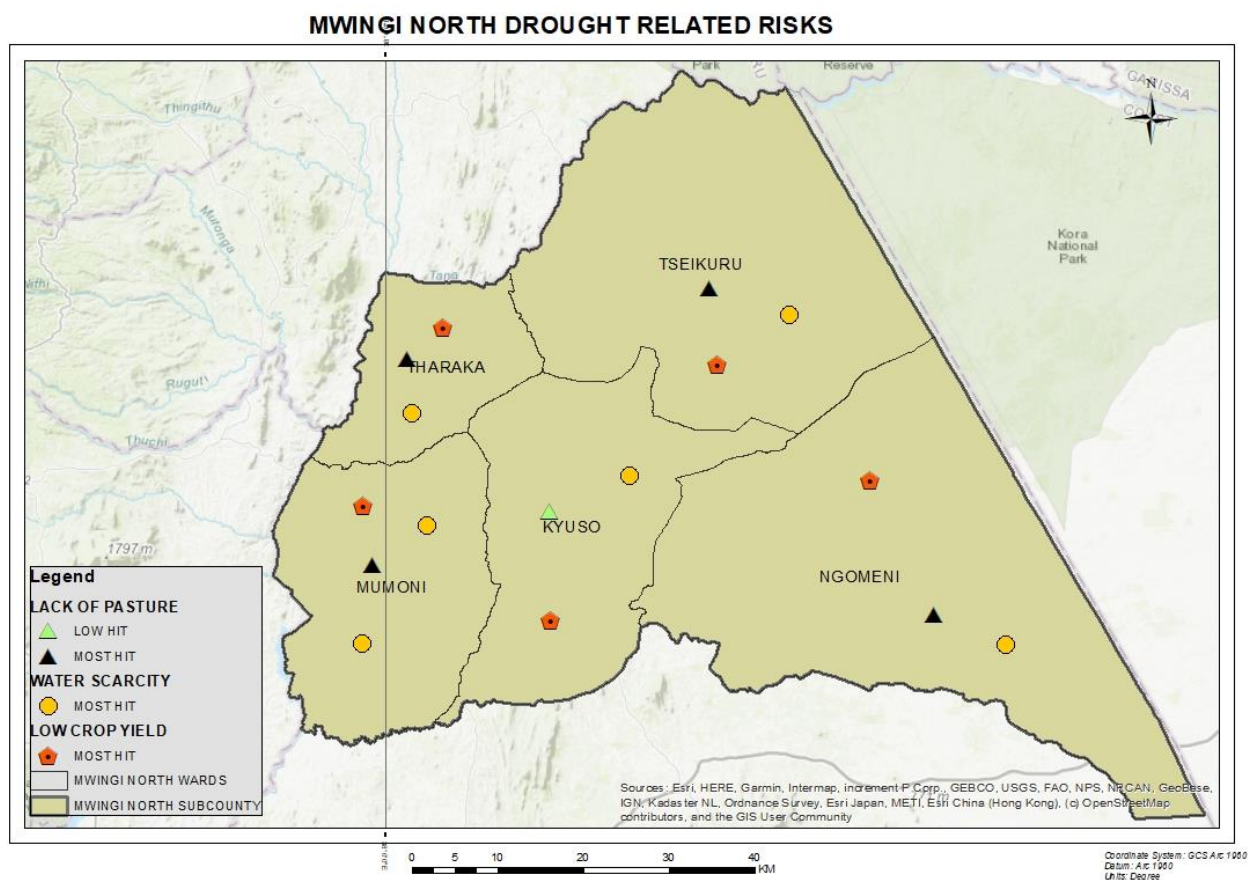




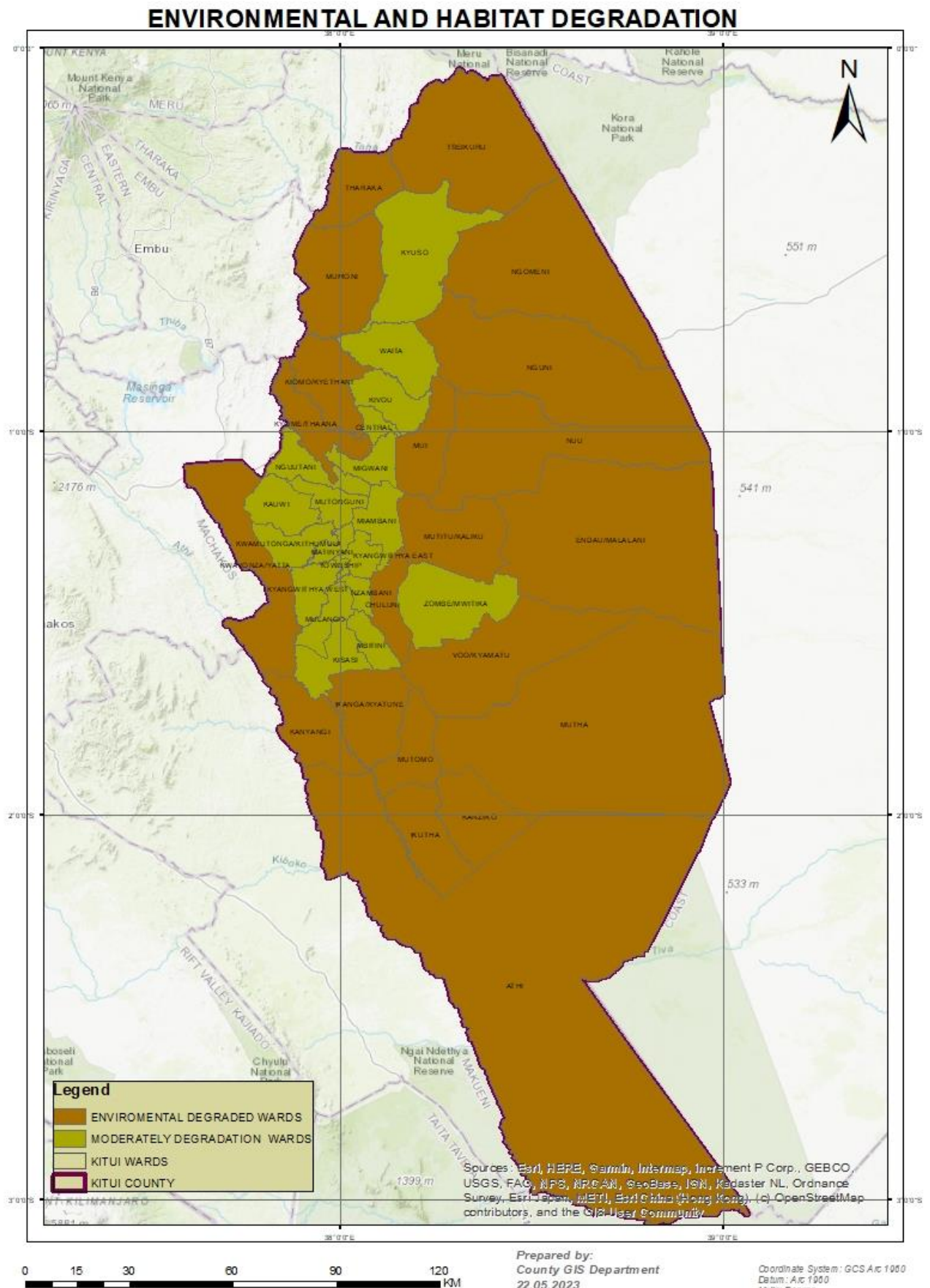


MWINGI CENTRAL DROUGHT RELATED RISKS

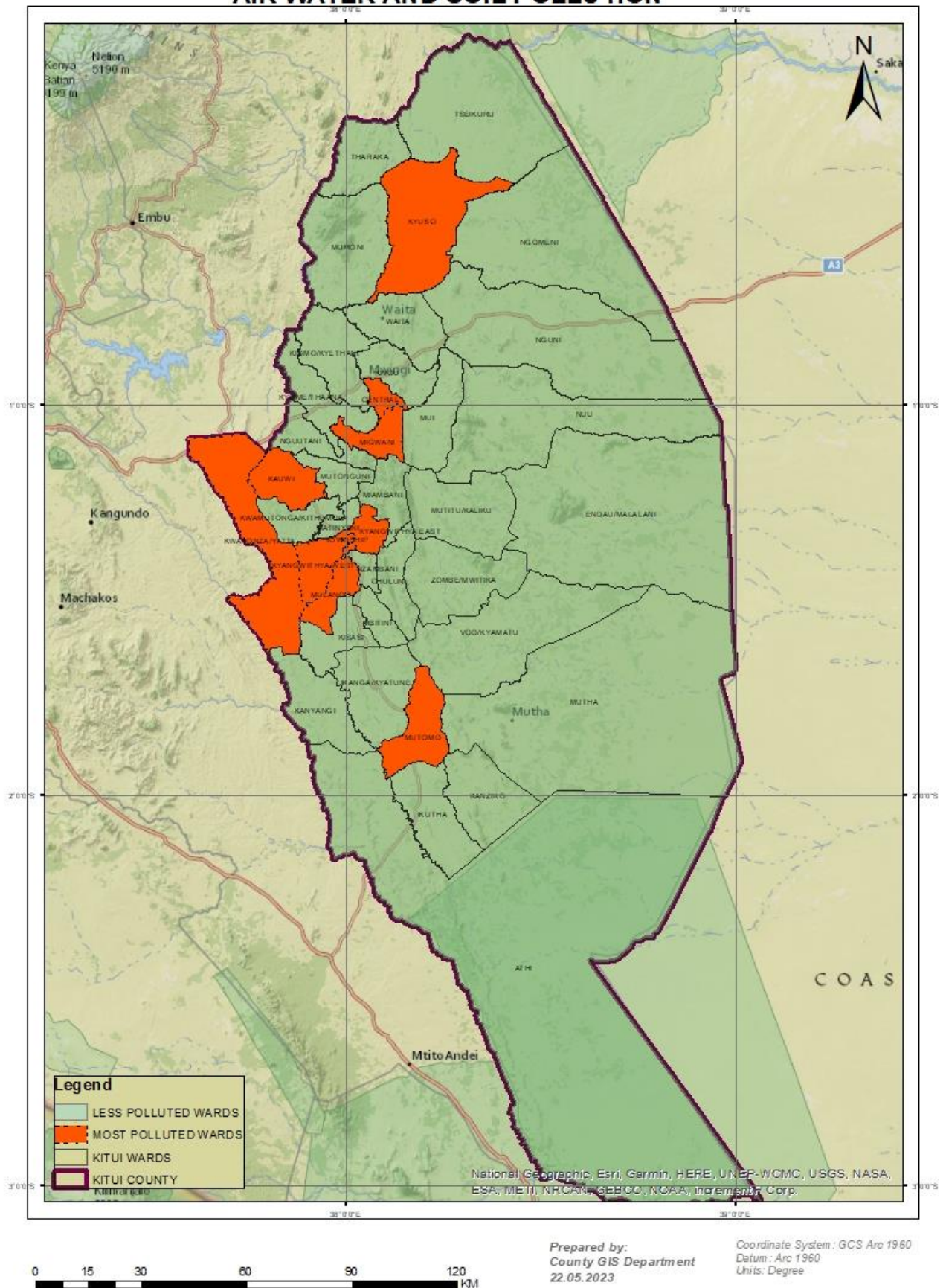




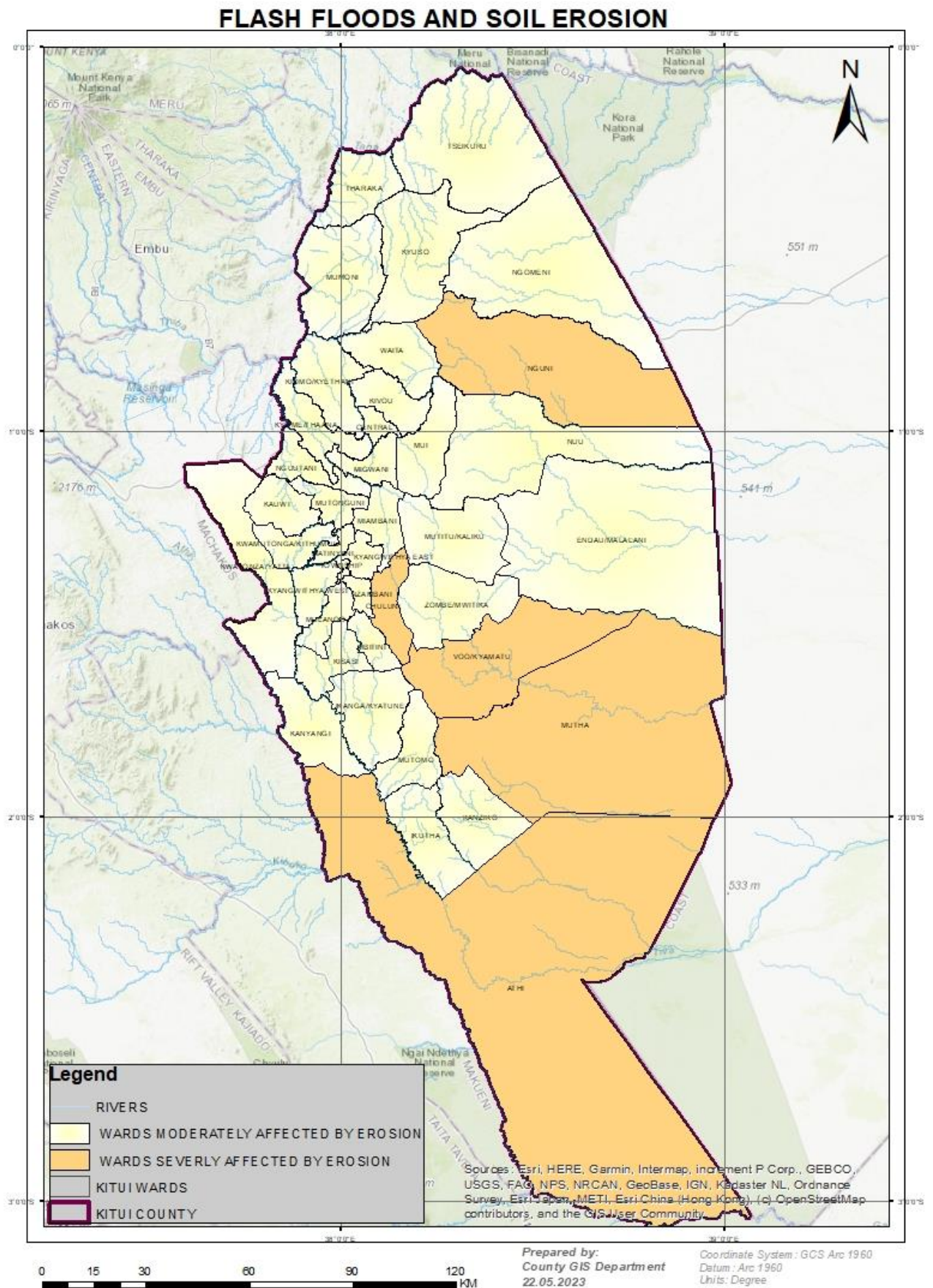
2. Environmental Degradation



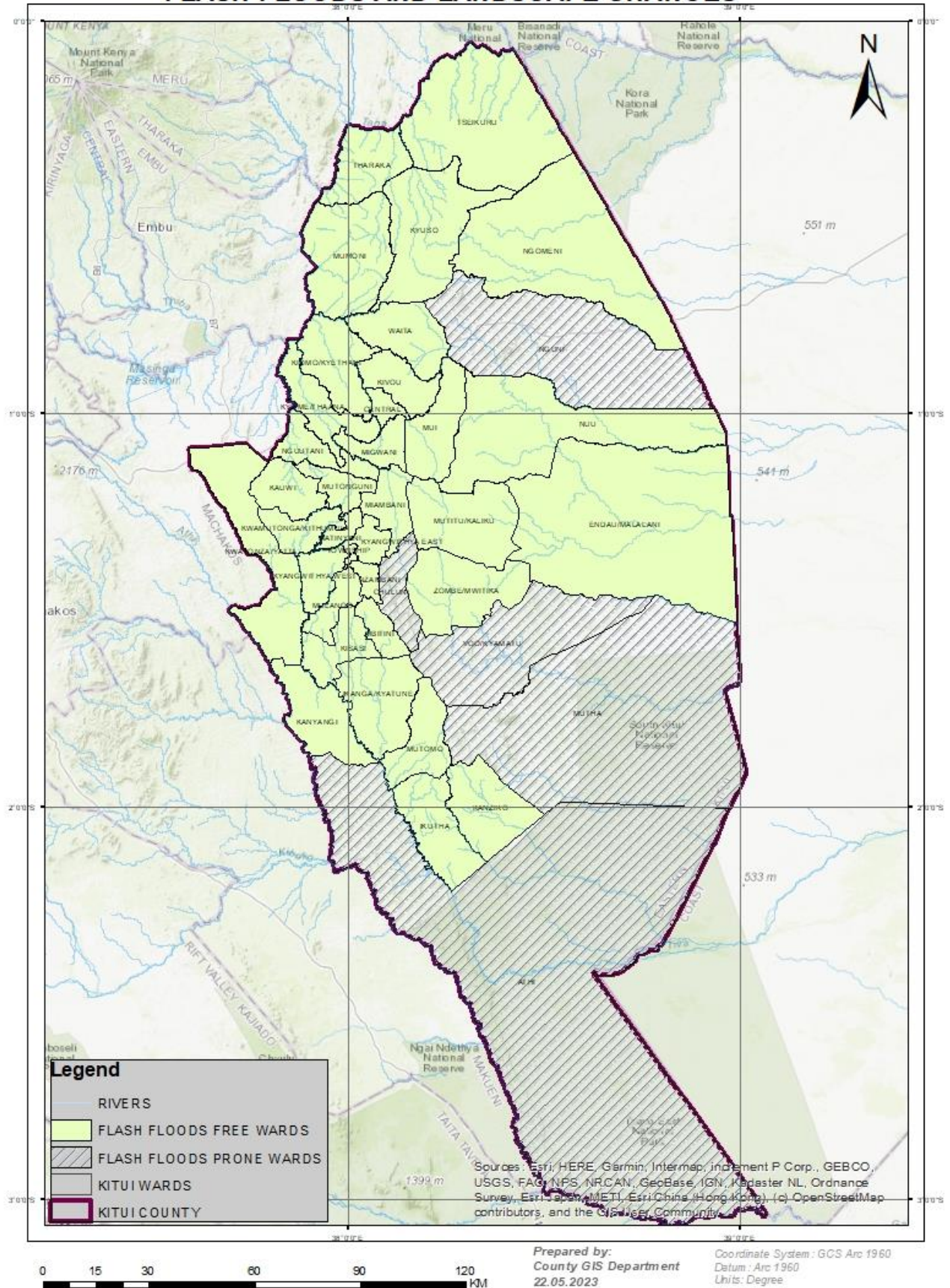
AIR WATER AND SOIL POLLUTION



3. Flash Floods

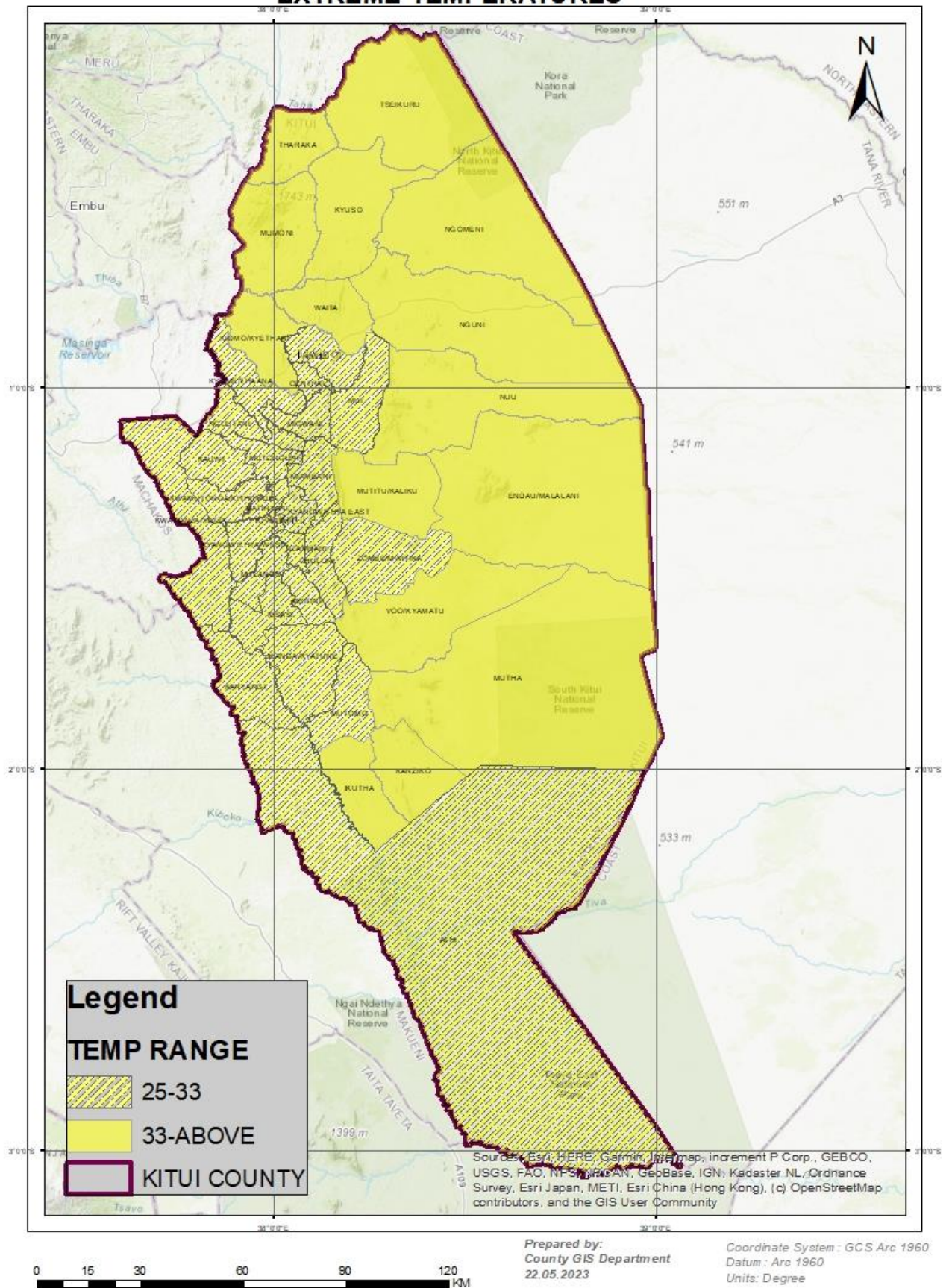


FLASH FLOODS AND LANDSCAPE CHANGES



4. Extreme Temperatures

EXTREME TEMPERATURES



3.0 Future climate scenarios

3.1 Future Temperature Scenarios for Kenya

Temperatures in Kenya are projected to continue rising by 1.7°C by the 2050s and by approximately 3.5°C at the end of the century, (*Ministry of Environment and Natural Resources (2016). Kenya National Adaptation Plan, 2015–2030. URL: https://www4.unfccc.int/sites/NAPC/Documents%20NAP/Kenya_NAP_Final.pdf*).

Additionally, the number of hot days and nights will increase, with 'hot days' projected to occur on 19%–45% of days by mid-century. Hot nights are expected to increase more quickly, projected to occur on 45%–75% of nights by mid-century and on 64%–93% of nights by the end of the century. Cold days and nights are expected to become increasingly rare, (*National Environment Management Authority (2015). Kenya-Second National Communication to the United National Framework Convention on Climate Change. URL: <https://unfccc.int/sites/default/files/resource/Kennnc2.pdf>*).

Across all emissions scenarios, temperatures in Kenya will continue to rise. As shown in Fig. 01 below, under a high-emission scenario (RCP 8.5), average temperatures are expected to increase rapidly by mid-century. Increased heat and extreme heat conditions will result in significant implications for human and animal health, agriculture, and ecosystems.

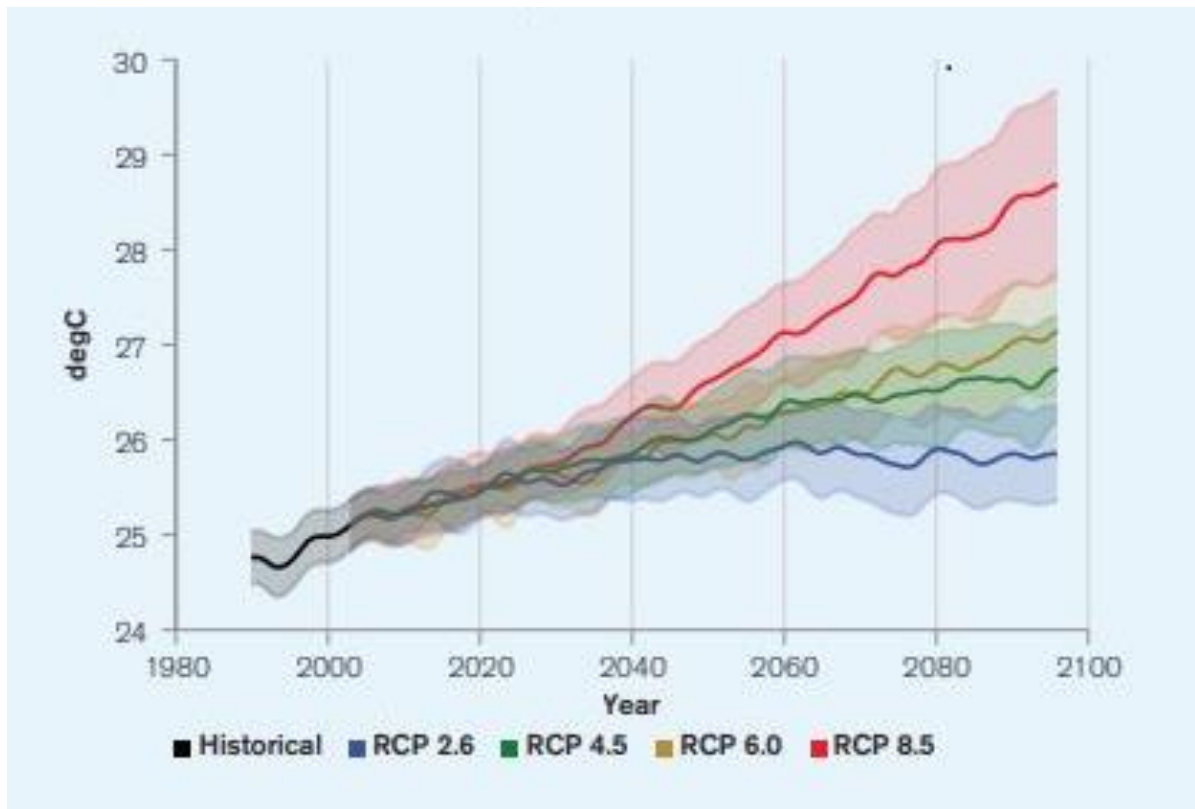


Fig. 01: Historical and projected average temperature for Kenya from 1986 to 2099.

(Source: WBG Climate Change Knowledge Portal (CCKP, 2020). Kenya Agriculture Dashboard.

URL: <https://climatedata.worldbank.org/CRMePortal/web/agriculture/crops-and-land-management?country=KEN&period=2080-2099>).

3.2 Future temperature scenarios for Kitui County

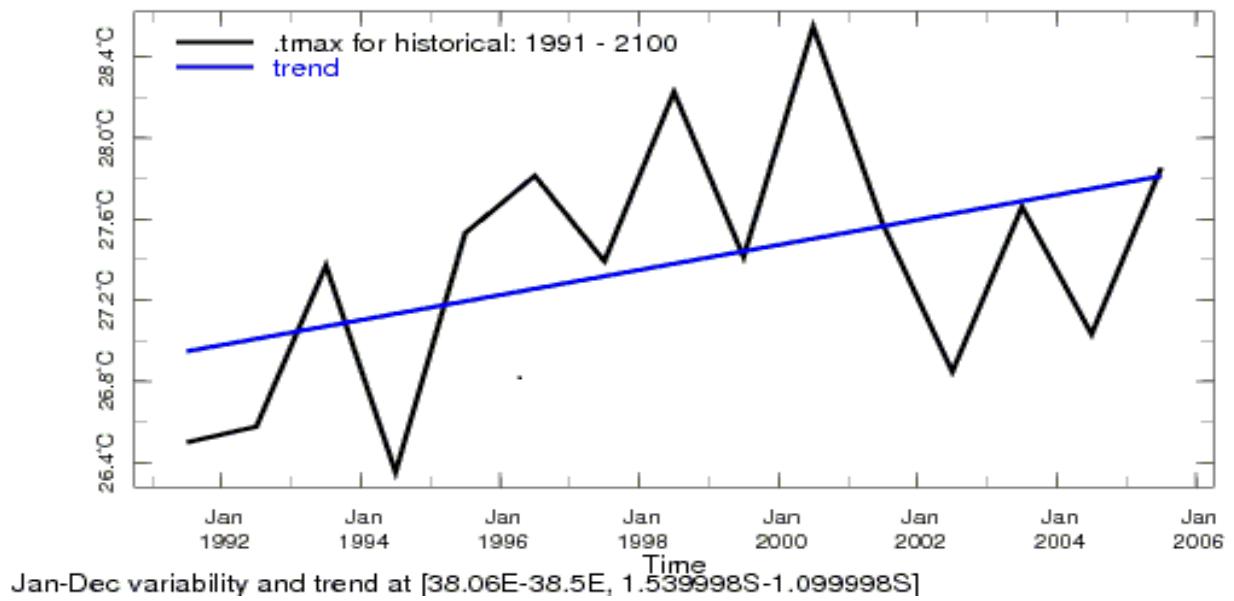


Fig. 02: Maximum Temperature for historical: 1991-2100, Source KMD Maproom Visualization Tool.

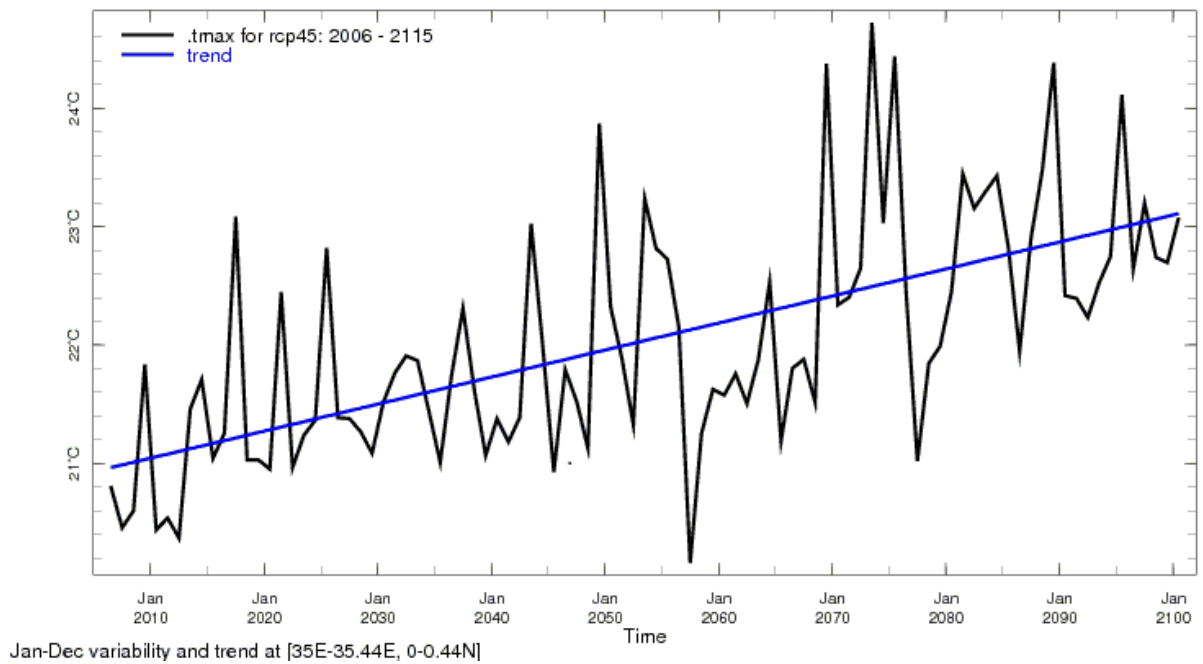


Fig. 03: Maximum Temperature for RCP45: 2006-2115, Source KMD Maproom Visualization Tool.

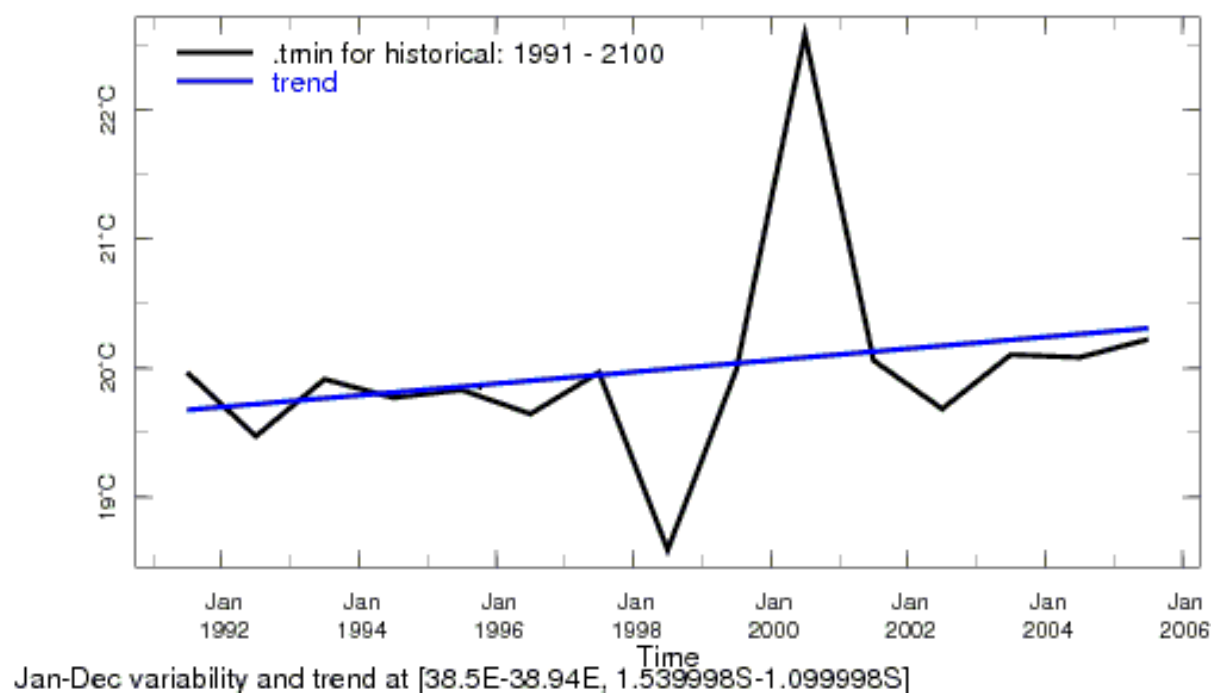


Fig. 04: Minimum Temperature for historical: 1991-2100, Source KMD Maproom Visualization Tool.

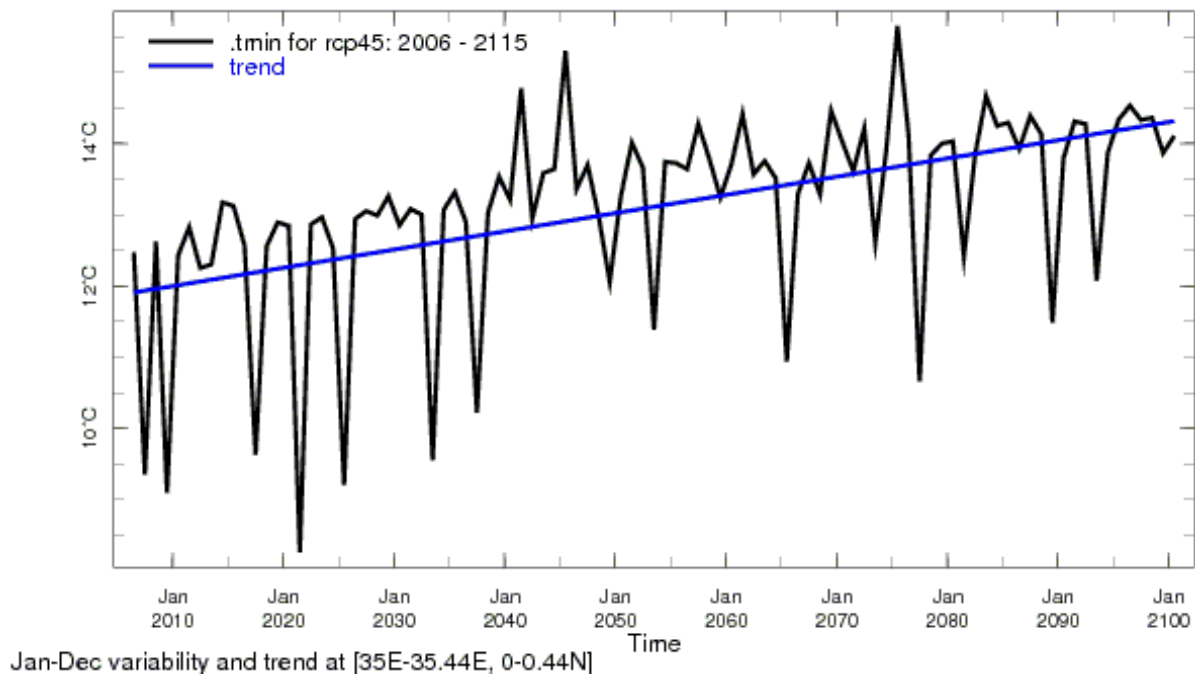


Fig. 05: Minimum Temperature for RCP45: 2006-2115, Source KMD Maproom Visualization Tool.

3.3 Future precipitation scenarios

3.3.1 Kenya

Precipitation in Kenya is projected to remain highly variable and uncertain, however average rainfall is expected to increase by mid-century, particularly during the 'short rains', which occur between October and December. Extreme rainfall events are also expected to increase in frequency, duration, and intensity and the proportion of heavy rainfall that occurs in heavy events will increase. However, the period between heavy rainfall events may increase. Importantly, rainfall in the arid zones is generally projected to decrease, (*WBG Climate Change Knowledge Portal (CCKP, 2020)*). Kenya

Water Dashboard. Data Description. URL: <https://climateknowledgeportal.worldbank.org/country/kenya/climate-sector-water>). As seen in Figure 002 below, annual average precipitation is expected to increase slightly by the end of the century under a high emissions scenario (RCP8.5).

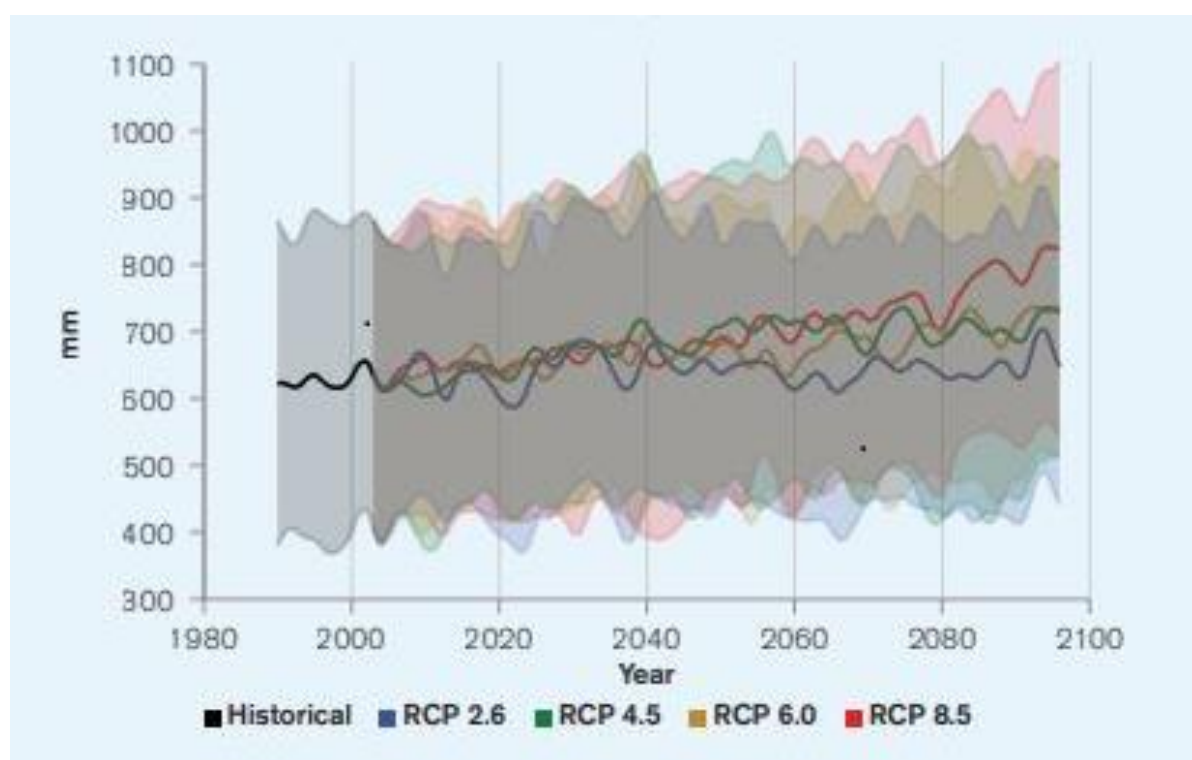


Fig. 06: Annual average precipitation trends and projections for Kenya, for 1986 to 2099. (Source: WBG Climate Change Knowledge Portal (CCKP, 2020). Climate Data-Projections. Kenya. URL: <https://climateknowledgeportal.worldbank.org/country/kenya/climate-sector-water>).

3.3.2 Kitui County

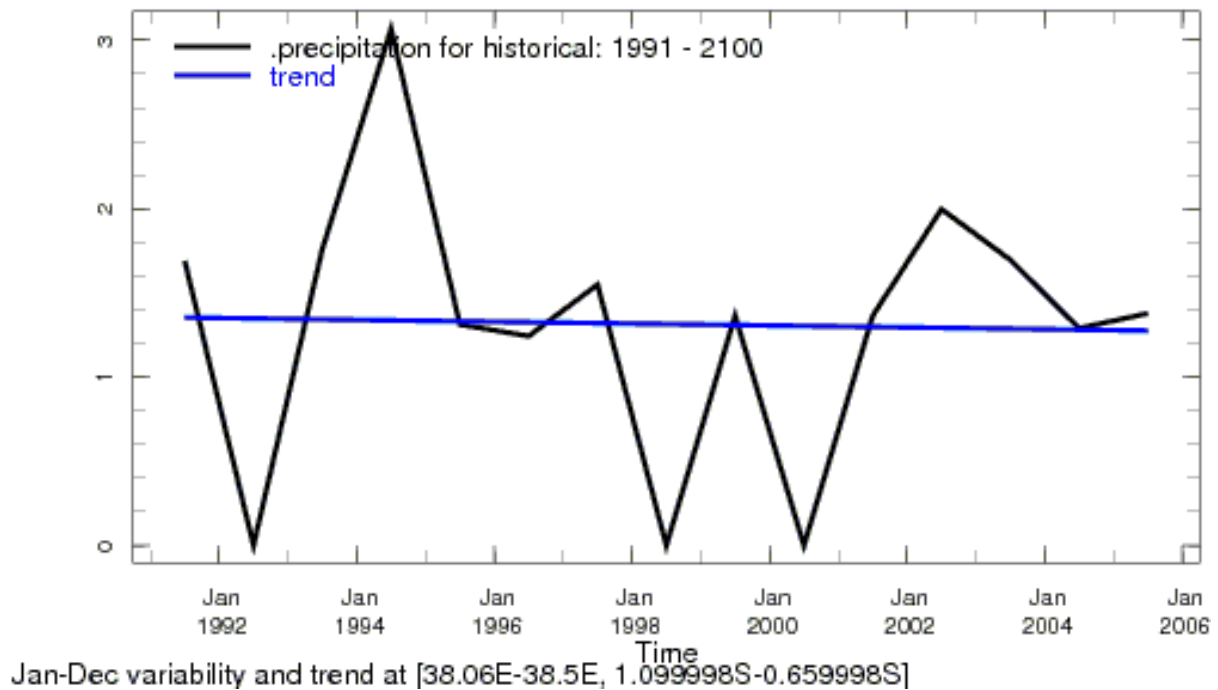


Fig. 07: Precipitation for Historical: 1991-2100, Source KMD Maproom Visualization Tool.

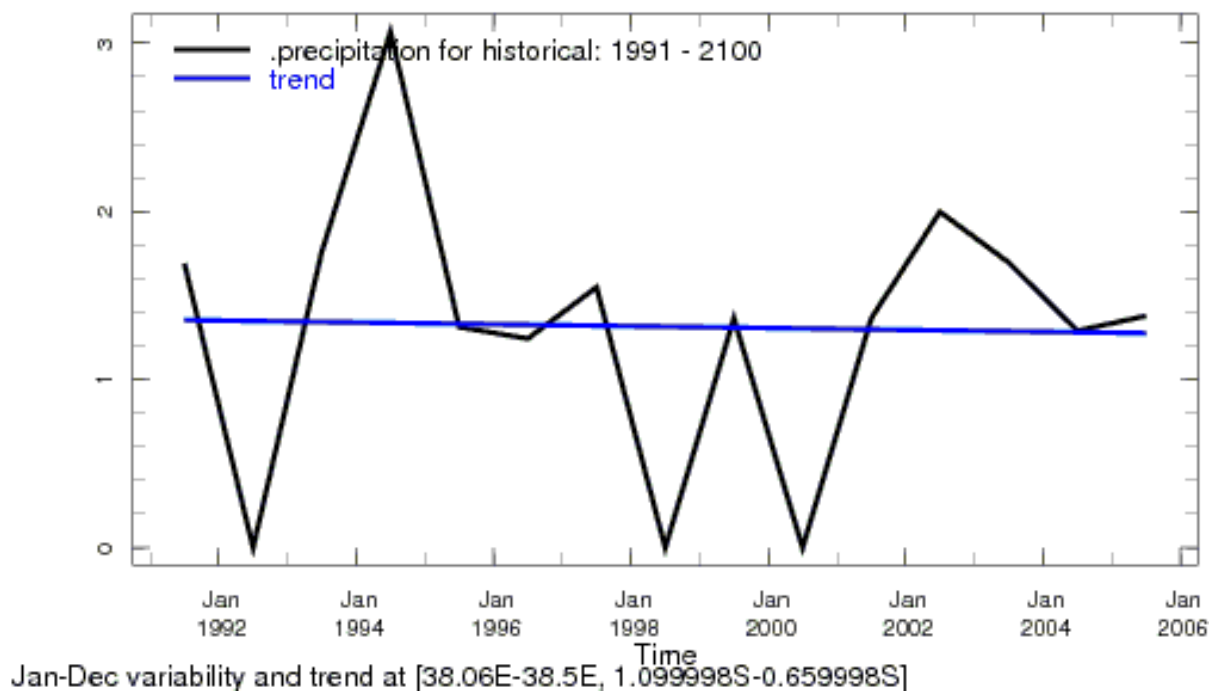


Fig. 08: Precipitation for RCP45: 2006-2115, Source KMD Maproom Visualization Tool.

4. Analysis of Existing Resilience/Adaptation Strategies to Current and Future Climate Risks

4.1 Overview of existing adaptation/resilience strategies and their effectiveness to current climate risks

Policy, legal framework, and institutions: Policies and regulations are important in ensuring that public resources are allocated to support adaptation and resilience actions in the County. Legal framework also provides for the establishment and institution of various structures and systems. The County Government of Kitui has formulated the Kitui County Environment and Climate Change Policy, 2023, Kitui County Climate Change Fund Regulations, 2018, and is in the process of developing the Kitui Climate Change Bill. Kitui County Charcoal Management Act, 2014 was developed and is now under review. Various policies have been developed in Kitui on several sectors related to Climate Change including the Kitui County water and sanitation policy and several agriculture-related policies. Kitui health policy focuses on the belief that investing in health is essential for a progressive County. The County has put special emphasis on the promotion of health and the prevention of illness, providing appropriate health services, adequate infrastructure, human resources, and medical supplies, and ensuring the involvement of communities in policy formulation and implementation. The policy reflects the County's commitment to being a "health

service provider of excellence” that is inclusive, people-centered, and evidence-based, to create a culture of health that is driven by the community it serves, and one that is responsive to the needs of its people.

Kitui County Climate Change Fund regulations 2018 constituted the Kitui County Climate Change Unit, the steering committee, the technical committee, and established Ward Climate Change Planning Teams. The regulations also constituted Kitui Climate Change Fund where not more than 2% of County annual development budget is allocated to support climate actions in the County. Banking on the established legal frameworks, 18 community adaptation projects in 16 wards have been undertaken under the public good investment. This provided an opportunity for piloting the effectiveness of these frameworks, documenting lessons learned and best practices for scale-up.

The formulated policies and regulations need to be effectively implemented to achieve the intended purpose and goals. The County Government of Kitui has an operational Environmental Enforcement and Compliance Unit even though it needs to be strengthened through staff training, and capacity building and be supported with essential infrastructure. More staff need to be recruited for effective delivery of services.

Climate-smart technologies: This involves increasing agricultural productivity through the adoption of various technologies and practices that enhance the adaptive capacity of farmers to climatic stresses such as low soil fertility, erratic rainfall, low soil moisture content, increased temperatures, outbreak of pests and diseases among others. Some of the technologies introduced and being adopted by farmers in Kitui include:- Conservation agriculture in 4 sub-counties, on-farm water harvesting in all sub-counties, pasture development, especially in Kitui Rural, Kitui Central, and Kitui West sub-counties, livestock husbandry, E-extension services, post-harvest handling of produce and strengthening market systems. These strategies have been effective in increasing food production even during lean years.

Climate Information: Over the years, climate information has been only made available to Government and civil society organizations despite it being a critical component in decision-making to the farmers. Farmers have always doubted the scientific climate information due to its complex presentation, lack of precision, and poor dissemination of the information. In realization of these misgivings; the department of Meteorological Services in collaboration with other development agencies, has simplified and technologically disseminated climate information directly to the farmers. Kitui County through the Meteorological department Funded by the ADA-consortium has a draft Climate Information Service Plan (CISP) to help disseminate climate information to farmers.

Development and implementation of CCIS plan: Helps in the coordination of obtaining real-time weather information for effective decision-making. Policymakers and development partners can make decisions involving resource allocation and other strategic actions. Farmers are well guided in the choice of enterprises and how to invest especially in crop farming and pastoralism. In Kitui, the KCEP-CRAL project through the County climate information service plan gives farmers weekly climate information.

Alternative sources of livelihoods: Alternative livelihood options provide coping mechanisms during periods of climatic hazards. These alternatives in Kitui County include trade in gums & resins in Kitui South, Kitui East and Mwingi North sub-counties, honey trade in Kitui South, Kamaki honey cooperative, Kitui East and Mwingi Central, wild fruits, baobab – food supplements in Kitui South and some parts of Kitui East, artisanal mining in Kitui south, Kitui east, Kitui rural, Mwingi Central and Mwingi North. The market information on these commodities remains scanty and only restricted to a few individual brokers and has remained underdeveloped. Formal employment to skilled/semiskilled/unskilled persons provides alternative livelihoods for the residents in urban areas. It's an option explored by many men and youth during climatic shocks. In return, the rural-urban migrants transfer remittances to the rural communities to provide for food and non-food items. Charcoal production although a negative adaptation strategy is a livelihood venture during lean periods.

The attempts by both County Government of Kitui through the Charcoal Management Act of 2014, and the national Government to halt this practice have not yielded much success due to the pull market factors of the energy needs in the major cities and towns.

Soil conservation measures: Environmental degradation is largely manifested through soil erosion features, loss of habitats, deforestation, and pollution of ecosystems. In response to this, the County Government of Kitui has constructed 120 sand dams and intends to have 2,400 sands by the year 2027 to curb the effects of extreme sand harvesting that has occurred in the past years. In this regard, afforestation programs by the County Government of Kitui through various initiatives like urban forestry and social forestry, rehabilitation of degraded ecosystems like hilltops, and rehabilitation of riparian areas aim to conserve and restore soils within the County. All these initiatives are in line with Vision 2030 goals of achieving 30% tree cover. From the awareness created through Government institutions, farmers have adopted on-farm water soil conservation structures such as terraces, gabions, retention ditches, farrows, and contour buds, and the programme seems to be on the right footing to attaining its objectives and goals. Construction of these soil and water conservation structures is championed by women groups at the grassroots level.

Modern farming technologies: To feed the ever-growing population in Kitui County there is an urgent need to expand the irrigated arable land and application of appropriate farming technologies. Post-harvest farm produce handling structures are inadequate in Kitui especially the use of agro-Z bags. Different value chains are embracing value addition in farm produce such as honey, mangoes, green grams, baobab, tamarind, and aloe vera. These strategies will continue to play a key role in ensuring the County is food secure. Some of the available modern farming technologies have faced slow adoption by farmers such as greenhouse farming, drip irrigation, and zero grazing.

Water harvesting structures: The average annual rainfall of 400 mm is inadequate for both domestic and agricultural use. Taking advantage of the wide network of seasonal streams and capitalizing on surface flow during the rainy seasons, the County has initiated strategies to promote on-farm water harvesting, construction of sand dams, excavation of earth dams, sinking of strategic boreholes, and rainwater harvesting across the County. The County has also invested in rock water catchment and river water abstraction structures. The river and stream network provides a unique opportunity to increase access to water for communities in this County. In other areas, farmers have embraced on-farm water harvesting through farm ponds.

Waste management on reduce, reuse, and recycle technologies: Solid waste in Kitui is produced majorly in the two main municipalities. The County has invested in scapeloaders and waste trucks deployed in the municipalities and main towns. There are also dumpsite resource miners recovering materials from the dumpsites for paper, scrap metal industries, pig feeds, and manure for farms. Recycling of waste paper is undertaken by youth groups to form sculptures sold as artwork for livelihood. Water refilling stations are scaling up in Kitui leading to the reuse of plastic bottles, a strategy that has led to better waste management. The establishment of kitchen gardens at the household level has led to the reuse of kitchen waste water. In the absence of sewer lines, the urban population has adopted the use of septic tanks and soak pits in the management of liquid waste.

4.2 Effectiveness of adaptation/resilience strategies to future climate risks

Analysis of adaptation/ resilience strategies.

The wards prioritized 4 hazards which are drought, environmental degradation, flash floods, and extreme temperatures. These hazards have greatly impacted the agricultural sector, water sector, environment, infrastructural, and health sectors. The County experiences both hydrological and agricultural drought. The prolonged dry spells affect productivity in the agricultural sector. Poor rainfall distribution across the rain seasons results in low crop yield and poor pasture development. The rainfall

received is not adequate to fill up water harvesting structures. This is further compromised by high evaporation rates due to extreme temperatures. The water stored does not resonate with water demand leading to water scarcity. The communities prioritized the excavation of more climate-proof earth dams, sand dams, provision of water tanks, sump wells, and extension of water lines. Impacts of environmental degradation have been experienced in the County through wildfires during the dry season, especially in Mutito Hill forest and the most recent in Yatta-Kwa Vonza ward. Soil erosion has been experienced in the County leading to gullies and siltation of water bodies posing a threat to water harvesting structures, farm lands, grazing areas, and forests. To tackle environmental degradation, the community proposed rehabilitation of existing gullies, planting of cover crops and trees, water harvesting at both the domestic level and in public facilities, and enforcement of relevant policies to protect water catchment areas.

Major rivers in Kitui County such as Thua, Mui, Enziu, and Tiva in some areas traverse through low land. During rainfall seasons of high intensity, the rivers break their banks along the lowland areas due to increased volumes. Occasionally, some areas with black cotton soils experience flooding as a result of rainfall events of high intensity. In urban areas flash flooding is experienced due to clogging of storm water drainage systems. Increasing public awareness, developing policies on the management of

riparian land, regular unclogging of drainage systems, and investing in early warning systems are great strategies that can avert the negative effects of flash floods.

Extreme temperatures have led to the emergence of crop and livestock diseases that are resistant to existing pesticides. Human diseases have also increased across the wards over the years. These increased temperatures have led to loss of biodiversity and a decrease in soil fertility. Capacity building of community health volunteers for early detection of human diseases to enhance preventive measures on human diseases. Capacity builds farmers on biological disease and pest control and invest in disease surveillance and monitoring systems. Investing in early warning systems and increased public awareness are some of the proposed strategies to help cushion the communities cope with this climatic hazard.

Table 4: Strategies to future climate risks

Hazard	Livelihood/Economic System	Climate Resilience Strategies	Stakeholder Group Applying the Strategy	Gender and Social Inclusion information
Drought	Crop production	Climate Smart Agriculture; On-farm water harvesting technologies Adoption of drought-resistant seeds	Farmers, County Government, Agricultural Extension Officers, CSOs, FBOs Farmers, Agricultural Extension Officers, CSOs, FBOs	Women are highly involved in agricultural productivity Women are highly involved in agricultural productivity
	Livestock Production	Pasture development; Breed upgrade; Pests and diseases management; Livestock insurance;	Farmer; County Government, Veterinary Officer; Traders; Banks; Red Cross; KALRO; CSOs, FBOs	Men are more dominant in livestock such as cattle, goats and sheep while women control poultry,

		Marketing; Processing & value addition.		
	Water supply systems	Rain water harvesting technologies; Surface/runoff harvesting; Underground drilling;	Farmers, Civil society, County Government, FBOs	Women and youth are more involved in looking for water in the society than men
	Trade and Industry	Value addition; market information sharing;	Farmers; Traders, County Government,	Men are more involved in trade and marketing than women. Women are more involved in processing and value addition
	Medium and Small Enterprises	Formation of Cooperative societies; Village Savings Schemes; Financial	Business community, cooperatives, self-help groups	Most self-help groups are formed by women

		Access through empowerment grants.		Youths are less involved in self help groups
	Ecotourism	Identification and development of ecotourism sites and facilities; Relief supplies to wildlife; establishment of conservancies, creation of wildlife corridors, population management, water for wildlife; Ecotourism sites marketing;	Business community, local communities, County Government, FBOs, CSOs	Women are more involved in income-generating activities like basketry and weaving
Environmental	Crop production	Agoforestry; Integrated Pests and diseases management; Trainings & capacity building; landscape	Farmers, Agricultural and Forest Extension Officers, CSOs, FBOs	Women are highly involved in agricultural productivity

Degradation		restoration, FMNR, agroecology technologies, CSA, Soil management, integrated soil fertility management (ISFM); Capacity building;		
	Apiculture	Afforestation and forest management, FMNR, water harvesting, value addition, Riverine protection and conservation; creation and management of forests; soil and water conservation	Farmers, Foresters, Extension officers, CSOs, FBOs	Men and youth are more involved in terracing,

	Forestry	Afforestation programs, Forest product regulations, environmental protection	Foresters, community forest association, farmers, extension services, FBOs, CSOs	Men are more involved in forestry than women
Extreme Heat/temperatures	Livestock Production	Pasture development; Breed upgrade; Pests and diseases management; Livestock insurance; Marketing; Processing & value addition,	Farmer; Veterinary Officer; Traders; Banks; Red Cross; KALRO; CSOs (ADSE, Caritas, KDC)	Men are more dominant in livestock such as cattle, goats, and sheep while women control small livestock such as poultry,
	Crop production	Climate Smart Agriculture; On-farm water harvesting technologies Adoption of drought-resistant seeds	Farmers, County Government, Agricultural Extension Officers, CSOs, FBOs	Women are highly involved in agricultural productivity

			<p>Farmers, Agricultural Extension</p> <p>Officers, CSOs, FBOs</p>	
--	--	--	--	--

CHAPTER FIVE (5)

KITUI COUNTY CLIMATE STRATEGIC ADAPTATION INVESTMENTS/ACTION PRIORITIES.

Investment in climate adaptation has the potential to bolster growth by helping to avoid future losses, and generate positive economic gains through innovation, and social and environmental benefits.

Adaptation investments help reduce negative economic impacts from Climate Change and help transform communities to become more resilient, more innovative, and better prepared to cope with a range of climate challenges that emanate from global warming.

The hazards and associated risks identified during the participatory climate risk assessment exercise cut across all sectors. To effectively address these hazards and risks there is a need for multi-sectoral climate adaptation strategies and investments.

Effective adaptation strategies will include but not be limited to;

Participatory policy development.

Legal framework will provide for the establishment and institution of various structures and systems. These legal frameworks will oversee the mainstreaming of climate

actions, ensure public resources are allocated to support climate adaptation and resilience.

Climate Information Service.

Agriculture is the main economic venture of the County. The sector is highly vulnerable to the impacts of climate variability and change.

Providing effective climate information services will ensure our climate-sensitive sectors will be able to cope better with increased variability, resulting in greater agricultural productivity while building resilience and improving livelihoods.

The provision of climate information services will involve packaging up, interpreting, and distributing climate data on variables such as temperature, rainfall, soil moisture, and extreme weather events. This will help farmers in making decisions on what and when to plant.

Accurate data analyses will also help County policymakers to integrate climate policies into decision-making during the economic and development planning process. The County will prepare a contingency plan to respond to extreme weather eventualities by adopting immediate and longer-term interventions such as investing in infrastructure that is designed and executed in light of the current and changing climate.

Adoption of climate-smart agriculture technologies.

The agricultural sector is at the forefront of the climate crisis in terms of being a significant source of greenhouse gas emissions while also being adversely impacted by rising temperatures, droughts, and floods.

Climate-smart agriculture (CSA) is guided by three principles; reduced Emissions (mitigating greenhouse gas emissions), enhanced resilience (adapting to Climate Change), and increased productivity (contributing to food and nutrition security). It encompasses a broad array of agricultural technologies and practices that include;

- ❖ Drought-tolerant crops
- ❖ Conservation agriculture(No-till)
- ❖ Agroforestry
- ❖ soil conservation.

Therefore, the promotion of CSA will decrease the vulnerability and improve the production capacity of the small-scale farmers within the extremely drought-stricken wards of the County.

Water conservation structures and protection of water catchments.

Water serves as a Fundamental link between the climate system, human society, and the environment. It is the primary medium through which Climate Change influences Earth's ecosystem, livelihood, and well-being of communities.

The climatic hazards of Extreme temperatures and other weather events (flash floods) are projected to affect water availability, distribution of rainfall, river flows, and groundwater recharge.

Therefore, investments in watershed management will greatly impact on increased food production, availability of water, improved hygiene and sanitation as well as environmental sustainability.

Climate Change adaptation strategies for watershed management will include;

- ❖ Construction of sand dams
- ❖ Construction of sump wells
- ❖ Landscape restoration
- ❖ Excavation of earth dams
- ❖ Construction of rock water catchments.
- ❖ Development and implementation of water sub-catchment management plans (SCMPS)
- ❖ Spring water protection
- ❖ Capacity building of water resource users' associations (WRUA'S)

Afforestation and restoration of degraded ecosystems.

Afforestation is one of the most effective means of tackling ecosystem degradation. It reduces the impact of desertification, supports habitat ecosystems, slows down expansion of barren lands & soil erosion, regulates water flow & hydrological ecosystems services. It helps in carbon sequestration from the atmosphere .

The County can only achieve 30% tree cover by promoting forest sector conservation interventions such as;

- ❖ Capacity building of Community Forest Associations.
- ❖ Sustainable land use management plans to restore denuded lands.
- ❖ Establishment of community tree nurseries
- ❖ Promotion of tree growing.
- ❖ Promote Urban Greening.
- ❖ Re –afforestation of County forests and hills through
- ❖ Development of County forest and woodland management plans
- ❖ Reseeding programs
- ❖ Farmer managed natural regeneration
- ❖ Promotion of commercial and social forestry
- ❖ Establishment of forest buffer zones

Strengthening of public health systems.

Existing shortfalls in providing basic health services cause much of the County's population to be exposed to climate-sensitive health hazards. Adaptive investment is needed to strengthen key functions, and to ensure that the health sector is ready to react to the challenges posed by Climate Change, natural disasters and disease epidemics.

Building the resilience of health systems to Climate Change involves strengthening the preventive and curatives service provision. This enables the health sector to respond to climate related hazards. This will be achieved through;

- ❖ Increasing and capacity building of health personnel
- ❖ Provision of drugs
- ❖ Improving accessibility to health facilities
- ❖ Recruitment and training of CHV's
- ❖ Equipping of health facilities
- ❖ Promote sustainable waste management practices in urban areas.
- ❖ Promotion of disease surveillance and monitoring systems,
- ❖ Promotion of mobile clinics

Promote the adoption of clean energy sources.

The use of dirty energy sources is the main culprit in the emission of greenhouse gases that contribute to Climate Change. Climate Change mitigation therefore dictates a shift to green energy sources and energy conservation technologies. This will be achieved through;

- ❖ Awareness creation and sensitization on energy conservation
- ❖ Adoption of efficient machines, equipment, and plants

(NB: Enclosed in Annex TABLE 14 is the ward specific climate adaptation strategies for the entire County.)

Ward: Kauwi					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Public health system strengthening)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Desilting of 13 earth dams	Kwa samba Matinga, Kavuta, Kaiveti, Kwa Nzuki, Kwa Kyondo, Kwa Nguli, Muthumula, Kisayani Mangelu Kwa Maundu, Kasue KaVoo, Maukuni	Conservation of the catchment areas of the 13 earth dams	Matinga, Kavuta, Kaiveti, Kwa Nzuki, Kwa Kyondo, Kwa Nguli, Muthumula, Kisayani Mangelu Kwa Maundu, Kasue KaVoo, Maukuni	Construct 5 new health facilities	Kyenge Kivani Mutini Katutu Mutanda
		Establish 6 tree		Household-level capacity building,	Mutini village,

		nurseries of 30,000 seedlings of assorted species in each village; Mutini village, Kivani Village, Mutanda village, Katutu village, Kyenge Village, Kauwi village		Immunization campaigns, Screening diseases, sensitization and awareness creation on health matters	Kivani Village, Mutanda village, Katutu village, Kyenge Village, Kauwi village
Supply 10,000m ³ water tanks to public institutions	Primary schools Public health facilities	Rehabilitating and restoring the degraded areas	Degraded sites in Mutini village, Kivani Village, Mutanda village,		

			Katutu village, Kyenge Village, Kauwi		
Capacity build farmers and promote drought tolerant crops	Mutini village, Kivani Village, Mutanda village, Katutu village, Kyenge Village, Kauwi village	Support environment and Climate Change champions; Mikuyuni, Kyenge, and Kauwi women groups	Mikuyuni, Kyenge, Kauwi		
Ward: Chuluni					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Public health system strengthening)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where

Construction of earth dams	Nguuni Kaluulu Kiliku Kwa Anoni	Rehabilitation of denuded sites through tree growing	Thua Kvuo Kisiro Kiongwe Mungure	Construct 5 new health facilities	Kangvu Kwa-wewa Kwa Mutei Kanzauwu Kiongwe
Construction of 6 sand dams	Kwa-nzangu Kyamuvyu Mililuni Nzuni Nziu Kwa Musengele	Sustainable land management for soil conservation	Thua, Kvuo Kisiro Kiongwe Mungure Ngungi Kyalele	Household level capacity building, sensitization and awareness creation on health and nutrition in all villages	Ngungi village Kyanzai village Kenze village Kyalele village Kanduti village Ithumula village
Capacity build 6,000 farmers on CSA practices and promote growing drought	Ngungi village Kyanzai village Kenze village Kyalele village Kanduti village Ithumula village	Establish 6 tree nurseries in 6 villages	Ngungi village Kyanzai village Kenze village Kyalele village		

tolerant crops in 6 villages			Kanduti village Ithumula village		
		Capacity build and sensitize 6,000 farmers in all villages on Climate Change and environme ntal protection	Ngungi village Kyanzai village Kenze village Kyalele village Kanduti village Ithumula village		
		Capacity build the Ward Climate Change Planning Team	Ward level		

Ward: Ikanga/Kyatune					
Priority 1 (Drought)		Priority 2 extreme temperatures		Priority 3 (Public health strengthening)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of Earth Dams	Kaloyo Kooi Ndilyani kasambuya Ndivuni Kaveta Nzalani Muliluni	Training 7,000 farmers on the use of certified seeds, soil fertility Provision of climate information services to at least 7,000 farmers Recruitment of 7 additional agricultur	Ithumula Kathungu Kyatune Ndatani Yongela Nduundune Makele	Operationalize 7 health facilities, construct 7 new health facilities in all villages	Ithumula Kathungu Kyatune Ndatani Yongela Nduundune Makele

		e extension officers			
Construction of Sand dams	Menzai KamuNguni Ngunga Semea makele Nzeeu Semea-kathungu Nzeeu – muumbuni				
Water Pipeline extension	Extension from Kiangwa to Kaveta Kanguu Pipeline extension from Ithumula to Windundu and rehabilitation of kwa wangu line				
Capacity building and training 7,000 farmers on CSA in all villages	Ithumula Kathungu Kyatune Ndatani Yongela Nduundune Makele				

Training farmers on sustainable livestock keeping at village level	Ithumula Kathungu Kyatune Ndatani Yongela Nduundune Makele				
Ward: Ikutha/Kasala					
Priority 1 (Drought)		Priority 2 (human-wildlife conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Capacity building 7,000 farmers in all villages on CSA	Kasala Kiangu Kyoani Maani Ngwate Ndili nzamba	Conduct anti-poaching sensitization and awareness	Kasala, Ngwate, Nzamba, Ndili, Maaini	Construct 7 health facilities in all villages Operationalize all health facilities	Kasala Kiangu Kyoani Maani Ngwate Ndili nzamba

Extension of Kasala market water project Construction of 7 earth dams in all villages		Use of alternative materials for fencing Improve on response mechanisms by the KWS in the affected areas			
Training 7,000 farmers on agroforestry Promote tree growing in 7 villages	Kasala Kiangu Kyoani Maani Ngwate Ndili nzamba				
Provide climate information services to 7,000 farmers in all villages					

Ward: Kanyangi					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams	Nzambia (Mwanzia) NZawa (Proposed) Kiseuni (Mue Makosi) Kitooni (Kwa Kamuti) Kanyongonyo (Isiuni) Kalulini (Makovo) Kanyangi (Kivelenge)	Establishment of 6 tree nurseries with a total of 180,000 assorted species of seedlings	Kanyangi Kanyongonyo Kitooni Kiseuni Kalulini nzambia	Operationalize and equip health facilities	Syomakanda Nzambia Ngomoni Kitooni
Construction of sand dams	Nzambia (Kwa Katulu)	Trainings on sustainabl	Kanyangi	Construct more health facilities	Kathiini Kalulini H.C

and shallow wells	Kanyongonyo (Musoloni) Kitooni (Kwa Kimanzi) Kiseuni (Elijah Kitungu) Kalulini (Kwa Kilungu)	e land management, rehabilitation of degraded lands, and restoration activities	Kanyongonyo Kitooni Kiseuni Kalulini nzambia		Kanyongonyo Kiseuni Syomunyu
Construction of sump wells	Tiva Kiesuni Kalulini (Ngomoni)			Capacity building, training, sensitization and awareness creation on health and nutrition	Kanyangi Kanyongonyo Kitooni Kiseuni Kalulini nzambia
Construction of farm ponds	<ul style="list-style-type: none"> - Kanyongonyo - Kiseuni - Nzambia - Kanyangi - Kalulini - Kitoono 				

Installation of rain water harvesting tanks	Schools (One per village) Masimba (Kitooni) Kathiani (Kiseuni) Mwangeni (Kalulini) Kyunduni (Kanyongonyo) Yamunyu (Nzambia) Kangaatu (Kanyangi)				
Ward: Kanziko					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construct 2 mega dams	1-mivuni 1-kituvwi	Deforestation awareness	Within Kanziko ward	Completion and equipping of	-kakithya -vyulu -mwanianga

		Use of alternative materials for fencing Better services by the Kfs Capacity building, planting trees 20000		uncomplete d dispensaries -construct more health centers Upgrading of existing and equipping these facilities -deploy more staffs	-kakindu -vutu -ndilili -kyanyaa
Construct-5 earth dams	1-mwainaiga 1-kivanndeni 1-kyanyaa 1-keutunda 1-simisi				
Construct 50 sand dams	10-keutundu 10-kivandeni/mwnia nga 10-ndilili/mivuni 10-kituvwu/ilamba				

	10-Ekani/simisi				
Ward: Kiomo/Kyethani					
Priority 1 (Drought)		Priority 2 (Crop pests and diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Afforestation, improved farming methods, Provision of climate information for planning. initiate income generating activities More veterinary officers	Kiomo Mbondoni Kavuvwani Kyethani Karura kairugu	Train more than 6,000 farmers Explore irrigation potential	Kiomo Mbondoni Kavuvwani Kyethani Karura kairugu	Regular treatment Create awareness Improved sanitation Improve health facilities and provide adequate/skilled personnel in all public	Kiomo Mbondoni Kavuvwani Kyethani Karura kairugu

Preserve pasture Construction of water sources, market linkage				health facilities	
Regular spraying Construction of cattle dips and more water points, - regular vaccination, frequent training of personnel Improvement of information flow Select breeds not susceptible to diseases	Kiomo Mbondoni Kavuvwani Kyethani Karura kairugu				
Improve on safety for	Karura				

farmers and women around the crocodile and hippos infested areas					
Ward: Yatta/Kwa Vonza					
Priority 1 (Drought)		Priority 2 (Livestock diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Revive IlikaAthi water project, do afforestation, introduce energy saving jikos,extend masinga phase 2 pipeline to kanyoonyoo	Ilika Kanyoonyoo Mwitasyano Kawongo Nthongoni Katothya	Constructi on of cattle dips, awareness creation about the diseases, training paravets, vaccinatio n, build	Ilika Kanyoo nyoo Mwitasy ano Kawong o Nthongo ni Katothy a	Training the community on preventive health and in particular about water sanitation and hygiene	Ilika Kanyoonyo o Mwitasyano Kawongo Nthongoni Katothya

location, tap water from Mwitasyano river to serve Kanyoonyoo, tap water from Tiva river to serve Kawongo and Nthongoni locations. Construct new earth dams at the following river streams - Katothya, KinuunuKasa suni, Kyango, Ngaindethya, mumbunimasi mbani. Drill boreholes: equipping and extensions at the 52 sites, construct sub surface dams,		earth dams and slaughter houses, initiation of afforestation and establishment of tree nurseries and tree growing programs		Build more health facilities	
---	--	--	--	------------------------------	--

dig and equip up shallow wells on 90 sites, rehabilitation of existing boreholes – KatothyaNzo kani, Ndovoini, Nthongoni borehole, proposed 24new dam sites					
Easy access to spraying equipment and pesticides, use of pests and diseases resistant seeds, training on farming and storage methods	Ilika Kanyoonyoo Mwitasiano Kawongo Nthongoni Katothya				

Construction of cattle dips, awareness creation about the diseases, training paravets, vaccination, build earth dams and slaughter houses, initiation of afforestation and establishment of tree nurseries and tree growing programs	Ilika Kanyoonyoo Mwitasyano Kawongo Nthongoni Katothya				
Ward: Kyome/Thaana					

Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of Earth dams	Kwa mbuta Katukoni Kwa muli- Mbooni Ndaluni Ngomeni Nguuni Kanyonyooni Kwa tirya Kwa kitema Kwa muli vava Kwa sau kata Mavui ED Kwa silu	Tree growing and establish tree nurseries in every village	Kanyaa Thitani Winzyei Musuani Thokoa kyome	Construct a new health facility	Mavalani
Construction of sand dams	Kwa mwanga Kamumbuni Masaani-kwa vele Kwa mbutu Kwa mwandi	Create awareness , sensitization, trainings and	Kanyaa Thitani Winzyei Musuani Thokoa kyome	Equip health facilities	<ul style="list-style-type: none"> • Wiki vuv wa • Kitulani

	Tyaa makunu Mavuu	advocacy points			• Thon zwe
Installation of water harvesting tanks	Kasavini primary Kamutekeo primary Kilela primary Kinyaa primary Kyome primary Kanyekini dispensary				
Rock catchment water harvesting	<i>Kathonzooni</i> rock <i>Kisee</i> rock <i>Kalwala</i> rock <i>Tumila</i> rock <i>Kwa</i> <i>syangalyo</i> rock				
Training farmers on	Kanyaa Thitani				

sustainable livestock keeping, CSA	Winzyei Musuani Thokoa kyome				
Ward: Matinyani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams	Kathuma village Kwasonge Syozungu Kauma village Kwa mulwa Kavumbu ndiangu kiwuni	Tree growing, establishment of tree nurseries in all villages, sensitization and awareness on environment	Kyondoni Katheuni Kathuma Kaumu Kalimani Maseki	Construction of a new health facility	Katheuni village

		ntal protection			
Desilting of earth dams	Katheuni/kalia village Kwa nzuki E.D Kanzevyu E.D (b)Kyondoni village Munandani E.D (c)kalimani village Kwa ngiti E.D Kasavyu E.D (d)Kauma village Kwandune E.D Musosya E.D				
Construction of sand dams	Katheuni /kalia -Vyanyu river Kwa kalanga mutia SD Kwa mutonya kitonga SD Ndolo kivengele SD -Ngethwa river Kwa muli ngombe SD			Equip health facilities	Matinyani health center Kalimani dispensary Kauma health center Kaseki dispensary Kathuma dispensary

<p>Kwa daudi kalingwa SD Maseki village Ndiangu river Kwa mbaluka SD Kwa Katanga SD</p> <p>Kwa Robert SD -yumbuni river Kwa kalungo SD Kwa mbithi SD Kauma village Mutindi river Kwa muveseki SD -Kwa mukui river Kwa kavale SD -Mataaani kwa muthengi kitheu river Kwa muange SD -kaetha river Kwa muthwii SD -kithamba ngii river Kwa munyoki SD Kathuma village</p>				
--	--	--	--	--

- kIkanga/Kyatune river Kwa nzou SD Kwa kanau SD Kwa masila SD -mukula river Kwa mwalimu SD Kwa kasele SD Kwa kethi SD -Syo nzangu river Kwa maluki SD Kwa bonny SD Kwa kyembeni SD -Mutendea river Kwa mutia SD Kwa ngemu SD -Ndiangu river Kwa matheka ngui SD Kwa mukaiwa SD Kyondoni village -Syokakua stream Kwa mutual sumaine SD					
---	--	--	--	--	--

- kIkanga/Kyatune river Kwa kivivukingoli SD -mutendea river Kwa mbaa nzuma SD -kavunilwa stream Kwa mutendwa musyoki SD -kungulu stream Kwa kasusya SD Kalimani village -syokiti river Kwa kithaka katiluSD Kwa mulanga SD Kwa kiluu SD Kwa nzomo mutual SD Kwa malati wa nzau SD -Kavuvu river Kwa kamanza SD Kwa mulandi SD				
--	--	--	--	--

	Kwa katumi SD -kwa ngeli river Kwa lovi SD Kwa nguuni SD -kaayo river Kwa nduli SD Kyasoo SD Kathunguli SD -mutendea river Kwa ngombalu.				
Extension of water pipelines	Katheuni /kalia -Vyanyu river Kwa kalanga mutia SD Kwa mutonya kitonga SD Ndolo kivengele SD -Ngethwa river Kwa muli ngombe SD Kwa daudi kalingwa SD Maseki village				

	<p>Ndiangu river Kwa mbaluka SD Kwa Katanga SD</p> <p>Kwa Robert SD -yumbuni river Kwa kalungo SD Kwa mbithi SD Kauma village Mutindi river Kwa muveseki SD -Kwa mukui river Kwa kavale SD -Mataaani kwa muthengi kitheu river Kwa muange SD -kaetha river Kwa muthwii SD -kithamba ngii river Kwa munyoki SD Kathuma village - kIkanga/Kyatune river</p>				
--	---	--	--	--	--

<p> Kwa nzou SD Kwa kanau SD Kwa masila SD -mukula river Kwa mwalimu SD Kwa kasele SD Kwa kethi SD -Syo nzangu river Kwa maluki SD Kwa bonny SD Kwa kyembeni SD -Mutendea river Kwa mutia SD Kwa ngemu SD -Ndiangu river Kwa matheka ngui SD Kwa mukaiwa SD Kyondoni village -Syokakua stream Kwa mutual sumaine SD - kIkanga/Kyatune river </p>					
---	--	--	--	--	--

<p>Kwa kivivukingoli SD -mutendea river Kwa mbaa nzuma SD -kavunilwa stream Kwa mutendwa musyoki SD -kungulu stream Kwa kasusya SD Kalimani village -syokiti river Kwa kithaka katiluSD Kwa mulanga SD Kwa kiluu SD Kwa nzomo mutual SD Kwa malati wa nzau SD -Kavuvu river Kwa kamanza SD Kwa mulandi SD Kwa katumi SD -kwa ngeli river Kwa lovi SD</p>					
--	--	--	--	--	--

	Kwa nguuni SD -kaayo river Kwa nduli SD Kyasoo SD Kathunguli SD -mutendea river Kwa ngombalu.				
Rain water harvesting in public institutions	-maini primary -kivanga primary -kyeni primary school -kwa musyimi primary -matinyani AIC primary school -mbavae primary school -katheoni primary school -kunikila primary school -kwa ndonga primary school				

	-kakumi primary school -kitumbi primary school -maseki primary school.				
Train farmers on CSA, provide farmers with climate information services	Kyondoni Katheuni Kathuma Kaumu Kalimani Maseki				
Ward: Migwani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams in all villages	Migwani Kyamboo Nzeluni Nzatani Kisovo	Tree growing activities, establish tree	Migwani Kyambo o Nzeluni Nzatani	Construct new and operationalize existing health	Migwani Kyamboo Nzeluni Nzatani Kisovo

	Katalwa	nurseries across all the villages, sensitize and create awareness on environmental conservation across all the villages	Kisovo Katalwa	facilities across all the villages	Katalwa
Construction of sand dams	Migwani Kyamboo Nzeluni Nzatani Kisovo Katalwa	Construction of soil conservation structures in degraded areas	Migwani Kyambo o Nzeluni Nzatani Kisovo Katalwa		
Rock catchment water harvesting	Migwani (itoloni)				

Training at least 6,000 farmers on CSA across all villages	Migwani Kyamboo Nzeluni Nzatani Kisovo Katalwa				
Ward: Mumoni					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (crop pests and diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams	Katse mbalani Kasioni nguuku Kakuyu ngakoone Itinda muti Kakunguru Ikango kwa semard	Rehabilitation of environmentally sensitive sites	Muvanwa mukonga Muvarwa kathiani Kanyulu muumo hills	Provision of improved farm inputs Increasing the number of extension officers from 4 to 7 Sensitization on crop management	Kakuyu Mukonga Mutanda Ngungani Nguuku Tyaa Katse

				Subsidised storage bags e.g hermetic bags Setting up modern silos Sensitization on cereal storage Capacity building farmers on improved farming methods Delocalization of capacity building initiative	
Rehabilitation of earth dams	Kamakuyu earth dam Kaliwa earth dam Kwa ngomo earth dam	Reforestation using indigenous species Construction of soil	Kakuyu Mukong a Mutanda Ngunguni		

	Miminali earth dam Kambusu earth dam Katingulu earth dam Musasya earth dam Matingani earth dam Nduloni earth dam	conservation across all villages	Nguuku Tyaa Katse		
Construction of sand dams	Wanzelu Kimii kwa nzoka Kakiko kwa syengo Ithamboni musonga Kakuadedu Iviani kwa ngai Kwa katingu Kwa musyoka Kwa kasau Mukindu				
Rain water harvesting	Kavisani primary school				

	Musanya primary school Mbarani primary school Ithozwi primary school Itinda primary school Kikuthini primary school Mukokene dispensary Kaliani primary school				
Water pipeline distribution	Katse –mbalani water pipe Kathioni – mutioni – mwosya Pipeline Mutioni – syomuti – kamathitu Kaliwa – yangalisu – kambusu				

	Ngaani – kangomo – ikongo Ithingili – ngaaka – kasyalani Katukatumi – ngingi – musukamioni				
Ward: Mutha					
Priority 1 (Drought)		Priority 2 (human-wildlife conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water harvesting through construction of earth dams, improve quality and drought tolerant crops, improve the	Katune Mwengea Kalambani Kiimani Ndakani Ngaani isaa	Improve response to human-wildlife conflict by the KWS	Ndasani, Kalia Katune, Ngaani, Katene kalambani, Ikaka	Construction of new health facilities, operationalize existing health facilities and equip	Katune Mwengea Kalambani Kiimani Ndakani Ngaani isaa

quality of local livestock breeds across all the villages				the health facilities	
Ward: Mutito					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water harvesting (earth dams, sand dams and water pans)	Masasini Kitoo Musukini Kyaimu Kalawa - Mutito hills	Protection of water springs	Mutito hills	Operationalization of health facilities across all villages, construction of new health facilities across all the villages, equipping health	Masasini Kitoo Musukini Kyaimu Kalawa

				facilities across all the villages	
Ward: Ngomeni					
Priority 1 (Drought)		Priority 2 (human-human conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams, sand dams, water pipeline distribution across the ward	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani	Sensitization and awareness, equal distribution of resources, surveying the disputed resources, increasing the number of	Kimela, Syumani, Mitamisyi, Kathalaani, Kavaani, Ikame	Construct new health facilities across the villages, equip health facilities across the villages, operationalize the stalled health facilities	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani

		water sources			
Promote pasture growing across the ward	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani				
Sensitization and awareness creation on environmental conservation and protection Capacity building local farmers on sustainable livestock keeping	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani				
Ward: Nguni					
Priority 1 (Drought)		Priority 2 (Livestock Diseases)	Priority 3 (Human Diseases)		

Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water tanks for rain water harvesting	Nguni primary school Mwasuma primary school Kamumbu primary school Kavisu primary school Kwanzili primary school Katune primary school Muimi primary school Kitungali primary school Kwa nganga primary school	Construction of modern crushes	Ivuusya site Kithumu la site Kavisu site Kiangu site Kiamumo site Sosoma site Levuni site Ukasi site	Construction of new health facilities	Muuni dispensary Ndiamumo Dispensary Kiangu dispensary Masavi dispensary Mosovo dispensary
Rock catchment water harvesting	Maai hills and Imba hills	Employ more veterinary officers	Mwasuma village	Equip health facilities	Sosoma dispensary Musovo dispensary

			Mathiak ani village Maai village Mbuvu village		Ndiamumo dispensary
Desilting earth dams	Nzengeni earthdam Kaluku earth dam Kwanzili earthdam Kiio earth dam Ukasi earthdam	Farmers to be trained on the type of pastures to grow, how to harvest and store pasture	Mwasu ma village Mathiak ani village Maai village Mbuvu village	Sensitizatio ns, promoting community health promoters	Across all villages
Construction of new earth dams	Kawala earthdam Kamunyu earthdam Kwa mwundu earthdam Kwandamu earthdam Kwa mulinde ED Kwa mutembuka ED				

Construction of sand dams	<p>Kwa isuo river kwa mutuku SD Enziu river Kanzu SD Kivou river MwelamaSD Thunguthu Kwa nziu SD Katuti river Katuti Sand dam Iseeni river Kwa kasaika SD</p> <p>Masavi to Maai Kilawa to Mwasuma primary to Chamatani primary To Kwa nguti primary to syonoo primary Tiva hills to Machui to Miuni</p>				

Ward: Tharaka					
Priority 1 (Drought)		Priority 2 (crop pests and diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water harvesting through; <ul style="list-style-type: none"> - construction of earth dams - construction of sand dams - installation of water tanks in public institutio 	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe	Constructi on of 5 cattle dips	Gacingo ngo Kanyeng ya Kamain di Kanthun gu Gakomb e	Construct at least 6 health facilities	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe

ns across the ward					
Tree growing - establish ment of 1 tree nurseries per village	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe	Promote local breeds	Gacingo ngo Kanyeng ya Kamain di Kanthun gu Gakomb e	Equip the existing health facilities	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe
Promoting pasture production across the ward	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe	Training and capacity building of at least 6,000 farmers	Gacingo ngo Kanyeng ya Kamain di Kanthun gu Gakomb e	Sensitization and awareness across the ward on health and nutrition Promote community health promoters across the ward	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe
Sensitization and awareness	Gacingongo Kanyengya	Employ at least 6	Gacingo ngo		

creation on environmental protection	Kamaindi Kanthungu Gakombe	more livestock officer	Kanyeng ya Kamaindi Kanthungu Gakombe		
Construction of water abstraction strategies from the tana river	Along tana river				
Ward: Waita					
Priority 1 (Drought)		Priority 2 (Crop Pests and Diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Rehabilitation of shallow wells	Kiriri shallow well	Promote drought tolerant crops	Waita Mwambui Thonoa	Construction of health centers	Katuluni dispensary Maongoa

	Jordan Shallow well Kwan ganga kavengei SW Mavivani kwa mbiti SW Kwa musili kamocho SW NauNguni primary SW		Kathoka Nyanyaa Enziu		Dispensary Malioni dispensary KauNguni dispensary Ikuusya Dispensary Kulungwa dispensary Kisolet dispensary Kya ndua dispensary
Rock catchment water harvesting	Thonoo rock cathment Kavila Ruguti Dungura Mukuni Kilyambo Kwa syengo munithya	Train and capacity farmers on CSA	Waita Mwambui Thonoo Kathoka Nyanyaa Enziu	Equip health centers	Waita dispensary Mutwangombe dispensary

					Enziu dispensary Nyaanyaa dispensary Muono dispensary Mwambui dispensary
Construction of earth dams	Kaliluni E.D Kyandoas earth dam MunyuNguni earthdam Katanga earth dam Kasura earthdam Ndologwe E.D Kathambandia E.D Kwa mwanzia E.D Kisole E.D				

	Kwa kimwele E.D Kiia E.D				
Construction of earth dams	Nginyei earthdam Kwa kisilu earthdam Kwa maithya earthdam Maongoa earthdam Kaulyambu E.D Ilinyi ED Waita ED Mutembuka ED Kwa kasee ED Kwa mutia ED Nzalani ED Kwa Michael ED Masokani ED Kwa titus mboo ED				
Construction of sand dams	Karuri river Karuri SD Kivila river Kwa kilile SD				

<p>Mbiri river Kwa iliu, Kwa mwendwa, Kwa muchasD Kasura river Kwa mwende, kwa vaivui, kwa mutisya SD Mwoono river Kwa muthui wa muthengi,Kaumb e , kwa muema Sand dam Kanyekini river Kwa Mwaniki, Kwa koko SD Mutembuka river Kwa kilonzo mumemde SD Musiiulu river Kwa kitulya , kwa paul SD Kamunyu river Kamunyu ilovi, Kwa mwanda SD SD Kivila river</p>					
--	--	--	--	--	--

	Kwa mwangangiSD Katakani river Kwa musili SD Kitwa mikeu river Kwa mwendwa kimwele , kwa murokalevele SD Nginyai river kwa titus SD Lenye river Kwa kombe , Kwa ivia SD				
Ward: Zombe					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where

Rain water harvesting tanks	Primary schools; 1. Makongo 2. Kaluli 3. Katikoni 4. Kivisuni 5. Mavia Mayo	Construction of soil conservation structures targeting farming lands in all villages	Kikuu Ilaa/Katikoni Malatani Makongo Thua kasuNguni	Construction of new health facilities	- Kavingo - Katikoni - Kadongo - Kongwea - Nzilani - Imbuvi - Kaavani
Construction of earth dams	- Ngelani dam - Kilimboni - Yimbuni - Ya wii - Nzilani - Kasululu	Training on commercial tree growing Establishing tree nurseries in all villages Sensitization and awareness creation on environmental	Kikuu Ilaa/Katikoni Malatani Makongo Thua kasuNguni	Equipping and operationalize health facilities	Zombe Hospital Ngungi Dispensary

		conservation Promoting alternative livelihoods to commercial charcoal production			
Construction of sand dams	<ul style="list-style-type: none"> - Ngungi River - Maangani River - Nguuni stream - Kithumula Stream - Mwinga Stream - Musavi Stream - Kathandi 				

Ward: Kyuso					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of sand dams	Thunguthu(Kwa Mwendwa Ngumbi) Kivila (kwa kilo/Kitheka) Kivila(kwa Yengo) Ikinda(kwa peter kimii) Kamwongo(kwa kalundu) Masyungwa Mathimami	9 tree growing sensitization activities Establishing at least 1 tree nursery in every village Construction of household level soil	Itiva/Nzou Kamula Kamuwongo Kimangao Kimu Mivukoni Ngaai Twimyu a kyuso	Improve and equip health facilities across the villages Awareness on hygiene and sanitation Improve accessibility to the health centers	Itiva/Nzou Kamula Kamuwongo Kimangao Kimu Mivukoni Ngaai Twimyu kyuso

		conservati on structures in farming lands across the ward		Increase the number of ambulances from 1-2	
Construction of earth dams	Kwa Mwilikwa Kisinga Ngiluni(kwa Musili Muli) Mauwani(kwa Mwendwa Ngumbi) Katungulu(kwa Musembi Muasya) Kasyongo(kwa Muasya Nzuku) Katwenywe Manana(kwa Kivulu) Kwa Sammy Mwangangi Ngaana kwa Ngundu				

Water pipeline extension	Itiva nzou(Tii market) Mivukoni(kwa Vere) Mbui borehole(kwa Mue) Ndathani borehole(kwa Muthimbi market) Kyuso(Malava) Kyuso(Mikwa) Ngaie(Mikwa) Kora(Mukeka)				
Rehabilitation of earth dams	Mbui earth dam Kamulu earth dam Maanzui earth dam Tii earth dam Kamavui earth dam Ngai earth dam				
Rain water harvesting tanks	Kitangui primary school				

(10,000L each)	Mugero primary school Kingingo primary school Mutambani primary school Kaliani primary school Kanana primary school Kamwengi primary school				
Ward: Athi					
Priority 1 (Drought)		Priority 2 (Human-Wildlife conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Tiva River, and Ndilui stream meeting point At ndilui stream (Ngomano)Rehab	Improve response to human-wildlife	Kisiio, Lower Kituti, Mwambani,	Create awareness on health and sanitation	Maluma MoNguni Upper kituti Lower kituti Katilini

	ilitation of Nguni earth dam	conflict reports	Katilini, Kilawa		Kilawa Kisiio Makaiye Kalivu
Extension of pipeline water supply	Kangu pipeline to other villages	Communit y sensitizati on and awareness creation on poaching and encroach ment	Kisiio, Lower Kituti, Mwamba ni, Katilini, Kilawa	Equipping existing health facilities, constructing new health facilities	Maluma MoNguni Upper kituti Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu
Establish a water purifying plant	Muangen i, moNguni, ilengi, nduuni, kyanduuni				
Construction of sand dams	Along Tiva Kwa kituku Kwa nzaki Kwa ho.Muoki Kwa Tisya Kwa Kisingo Kwa Matemani Kwa kasoka				

	Kwa imathoka				
Rehabilitation of degraded sites through tree growing	Mbakoni Kisiio Lower kituti Upper Kitui				
Establishment of tree nurseries at least 1 in each village	Maluma MoNguni Upper kituti Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu				
Trainings and capacity building Climate Change planning teams	Maluma MoNguni Upper kituti Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu				

Ward: Voo Kyamatu					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Extension of water pipeline	From Muthungu to Itikie to Kamwui to Nditine From NzuNguni to Ndulani, Kithekethe, Twalimu to makutano	Rehabilitation of water catchment areas	Kinzou Inguu Malembwa kaluasi	Construction of new health facilities Equipping of existing health facilities	Kyango Imale Muthungue Kyamatu NzuNguni
Construction of earth dams	Kyandeve Kemwaa Kwa muii Kwa ngila Kwa mbaa ndungi Masimbani Katulu Kwa muvithu Menguuwe Indoo	Ecosystem restoration and soil conservation through check dams	Wangila Mbuku Mwinga Kwa muti Kwa kimande Kyanngo Ikukuma		

	Kwa mulatya Kwa musyoka Syetundo		Kamaku vu Kanzilu Isalava		
Sumpwells	Kaluasi Kwanzungu nditime Kwa Mwangu kamwiu Thua Tukili Ikitioni				
Desilting earth dams	Kwa Mbivya Kithanako Kwa Kalavati Kwa Kalowe Katolongwe				
Improve response on human-human conflict reported	Kyamatu, Nzanzu, Muthungue, NzuNguni				
Improve response on human- wildlife	Kyamatu and Muthungue				

conflict reported					
Ward: Kisasi					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams and sand dams	Kwa mutunga Kwa katumi Kwa kalovo Isyuko ikuthumula Mililuni Kwa kakonge nungu Kwa philomena muthoka Kwa kimote Kaloloo Nduni Mwala ivu Kya mioni Koma one	Designate a solid waste dumping site	Mosa	Inclusion of 10 community health promoters per vilage	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni

	Koma two Nzeeu ilungusu Kwa kyalo Kwa kinyoo Kilonzo Kwa maluki Kilonzo Kwa kaamba Kitamba Miumbu Katakali Koma kwa john Ngasani Kwa isoni katombya Kiwa ngei				
Rock catchment water harvesting	Ituki Kwa nduluku Mbuthani Mathendu Nguutu Muloso	Establish tree nurseries at least one in each village	Masimbi ni Maaliku Mbusya ni Kavisuni Ngiluni Mosa nguuni	Sensitization and awareness on health and nutrition	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni

Water harvesting tanks	Masimbini Ngiluni Mbusyani Maaliku Kavisuni Nguuni Mosa				
Water pans	Each village 3 water pans and 3 farm ponds				
Distribution of piped water	Kisasi to savat Kisasi to kivini Maaliku to mission Ngiluni to tunduni kasevi Kavasya to mathumbi ndivo Mbusyani to kilimbitini Kavisuni to kivuthi				
Promote drought tolerant crops and CSA	Masimbini Maaliku Mbusyani Kavisuni Ngiluni				

	Mosa nguuni				
Employ more extension agriculture officers	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni				
Employ more extension livestock officers	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni				
Promote poultry farming	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni				
Ward: Nuu					

Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati	Improve response to human-wildlife conflict reports	Nuu, Mwambiu, Wingemi, Kyangati, Nyaani, Mutyangome, Nguuni	Create awareness on health and sanitation	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati
Extension of pipeline water supply	Kangu pipeline to other villages	Community sensitization and awareness creation on poaching and encroachment	Nuu, Mwambiu, Wingemi, Kyangati, Nyaani, Mutyangome, Nguuni	Equipping existing health facilities, constructing new health facilities	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati
Establish a water	Nuu				

purifying plant					
Construction of sand dams	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati				
Rehabilitation of degraded sites through tree growing	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati				
Establishment of tree nurseries at least 1 in each village	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati Makaiye Kalivu				
Trainings and capacity building	Maluma MoNguni Upper kituti				

Climate Change planning teams	Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu				
Ward: Mui					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Itiko Kitise Ngungi Ngoo Ngiluni	Rehabilitation of degraded lands	Itiko Kitise Ngungi Ngoo Ngiluni	Create awareness on health and sanitation	Itiko Kitise Ngungi Ngoo Ngiluni
Extension of pipeline water supply	Itiko Kitise Ngungi Ngoo Ngiluni	Community sensitization and awareness creation on	Itiko Kitise Ngungi Ngoo Ngiluni	Equipping existing health facilities, constructing new health facilities	Itiko Kitise Ngungi Ngoo Ngiluni

		encroach ment			
Establish a water purifying plant	Itiko Kitise Ngungi Ngoo Ngiluni				
Construction of sand dams	Itiko Kitise Ngungi Ngoo Ngiluni				
Rehabilitation of degraded sites through tree growing	Itiko Kitise Ngungi Ngoo Ngiluni				
Establishment of tree nurseries at least 1 in each village	Itiko Kitise Ngungi Ngoo Ngiluni				
Trainings and capacity building Climate Change	Itiko Kitise Ngungi Ngoo Ngiluni				

planning teams					
Construction of mega earth dams	Itiko Kitise Ngungi Ngoo Ngiluni	Improve response to human-wildlife conflict reports	Itiko Kitise Ngungi Ngoo Ngiluni	Create awareness on health and sanitation	Itiko Kitise Ngungi Ngoo Ngiluni
Extension of pipeline water supply	Itiko Kitise Ngungi Ngoo Ngiluni	Community sensitization and awareness creation on poaching and encroachment	Itiko Kitise Ngungi Ngoo Ngiluni	Equipping existing health facilities, constructing new health facilities	Itiko Kitise Ngungi Ngoo Ngiluni
Ward: Nguutani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention	Where	Action or Intervention required	Where

		on required			
Construction of mega earth dams	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni	Rehabilitation of degraded lands	Nzawa Muthioni i Nzauni Muivu Nzala Nguutani i Ngongoni	Create awareness on health and sanitation	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni
Extension of pipeline water supply	Kangu pipeline to other villages	Community sensitization and awareness	Nzawa Muthioni i Nzauni Muivu Nzala Nguutani i Ngongoni	Equipping existing health facilities, constructing new health facilities	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni
Establish a water purifying plant	Nzawa Muthioni Nzauni Muivu Nzala				

	Nguutani Ngongoni				
Construction of sand dams	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni				
Rehabilitation of degraded sites through tree growing	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni				
Establishment of tree nurseries at least 1 in each village	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni				
Trainings and capacity building Climate	Nzawa Muthioni Nzauni Muivu				

Change planning teams	Nzala Nguutani Ngongoni				
Ward: MutoNguni					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi	Rehabilitation of degraded areas	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi	Create awareness on health and sanitation	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi
Extension of pipeline water supply	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi	Community sensitization and awareness creation	Mithini MutoNguni Musengo Yalatani	Equipping existing health facilities, constructing	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi

		on poaching and encroach ment	Takeani Kangaon di	new health facilities	
Establish a water purifying plant	Mithini MutoNguni Musengo Yalatani Takeani Kangaondi				
Construction of sand dams	Mithini MutoNguni Musengo Yalatani Takeani Kangaondi				
Rehabilitation of degraded sites through tree growing	Mithini MutoNguni Musengo Yalatani Takeani Kangaondi				
Establishment of tree nurseries at	Mithini MutoNguni Musengo Yalatani				

least 1 in each village	Kakeani Kangaondi				
Trainings and capacity building Climate Change planning teams	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi				
Ward: Kyangwithya West					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta	Rehabilitate degraded areas	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta	Create awareness on health and sanitation	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta

Extension of pipeline water supply	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta	Community sensitization and awareness	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta	Equipping existing health facilities, constructing new health facilities	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta
Establish a water purifying plant	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Construction of sand dams	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Rehabilitation of degraded sites through tree growing	Kavuta Ndumoni Utooni Itoleka Mulutu				

	Tunguta				
Establishment of tree nurseries at least 1 in each village	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Trainings and capacity building Climate Change planning teams	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Ward: Kyangwithya East					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where

Construction of mega earth dams	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini	Rehabilitation of degraded areas	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini	Create awareness on health and sanitation	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini
Extension of pipeline water supply	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini	Community sensitization and awareness creation	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini	Equipping existing health facilities, constructing new health facilities	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini
Establish a water purifying plant	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini				
Construction of sand dams	Kalawa/kabaa Museve				

	Mutune Mulundi Misewani Ivaini				
Rehabilitation of degraded sites through tree growing	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini				
Establishment of tree nurseries at least 1 in each village	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini				
Trainings and capacity building Climate Change planning teams	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini				

Ward: Kithumula Kwa Mutonga					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Rehabilitation of degraded areas	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Create awareness on health and sanitation	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani
Extension of pipeline water supply	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Community sensitization and awareness creation on poaching	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Equipping existing health facilities, constructing new health facilities	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani

		and encroach ment			
Establish a water purifying plant	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Construction of sand dams	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Rehabilitation of degraded sites through tree growing	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Establishment of tree nurseries at least 1 in each village	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				

Trainings and capacity building Climate Change planning teams	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Construction of mega earth dams	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Improve response to human-wildlife conflict reports	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Create awareness on health and sanitation	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani
Ward: Mutomo					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where

Construction of mega earth dams	Mwala Kandae Kibwea Kawelu Uae Kitoo	Rehabilitation of degraded lands	Mwala Kandae Kibwea Kawelu Uae Kitoo	Create awareness on health and sanitation	Mwala Kandae Kibwea Kawelu Uae Kitoo
Extension of pipeline water supply	Mwala Kandae Kibwea Kawelu Uae Kitoo	Community sensitization and awareness creation on poaching and encroachment	Mwala Kandae Kibwea Kawelu Uae Kitoo	Equipping existing health facilities, constructing new health facilities	Mwala Kandae Kibwea Kawelu Uae Kitoo
Establish a water purifying plant	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Construction of sand dams	Mwala Kandae Kibwea Kawelu				

	Uae Kitoo				
Rehabilitation of degraded sites through tree growing	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Establishment of tree nurseries at least 1 in each village	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Trainings and capacity building Climate Change planning teams	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Construction of mega earth dams	Mwala Kandae Kibwea Kawelu Uae Kitoo	Improve response to human-wildlife conflict reports	Mwala Kandae Kibwea Kawelu Uae Kitoo	Create awareness on health and sanitation	Mwala Kandae Kibwea Kawelu Uae Kitoo

Extension of pipeline water supply	Mwala Kandae Kibwea Kawelu Uae Kitoo	Community sensitization and awareness creation on poaching and encroachment	Mwala Kandae Kibwea Kawelu Uae Kitoo	Equipping existing health facilities, constructing new health facilities	Mwala Kandae Kibwea Kawelu Uae Kitoo
Ward: Mbitini					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Mwala Kandae Kibwea Kawelu Uae Kitoo	Rehabilitate degraded areas	Mwala Kandae Kibwea Kawelu Uae Kitoo	Create awareness on health and sanitation	Mwala Kandae Kibwea Kawelu Uae Kitoo

Extension of pipeline water supply	Mwala Kandae Kibwea Kawelu Uae Kitoo	Community sensitization and awareness creation on poaching and encroachment	Mwala Kandae Kibwea Kawelu Uae Kitoo	Equipping existing health facilities, constructing new health facilities	Mwala Kandae Kibwea Kawelu Uae Kitoo
Establish a water purifying plant	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Construction of sand dams	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Rehabilitation of degraded sites through tree growing	Mwala Kandae Kibwea Kawelu				

	Uae Kitoo				
Establishment of tree nurseries at least 1 in each village	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Trainings and capacity building Climate Change planning teams	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Ward: Nzambani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kavalula Kilonzo Ikuyuni	Rehabilitation of	Kavalula Kilonzo Ikuyuni	Create awareness on health	Kavalula Kilonzo Ikuyuni

	Kyanika Kangweni	degraded areas	Kyanika Kangwe ni	and sanitation	Kyanika Kangweni
Extension of pipeline water supply	Kavalula Kilonzo Ikuyuni Kyanika Kangweni	Communit y sensitizati on and awareness creation on poaching and encroach ment	Kavalula Kilonzo Ikuyuni Kyanika Kangwe ni	Equipping existing health facilities, constructing new health facilities	Kavalula Kilonzo Ikuyuni Kyanika Kangweni
Establish a water purifying plant	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Construction of sand dams	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				

Rehabilitation of degraded sites through tree growing	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Establishment of tree nurseries at least 1 in each village	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Trainings and capacity building Climate Change planning teams	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Ward: Mulango					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Interventi	Where	Action or Interventio n required	Where

		on required			
Construction of mega earth dams	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani	Rehabilita tion of degraded areas	Wii Kwamul i Wikilily e Kyangu nga Kathung i Kyambit i Katulani	Create awareness on health and sanitation	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani
Extension of pipeline water supply	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani	Communit y sensitiza tion and awareness creation	Wii Kwamul i Wikilily e Kyangu nga Kathung i Kyambit i Katulani	Equipping existing health facilities, constructing new health facilities	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani

Establish a water purifying plant	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani				
Construction of sand dams	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani				
Rehabilitation of degraded sites through tree growing	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani				
Ward: Tseikuru					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	

Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni	Improve response to human-wildlife conflict reports	Musavani , Kaningo, Katumbi, Mulango ni, Masyung wa	Create awareness on health and sanitation	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni
Extension of pipeline water supply	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni	Community sensitization and awareness creation on poaching and encroachment	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni	Equipping existing health facilities, constructing new health facilities	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni
Establish a water	Kaivirya Kaningo				

purifying plant	Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni				
Construction of sand dams	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni				
Rehabilitation of degraded sites through tree growing	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni				
Establishment of tree nurseries at least 1 in each village	Kaivirya Kaningo Katumbi Masyungwa Musavani				

	Ngalange Tseiukuru mulangoni				
Trainings and capacity building Climate Change planning teams	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni				
Construction of mega earth dams	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni	Improve response to human-wildlife conflict reports	Kisiio, Lower Kituti, Mwambani, Katilini, Kilawa	Create awareness on health and sanitation	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni
Ward: Kivou					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention	Where	Action or Intervention required	Where

		on required			
Construction of mega earth dams	Kivou Kisana Ithumbi Kyanika kanzui	Rehabilitation of degraded areas	Kivou Kisana Ithumbi Kyanika kanzui	Create awareness on health and sanitation	Kivou Kisana Ithumbi Kyanika kanzui
Extension of pipeline water supply	Kivou Kisana Ithumbi Kyanika kanzui	Community sensitization and awareness creation	Kivou Kisana Ithumbi Kyanika kanzui	Equipping existing health facilities, constructing new health facilities	Kivou Kisana Ithumbi Kyanika kanzui
Establish a water purifying plant	Kivou Kisana Ithumbi Kyanika kanzui				
Construction of sand dams	Kivou Kisana Ithumbi Kyanika kanzui				
Rehabilitation of degraded	Kivou Kisana Ithumbi				

sites through tree growing	Kyanika kanzui				
Establishment of tree nurseries at least 1 in each village	Kivou Kisana Ithumbi Kyanika kanzui				
Trainings and capacity building Climate Change planning teams	Kivou Kisana Ithumbi Kyanika kanzui				
Ward: Miambani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Nzaaya Kanzau Kavalo Mutual	Rehabilitation of degraded areas	Nzaaya Kanzau Kavalo Mutual	Create awareness on health	Nzaaya Kanzau Kavalo Mutual

	Mung'ang'a Kamandio		Mung'a ng'a Kamand io	and sanitation	Mung'ang'a Kamandio
Extension of pipeline water supply	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio	Communit y sensitizati on and awareness creation	Nzaaya Kanzau Kavalo Mutual Mung'a ng'a Kamand io	Equipping existing health facilities, constructing new health facilities	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio
Establish a water purifying plant	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio				
Construction of sand dams	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio				
Rehabilitation of degraded	Nzaaya Kanzau Kavalo				

sites through tree growing	Mutual Mung'ang'a Kamandio				
Establishment of tree nurseries at least 1 in each village	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio				
Ward: Endau					
Priority 1 (Drought)		Priority 2 (Human-Human/human-wildlife conflicts)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani	Improve response to human-human conflict reports	Twambu, Makuka, Katumbi, Ndetani	Create awareness on health and sanitation	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani

		Improve response to human-wildlife conflict reports	Kathua, Yiuku, Malalani		
Extension of pipeline water supply	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani	Community sensitization and awareness creation on poaching and encroachment	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani	Equipping existing health facilities, constructing new health facilities	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani
Establish a water purifying plant	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani				
Construction of sand dams	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani				
Rehabilitation of degraded	Twambu, Makuka, Katumbi, Ndetani				

sites through tree growing	Kathua, Yiuku, Malalani				
Ward: Mwingi Central					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams, sand dams, and rock catchment	Mathyakani Mulanga Kanzanzu Kalisasi	Establish solid waste reuse and recycle systems	Central	Construct new health facilities across the ward	Mathyakani Mulanga Kanzanzu Kalisasi
Promote CSA	Mathyakani Mulanga Kanzanzu Kalisasi Central	Develop waste disposal regulatory framework	Mwingi Municipality	Increase the number of community health promoters	Mathyakani Mulanga Kanzanzu Kalisasi Central
Trainings and capacity building	Mathyakani Mulanga Kanzanzu	Awareness and sensitization	Mathyakani Mulanga	Equip mwingi	Central

farmers – 5,000 farmers across the ward	Kalisasi Central	on on environme ntal protection across the ward	Kanzanz u Kalisasi Central	level 4 hospital	
		Develop a sewerage system	Mwingi Municip ality (Central village)	Sensitizatio n on health and nutrition across the ward	Mathyakani Mulanga Kanzanzu Kalisasi Central
Increase the number of agriculture extension officers by 1 per village	Mathyakani Mulanga Kanzanzu Kalisasi Central				
Promote sustainable livestock keeping	Mathyakani Mulanga Kanzanzu Kalisasi Central				
Ward: Kitui Township					
Priority 1 (Poor Waste Disposal)		Priority 2 (Water Pollution)		Priority 3 (Air Pollution)	

Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Designate a new and appropriate solid waste dumping site	Outside the busy kalundu market	Construction of proper drainage and sewerage system	Kaveta Town Majengo Ngiini Kalundu	Develop air pollution control regulatory framework	Kitui municipality
Sorting solid waste at the source points (residential and commercial areas)	Kaveta Town Majengo Ngiini Kalundu	Install a water treatment plant	Kaveta Town Majengo Ngiini Kalundu	Train and sensitize institutions on air pollution control	Kitui municipality
Conduct public awareness and sensitization of proper waste disposal	Kaveta Town Majengo Ngiini Kalundu	Construction of a new and suitable solid waste dumping site	Kaveta Town Majengo Ngiini Kalundu		

Formulation of waste management policies and regulatory framework	Kitui municipality	Construct soil conservation structures	Kaveta Town Majengo Ngiini Kalundu		
Develop regulatory framework for Kitui County Waste Management	Kitui Municipality	Formulate water pollution control regulatory framework	Kitui municipality		
Establish a solid waste recycling plant	Town Majengo Kalundu				
Mobilize organized youth groups to develop solid waste recycling proposals	Town Majengo Kalundu				

5. Kitui County Climate Strategic Adaptation Investment/Action Priorities

Table 5: Climate Strategic Adaptation Investment/Action Priorities

Strategic Objectives	Strategic investment/Action Priority	Expected results	Key interest/Stakeholders
----------------------	---	------------------	------------------------------

1. Reduce risks to communities and infrastructure resulting from climate-related disasters, such as droughts and floods	1. Participatory policy development	Established frameworks, regulations, and incentives in the County to support adaptation efforts.	
	2. Sensitization on climate information	Communities empowered in climate information services	
	3. Risk assessment and management (community preparedness to cope with climate risks)	Drought early warning systems improved, including the promotion of	

		<p>people-centered systems in the County</p> <p>County Disaster and Emergency services Fund operationalized</p>	
	<p>4. Enhanced social protection programs (households and entities benefiting from devolved adaptive services)</p>	<p>Hunger Safety Net Programme established</p> <p>Strengthened social safety net programs (Women, Youth, Elderly, Persons with Disabilities)</p>	

	Develop climate resilient infrastructure	Climate resilient, energy-efficient infrastructure developed (water, roads, energy, buildings)	
2. Increase food and nutrition security by enhancing productivity and resilience of the agricultural sector in as low-carbon manner as possible	Improve crop productivity through implementation of CSA interventions	Climate-resilient agricultural practices, sustainable farming techniques promoted and adopted. Farmers adapting to changing climatic conditions supported.	

3. Enhance the resilience of the water sector by ensuring adequate access to, and efficient use of, water for agriculture, manufacturing, domestic use, wildlife, and other uses.	Promote water conservation practices, develop alternative water sources, and manage water allocation during droughts.	Enhanced access to sustainable, safe, affordable and adequate water for domestic use and irrigated agriculture.	
4. Increase Forest/tree cover to 10% of total land area, rehabilitate degraded lands, including rangelands and, increase the resilience of wildlife.	Promotion of afforestation, reduction of deforestation, restoration of degraded ecosystems, promotion of sustainable charcoal production,	Protected and restored natural resources supporting lives and livelihoods	

	implementation of enabling actions, and capacity development.		
5. Mainstream Climate Change adaptation into the health sector, and increase the resilience of human settlements, including through improved solid waste management in urban areas.	Strengthen public health systems to respond to climate-related health risks, capacity building of healthcare providers, promotion of disease surveillance and monitoring systems, development of healthcare policies and guidelines.	Strengthened public health systems to respond to climate-related health risks	

6. Promote energy and resource efficiency in the manufacturing sector	Promotion energy efficiency as a key enabler for optimization of manufacturing processes. (Affordability, secure, reliability and climate resilient energy supply)	Improved energy efficiency (reduced greenhouse gas emissions) and enhanced resilience to Climate Change impacts for a sustainable and low-carbon economy.	
7a. Ensure an electricity supply mix that is based mainly on renewable energy, is resilient to Climate Change, and promotes energy efficiency and	Promote adoption of climate-resilient renewable energy and clean cooking technologies (Affordability, secure,	Increased adoption of climate-resilient renewable energy and clean cooking technologies	

encourage transition to clean cooking to reduce demand for fuelwood.	reliability and climate resilient energy supply)		
7b. Establish efficient, sustainable, climate-resilient transport and logistics services	Promotion of efficient, sustainable, climate-resilient transport systems	Affordable, safe, efficient and environmentally sustainable energy mix adopted	

Table 6: Ward Specific Action Priorities

Ward: Kauwi					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Desilting of 13 earth dams	Kwa samba Matinga, Kavuta, Kaiveti, Kwa Nzuki, Kwa Kyondo, Kwa Nguli, Muthumula, Kisayani Mangelu Kwa Maundu, Kasue	Conservation of the catchment areas of the 13 earth dams	Matinga, Kavuta, Kaiveti, Kwa Nzuki, Kwa Kyondo, Kwa Nguli, Muthumula, Kisayani Mangelu Kwa Maundu, Kasue	Construct 5 new health facilities	Kyenge Kivani Mutini Katutu Mutanda

	KaVoo, Maukuni		KaVoo, Maukuni		
		Establish 6 tree nurseries of 30,000 seedlings of assorted species in each village; Mutini village, Kivani Village, Mutanda village, Katutu village, Kyenge Village, Kauwi village		Household level capacity building, Immunization campaigns, Screening diseases, sensitization and awareness creation on health matters	Mutini village, Kivani Village, Mutanda village, Katutu village, Kyenge Village, Kauwi village
Supply 10,000m ³ water tanks to public institutions	Primary schools Public health facilities	Rehabilitating and restoring the degraded areas	Degraded sites in Mutini village, Kivani Village, Mutanda village, Katutu village,		

			Kyenge Village, Kauwi		
Capacity build farmers and promote drought tolerant crops	Mutini village, Kivani Village, Mutanda village, Katutu village, Kyenge Village, Kauwi village	Support environment and Climate Change champions; Mikuyuni, Kyenge, and Kauwi women groups	Mikuyuni, Kyenge, Kauwi		
Ward: Chuluni					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where

Construction of earth dams	Nguuni Kaluulu Kiliku Kwa Anoni	Rehabilitation of denuded sites through tree growing	Thua Kvuo Kisiro Kiongwe Mungure	Construct 5 new health facilities	Kangvu Kwa-wewa Kwa Mutei Kanzauwu Kiongwe
Construction of 6 sand dams	Kwa-nzangu Kyamuvyu Mililuni Nzuni Nziu Kwa Musengele	Sustainable land management for soil conservation	Thua, Kvuo Kisiro Kiongwe Mungure Ngungi Kyalele	Household level capacity building, sensitization and awareness creation on health and nutrition in all villages	Ngungi village Kyanzai village Kenze village Kyalele village Kanduti village Ithumula village
Capacity build 6,000 farmers on CSA practices and promote growing drought tolerant crops in 6 villages	Ngungi village Kyanzai village Kenze village Kyalele village	Establish 6 tree nurseries in 6 villages	Ngungi village Kyanzai village Kenze village Kyalele village		

	Kanduti village Ithumula village		Kanduti village Ithumula village		
		Capacity build and sensitize 6,000 farmers in all villages on Climate Change and environmental protection	Ngungi village Kyanzai village Kenze village Kyalele village Kanduti village Ithumula village		
		Capacity build the Ward Climate Change Planning Team	Ward level		
Ward: Ikanga/Kyatune					
Priority 1 (Drought)		Priority 2 (Crop pests and diseases)		Priority 3 (Human Diseases)	

Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of Earth Dams	Kaloyo Kooi Ndilyani – kasambuya Ndivuni Kaveta Nzalani Muliluni	Training 7,000 farmers on the use of certified seeds, soil fertility Provision of climate information services to at least 7,000 farmers Recruitment of 7 additional agriculture extension officers	Ithumula Kathungu Kyatune Ndatani Yongela Nduundune Makele	Operationalize 7 health facilities, construct 7 new health facilities in all villages	Ithumula Kathungu Kyatune Ndatani Yongela Nduundune Makele
Construction of Sand dams	Menzai KamuNguni Ngunga Semea makele				

	Nzeeu Semea- kathungu Nzeeu – muumbuni				
Water Pipeline extension	Extension from Kiangwa to Kaveta Kanguu Pipeline extension from Ithumula to Windundu and rehabilitati on of kwa wangu line				
Capacity building and training 7,000 farmers on CSA in all villages	Ithumula Kathungu Kyatune Ndatani Yongela Nduundun e Makele				

Training farmers on sustainable livestock keeping at village level	Ithumula Kathungu Kyatune Ndatani Yongela Nduundune Makele				
Ward: Ikutha/Kasala					
Priority 1 (Drought)		Priority 2 (human-wildlife conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Capacity building 7,000 farmers in all villages on CSA Extension of Kasala market water project Construction of 7 earth dams in all villages	Kasala Kiangu Kyoani Maani Ngwate Ndili nzamba	Conduct anti-poaching sensitization and awareness Use of alternative	Kasala, Ngwate, Nzamba, Ndili, Maaini	Construct 7 health facilities in all villages Operationalize all	Kasala Kiangu Kyoani Maani Ngwate Ndili nzamba

		materials for fencing Improve on response mechanisms by the KWS in the affected areas		health facilities	
Training 7,000 farmers on agroforestry Promote tree growing in 7 villages	Kasala Kiangu Kyoani Maani Ngwate Ndili nzamba				
Provide climate information services to 7,000 farmers in all villages					
Ward: Kanyangi					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Interven	Where

				tion required	
Construction of earth dams	Nzambia (Mwanzia) NZawa (Proposed) Kiseuni (Mue Makosi) Kitooni (Kwa Kamuti) Kanyongonyo (Isiuni) Kalulini (Makovo) Kyangi (Kivelenge)	Establishment of 6 tree nurseries with a total of 180,000 assorted species of seedlings	Kyangi Kanyongonyo Kitooni Kiseuni Kalulini nzambia	Operationalize and equip health facilities	Syomakanda Nzambia Ngomoni Kitooni
Construction of sand dams and shallow wells	Nzambia (Kwa Katulu) Kanyongonyo (Musoloni)	Trainings on sustainable land management, rehabilitation of degraded lands, and	Kyangi Kanyongonyo Kitooni Kiseuni Kalulini nzambia	Construct more health facilities	Kathiini Kalulini H.C Kanyongonyo Kiseuni Syomunyu

	Kitooni (Kwa Kimanzi) Kiseuni (Elijah Kitungu) Kalulini (Kwa Kilungu)	restoration activities			
Construction of sump wells	Tiva Kiesuni Kalulini (Ngomoni)			Capacity building, training, sensitizat ion and awarenes s creation on health and nutrition	Kanyangi Kanyongonyo Kitooni Kiseuini Kalulini nzambia
Construction of farm ponds	- Kanyo ngony o - Kiseu ni - Nzam bia				

	<ul style="list-style-type: none"> - Kanyangi - Kalulini - Kitoo no 				
Installation of rain water harvesting tanks	Schools (One per village) Masimba (Kitooni) Kathiani (Kiseuni) Mwangeni (Kalulini) Kyunduni (Kanyongonyo) Yamunyu (Nzambia) Kangaatu (Kanyangi)				
Ward: Kanziko					

Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construct 2 mega dams	1-mivuni 1-kituvwi	Deforestation awareness Use of alternative materials for fencing Better services by the Kfs Capacity building, planting trees 20000	Within Kanziko ward	Completion and equipping of uncompleted dispensaries - construct more health centers Upgrading of existing and equipping these facilities	-kakithya -vyulu -mwanianga -kakindu -vutu -ndilili -kyanyaa

				-deploy more staffs	
Construct-5 earth dams	1- mwainaiga 1- kivanndeni 1-kyanyaa 1-keutunda 1-simisi				
Construct 50 sand dams	10- keutundu 10- kivandeni/ mwanianga 10- ndilili/miv uni 10- kituvwu/ila mba 10- Ekani/simi si				
Ward: Kiomo/Kyethani					

Priority 1 (Drought)		Priority 2 (Crop pests and diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Afforestation, improved farming methods, Provision of climate information for planning. initiate income generating activities More veterinary officers Preserve pasture Construction of water sources, market linkage	Kiom Mbondoni Kavuvwani Kyethani Karura kairugu	Train more than 6,000 farmers Explore irrigation potential	Kiomo Mbondoni Kavuvwani Kyethani Karura kairugu	Regular treatment Create awareness Improved sanitation Improve health facilities and provide adequate/skilled personnel in all public health facilities	Kiomo Mbondoni Kavuvwani Kyethani Karura kairugu
Regular spraying	Kiomo Mbondoni				

Construction of cattle dips and more water points, -regular vaccination, frequent training of personnel Improvement of information flow Select breeds not susceptible to diseases	Kavuvwani Kyethani Karura kairugu				
Improve on safety for farmers and women around the crocodile and hippos infested areas	Karura				
Ward: Yatta/Kwa Vonza					
Priority 1 (Drought)		Priority 2 (Livestock diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Revive IlikaAthi water project, do afforestation, introduce energy saving	Ilika Kanyoonyoo	Construction of cattle dips, awareness creation about	Ilika Kanyoonyoo	Training the community on	Ilika Kanyoonyoo Mwitasyano Kawongo

<p>jikos,extend masinga phase 2 pipeline to kanyoonyoo location, tap water from Mwitasyano river to serve Kanyoonyoo, tap water from Tiva river to serve Kawongo and Nthongoni locations. Construct new earth dams at the following river streams - Katothya, KinuunuKasasuni, Kyango, Ngaindethya, mumbunimasimbani. Drill boreholes: equipping and extensions at the 52 sites, construct sub surface dams, dig and equip up shallow wells on 90 sites, rehabilitation of existing boreholes – KatothyaNzokani, Ndovoini, Nthongoni</p>	<p>Mwitasyano Kawongo Nthongoni Katothya</p>	<p>the diseases, training paravets, vaccination, build earth dams and slaughter houses, initiation of afforestation and establishment of tree nurseries and tree growing programs</p>	<p>Mwitasyano Kawongo Nthongoni Katothya</p>	<p>preventive health and in particular about water sanitation and hygiene Build more health facilities</p>	<p>Nthongoni Katothya</p>
--	--	---	--	--	-------------------------------

borehole, proposed 24new dam sites					
Easy access to spraying equipment and pesticides, use of pests and diseases resistant seeds, training on farming and storage methods	Ilika Kanyoony oo Mwitasyan o Kawongo Nthongoni Katothya				
Construction of cattle dips, awareness creation about the diseases, training paravets, vaccination, build earth dams and slaughter houses, initiation of afforestation and establishment of tree nurseries and tree growing programs	Ilika Kanyoony oo Mwitasyan o Kawongo Nthongoni Katothya				
Ward: Kyome/Thaana					

Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of Earth dams	Kwa mbuta Katukoni Kwa muli-Mbooni Ndaluni Ngomeni Nguuni Kanyonyo oni Kwa tirya Kwa kitema Kwa muli vava Kwa sau kata Mavui ED Kwa silu	Tree growing and establish tree nurseries in every village	Kanyaa Thitani Winzyei Musuani Thokoa kyome	Construct a new health facility	Mavalani

Construction of sand dams	Kwa mwanga Kamumbu ni Masaani-kwa vele Kwa mbutu Kwa mwandi Tyaa makunu Mavuu	Create awareness, sensitization, trainings and advocacy points	Kanyaa Thitani Winzyei Musuani Thokoa kyome	Equip health facilities	<ul style="list-style-type: none"> • Wikivuvwa • Kitulani • Thonzwe
Installation of water harvesting tanks	Kasavi ni primary Kamut ekeo primary Kilela primary				

	Kinyaa primar y Kyome primar y Kanyek ini dispens ary				
Rock catchment water harvesting	<i>Kathon</i> <i>zooni</i> rock <i>Kisee</i> rock <i>Kalwal</i> <i>a</i> rock <i>Tumila</i> rock <i>Kwa</i> <i>syangal</i> yo rock				

Training farmers on sustainable livestock keeping, CSA	Kanyaa Thitani Winzyei Musuani Thokoa kyome				
Ward: Matinyani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams	Kathuma village Kwasonge Syozangu Kauma village Kwa mulwa	Tree growing, establishment of tree nurseries in all villages, sensitization and awareness on environmental protection	Kyondoni Katheuni Kathuma Kaumu Kalimani Maseki	Construction of a new health facility	Katheuni village

	Kavumbu ndiangu kiwuni				
Desilting of earth dams	Katheuni/k alia village Kwa nzuki E.D Kanzevyu E.D (b)Kyondo ni village Munandani E.D (c)kalimani village Kwa ngiti E.D Kasavyu E.D (d)Kauma village Kwandune E.D Musosya E.D				

Construction of sand dams	Katheuni /kalia -Vyanyu river Kwa kalanga mutia SD Kwa mutonya kitonga SD Ndolo kivengele SD -Ngethwa river Kwa muli ngombe SD Kwa daudi kalingwa SD Maseki village Ndiangu river			Equip health facilities	Matinyani health center Kalimani dispensary Kauma health center Kaseki dispensary Kathuma dispensary
---------------------------	--	--	--	-------------------------	--

	<p>Kwa mbaluka SD</p> <p>Kwa Katanga SD</p> <p>Kwa Robert SD -yumbuni river</p> <p>Kwa kalungo SD</p> <p>Kwa mbithi SD</p> <p>Kauma village Mutindi river</p> <p>Kwa muveseki SD</p> <p>-Kwa mukui river</p> <p>Kwa kavale SD</p>				
--	---	--	--	--	--

	-Mataaani kwa muthengi kitheu river Kwa muange SD -kaetha river Kwa muthwii SD -kithamba ngii river Kwa munyoki SD Kathuma village - kIkanga/K yatune river Kwa nzou SD Kwa kanau SD				
--	---	--	--	--	--

	<p>Kwa masila SD -mukula river Kwa mwalimu SD Kwa kasele SD Kwa kethi SD -Syo nzangu river Kwa maluki SD Kwa bonny SD Kwa kyembeni SD -Mutendea river Kwa mutia SD Kwa ngemu SD</p>				
--	---	--	--	--	--

	<p>-Ndiangu river Kwa matheka ngui SD Kwa mukaiwa SD Kyondoni village -Syokakua stream Kwa mutual sumaine SD - kIkanga/K yatune river Kwa kivivuking oli SD -mutendea river Kwa mbaa nzuma SD</p>				
--	---	--	--	--	--

	-kavunilwa stream Kwa mutendwa musyoki SD -kungulu stream Kwa kasusya SD Kalimani village -syokiti river Kwa kitheka katiluSD Kwa mulanga SD Kwa kiluu SD Kwa nzomo mutual SD				
--	---	--	--	--	--

	<p>Kwa malati wa nzau SD -Kavuvu river Kwa kamanza SD Kwa mulandi SD Kwa katumi SD -kwa ngeli river Kwa lovi SD Kwa nguuni SD -kaayo river Kwa nduli SD Kyasoo SD Kathunguli SD</p>				
--	---	--	--	--	--

	-mutendea river Kwa ngombalu.				
Extension of water pipelines	Katheuni /kalia -Vyanyu river Kwa kalanga mutia SD Kwa mutonya kitonga SD Ndolo kivengele SD -Ngethwa river Kwa muli ngombe SD				

	<p>Kwa daudi kalingwa SD Maseki village Ndiangu river Kwa mbaluka SD Kwa Katanga SD</p> <p>Kwa Robert SD -yumbuni river Kwa kalungo SD Kwa mbithi SD Kauma village Mutindi river</p>				
--	--	--	--	--	--

	<p>Kwa muveseki SD -Kwa mukui river Kwa kavale SD -Mataaani kwa muthengi kitheu river Kwa muange SD -kaetha river Kwa muthwii SD -kithamba ngii river Kwa munyoki SD Kathuma village - kIkanga/K</p>				
--	--	--	--	--	--

	yatune river Kwa nzou SD Kwa kanau SD Kwa masila SD -mukula river Kwa mwalimu SD Kwa kasele SD Kwa kethi SD -Syo nzangu river Kwa maluki SD Kwa bonny SD Kwa kyembeni SD				
--	--	--	--	--	--

	<p>-Mutendea river Kwa mutia SD Kwa ngemu SD -Ndiangu river Kwa matheka ngui SD Kwa mukaiwa SD Kyondoni village -Syokakua stream Kwa mutual sumaine SD - kIkanga/K yatune river</p>				
--	---	--	--	--	--

	<p>Kwa kivivuking oli SD -mutendea river Kwa mbaa nzuma SD -kavunilwa stream Kwa mutendwa musyoki SD -kungulu stream Kwa kasusya SD Kalimani village -syokiti river Kwa kitheka katiluSD Kwa mulanga SD</p>				
--	---	--	--	--	--

	<p>Kwa kiluu SD</p> <p>Kwa nzomo mutual SD</p> <p>Kwa malati wa nzau SD</p> <p>-Kavuvu river</p> <p>Kwa kamanza SD</p> <p>Kwa mulandi SD</p> <p>Kwa katumi SD</p> <p>-kwa ngeli river</p> <p>Kwa lovi SD</p> <p>Kwa nguuni SD</p> <p>-kaayo river</p>				
--	---	--	--	--	--

	Kwa nduli SD Kyasoo SD Kathunguli SD -mutendea river Kwa ngombalu.				
Rain water harvesting in public institutions	-maini primary -kivanga primary -kyeni primary school -kwa musyimi primary -matinyani AIC primary school				

	-mbavae primary school -katheoni primary school -kunikila primary school -kwa ndonga primary school -kakumi primary school -kitumbi primary school -maseki primary school.				
Train farmers on CSA, provide farmers with climate information services	Kyondoni Katheuni Kathuma Kaumu Kalimani				

	Maseki				
Ward: Migwani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams in all villages	Migwani Kyamboo Nzeluni Nzatani Kisovo Katalwa	Tree growing activities, establish tree nurseries across all the villages, sensitize and create awareness on environmental conservation across all the villages	Migwani Kyamboo Nzeluni Nzatani Kisovo Katalwa	Construct new and operation alize existing health facilities across all the villages	Migwani Kyamboo Nzeluni Nzatani Kisovo Katalwa
Construction of sand dams	Migwani Kyamboo Nzeluni	Construction of soil conservation	Migwani Kyamboo Nzeluni		

	Nzatani Kisovo Katalwa	structures in degraded areas	Nzatani Kisovo Katalwa		
Rock catchment water harvesting	Migwani (itoloni)				
Training at least 6,000 farmers on CSA across all villages	Migwani Kyamboo Nzeluni Nzatani Kisovo Katalwa				
Ward: Mumoni					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (crop pests and diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Interven tion required	Where
Construction of earth dams	Katse mbalani Kasioni nguuku Kakuyu ngakoone	Rehabilitation of environmentall y sensitive sites	Muvanwa mukonga Muvarwa kathiani	Provision of improved farm inputs	Kakuyu Mukonga Mutanda Ngungani Nguuku Tyaa

	Itinda muti Kakunguru Ikango kwa semard		Kanyululu muumo hills	Increasing the number of extension officers from 4 to 7 Sensitization on crop management Subsided storage bags e.g hermetic bags Setting up modern silos Sensitization on cereal storage	Katse
--	--	--	-----------------------------	--	-------

				Capacity building farmers on improved farming methods Delocalization of capacity building initiative	
Rehabilitation of earth dams	Kamakuyu earth dam Kaliwa earth dam Kwa ngomo earth dam Miminali earth dam Kambusu earth dam Katingulu earth dam Musasya earth dam	Reforestation using indigenous species Construction of soil conservation across all villages	Kakuyu Mukonga Mutanda Ngungani Nguuku Tyaa Katse		

	Matingani earth dam Nduloni earth dam				
Construction of sand dams	Wanzelu Kimii kwa nzoka Kakiko kwa syengo Ithamboni musonga Kakuadedu Iviani kwa ngai Kwa katingu Kwa musyoka Kwa kasau Mukindu				
Rain water harvesting	Kavisani primary school Musenya primary school				

		Mbarani primary school Ithozwi primary school Itinda primary school Kikuthini primary school Mukokene dispensary Kaliani primary school				
Water distribution	pipeline	Katse – mbalani water pipe Kathioni – mutioni – mwosya Pipeline Mutioni – syomuti – kamathitu				

	Kaliwa – yangalisu – kambusu Ngaani – kangomo – ikongo Ithingili – ngaaka – kasyalani Katukatu mi – ngingi – musukami oni				
Ward: Mutha					
Priority 1 (Drought)		Priority 2 (human-wildlife conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water harvesting through construction of earth dams, improve quality and drought	Katune Mwengea Kalambani Kiimani	Improve response to human-wildlife	Ndasani, Kalia Katune, Ngaani, Katene	Construction of new health	Katune Mwengea Kalambani Kiimani

tolerant crops, improve the quality of local livestock breeds across all the villages	Ndakani Ngaani isaa	conflict by the KWS	kalambari, Ikaa	facilities, operation alize existing health facilities and equip the health facilities	Ndakani Ngaani isaa
Ward: Mutito					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water harvesting (earth dams, sand dams and water pans)	Masasini Kitoo Musukini Kyaimu Kalawa - Mutito hills	Protection of water springs	Mutito hills	Operationalization of health facilities across all villages, construction of new	Masasini Kitoo Musukini Kyaimu Kalawa

				health facilities across all the villages, equipping health facilities across all the villages	
Ward: Ngomeni					
Priority 1 (Drought)		Priority 2 (human-human conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams, sand dams, water pipeline distribution across the ward	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani	Sensitization and awareness, equal distribution of resources, surveying the disputed	Kimela, Syumani, Mitamisyi, Kathalaani, Kavaani, Ikame	Construct new health facilities across the villages, equip	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani

		resources, increasing the number of water sources		health facilities across the villages, operation alize the stalled health facilities	
Promote pasture growing across the ward	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani				
Sensitization and awareness creation on environmental conservation and protection Capacity building local farmers on sustainable livestock keeping	Kavaani Mitamisyi Kalwa Kimela Ndatani Syumani Kathalaani				
Ward: Nguni					

Priority 1 (Drought)		Priority 2 (Livestock Diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water tanks for rain water harvesting	Nguni primary school Mwasuma primary school Kamumbu primary school Kavisu primary school Kwanzili primary school Katune primary school Muimi primary school	Construction of modern crushes	Ivuusya site Kithumula site Kavisu site Kiangu site Kiamumo site Sosoma site Levuni site Ukasi site	Construction of new health facilities	Muuni dispensary Ndiamumo Dispensary Kiangu dispensary Masavi dispensary Mosovo dispensary

	Kitungali primary school Kwa nganga primary school				
Rock catchment water harvesting	Maai hills and Imba hills	Employ more veterinary officers	Mwasuma village Mathiakani village Maai village Mbuvi village	Equip health facilities	Sosoma dispensary Musovo dispensary Ndiamumo dispensary
Desilting earth dams	Nzengeni earthdam Kaluku earth dam Kwanzili earthdam Kio earth dam Ukasi earthdam	Farmers to be trained on the type of pastures to grow, how to harvest and store pasture	Mwasuma village Mathiakani village Maai village Mbuvi village	Sensitization, promoting community health promoters	Across all villages

Construction of new earth dams	Kawala earthdam Kamunyu earthdam Kwa mwundu earthdam Kwandamu earthdam Kwa mulinde ED Kwa mutembuka ED				
Construction of sand dams	Kwa isuo river Kwa mutuku SD Enziu river Kanzu SD Kivou river MwelamaSD Thunguthu				

	<p>Kwa nziu SD Katuti river Katuti Sand dam Iseeni river Kwa kasaika SD</p> <p>Masavi to Maai Kilawa to Mwasuma primary to Chamatani primary To Kwa nguti primary to syonoo primary Tiva hills to Machui to Miuni</p>				

Ward: Tharaka					
Priority 1 (Drought)		Priority 2 (crop pests and diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Water harvesting through; <ul style="list-style-type: none"> - construction of earth dams - construction of sand dams - installation of water tanks in public institutions across the ward 	Gacingong o Kanyengya Kamaindi Kanthungu Gakombe	Construction of 5 cattle dips	Gacingong o Kanyengya Kamaindi Kanthungu Gakombe	Construct at least 6 health facilities	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe
Tree growing <ul style="list-style-type: none"> - establishment of 1 tree nurseries per village 	Gacingong o Kanyengya Kamaindi Kanthungu Gakombe	Promote local breeds	Gacingong o Kanyengya Kamaindi Kanthungu Gakombe	Equip the existing health facilities	Gacingongo Kanyengya Kamaindi Kanthungu Gakombe
Promoting pasture production across the ward	Gacingong o Kanyengya Kamaindi	Training and capacity building of at	Gacingong o Kanyengya Kamaindi	Sensitization and awareness across	Gacingongo Kanyengya Kamaindi Kanthungu

	Kanthungu Gakombe	least 6,000 farmers	Kanthungu Gakombe	the ward on health and nutrition Promote communi ty health promoter s across the ward	Gakombe
Sensitization and awareness creation on environmental protection	Gacingong o Kanyengya Kamaindi Kanthungu Gakombe	Employ at least 6 more livestock officer	Gacingong o Kanyengya Kamaindi Kanthungu Gakombe		
Construction of water abstraction strategies from the tana river	Along tana river				
Ward: Waita					
Priority 1 (Drought)		Priority 2 (Crop Pests and Diseases)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Interven	Where

				tion required	
Rehabilitation of shallow wells	Kiriri shallow well Jordan Shallow well Kwan ganga kavengei SW Mavivani kwa mbiti SW Kwa musili kamothe SW NauNguni primary SW	Promote drought tolerant crops	Waita Mwambui Thonoa Kathoka Nyanyaa Enziu	Construct ion of health centers	Katuluni dispensary Maongoa Dispensary Malioni dispensary KauNguni dispensary Ikuusya Dispensary Kulungwa dispensary Kisole dispensary Kya ndua dispensary

Rock catchment water harvesting	Thonoa rock catchment Kavila Ruguti Dungura Mukuni Kilyambo Kwa syengo munithya	Train capacity farmers on CSA	Waita Mwambui Thonoa Kathoka Nyanyaa Enziu	Equip health centers	Waita dispensary Mutwangombe dispensary Enziu dispensary Nyaanyaa dispensary Muono dispensary Mwambui dispensary
Construction of earth dams	Kaliluni E.D Kyandoas earth dam MunyuNguni earthdam Katanga earth dam Kasura earthdam				

	Ndologwe E.D Kathamban dia E.D Kwa mwanzia E.D Kisole E.D Kwa kimwele E.D Kiia E.D				
Construction of earth dams	Nginyei earthdam Kwa kisilu earthdam Kwa maithya earthdam Maongoa earthdam Kaulyamb u E.D Ilinyi ED Waita ED				

	Mutembuk a ED Kwa kasee ED Kwa mutia ED Nzalani ED Kwa Michael ED Masokani ED Kwa titus mboo ED				
Construction of sand dams	Karuri river Karuri SD Kivila river Kwa kilile SD Mbiri river Kwa iliu, Kwa mwendwa, Kwa muchasD				

	<p>Kasura river Kwa mwende, kwa vaivui, kwa mutisya SD Mwoono river Kwa muthui wa muthengi, Kaumbe , kwa muema Sand dam Kanyekini river Kwa Mwaniki, Kwa koko SD Mutembuk a river Kwa kilonzo mumemde SD</p>				
--	--	--	--	--	--

	Musiiulu river Kwa kitulya , kwa paul SD Kamunyu river Kamunyu ilovi, Kwa mwanda SD SD Kivila river Kwa mwangang iSD Katakani river Kwa musili SD Kitwa mikeu river Kwa mwendwa kimwele , kwa				
--	--	--	--	--	--

	murokaleve SD Nginyai river kwa titus SD Lenye river Kwa kombe , Kwa ivia SD				
Ward: Zombe					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Rain water harvesting tanks	Primary schools;	Construction of soil conservation structures	Kikuu Ilaa/Katiko ni Malatani	Construction of new	- Kavingo - Katikoni - Kadongo

	6. Makongo 7. Kaluli 8. Katikoni 9. Kivisuni 10. Mavia Mayo	targeting farming lands in all villages	Makongo Thua kasuNguni	health facilities	- Kongwea - Nzilani - Imbuvi - Kaavani
Construction of earth dams	- Ngelani dam - Kilimboni - Yimbuni - Yawii - Nzilani - Kasululu	Training on commercial tree growing Establishing tree nurseries in all villages Sensitization and awareness creation on environmental conservation Promoting alternative livelihoods to commercial	Kikuu Ilaa/Katiko ni Malatani Makongo Thua kasuNguni	Equipping and operationalize health facilities	Zombe Hospital Ngungi Dispensary

		charcoal production			
Construction of sand dams	<ul style="list-style-type: none"> - Ngungi River - Maangani River - Nguuni stream - Kithumula Stream - Mwinga Stream - Musavi Stream - Kathandi 				

Ward: Kyuso					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of sand dams	Thunguthu (Kwa Mwendwa Ngumbi) Kivila (kwa kilo/Kitheka) Kivila(kwa Yengo) Ikinda(kwa peter kimii) Kamwongo(kwa kalundu) Masyungwa	9 tree growing sensitization activities Establishing at least 1 tree nursery in every village Construction of household level soil conservation structures in farming lands across the ward	Itiva/Nzou Kamula Kamuwongo Kimangao Kimu Mivukoni Ngaaie Twimyua kyuso	Improve and equip health facilities across the villages Awareness on hygiene and sanitation Improve accessibility to the	Itiva/Nzou Kamula Kamuwongo Kimangao Kimu Mivukoni Ngaaie Twimyua kyuso

	Mathimam i			health centers Increase the number of ambulanc es from 1-2	
Construction of earth dams	Kwa Mwilikwa Kisinga Ngiluni(kw a Musili Muli) Mauwani(k wa Mwendwa Ngumbi) Katungulu(kwa Musembi Muasya) Kasyongo(kwa				

		Muasya Nzuku) Katwenywe Manana(k wa Kivulu) Kwa Sammy Mwangangi Ngaana kwa Ngundu				
Water extension	pipeline	Itiva nzou(Tii market) Mivukoni(kwa Vere) Mbui borehole(k wa Mue) Ndathani borehole(k wa Muthimbi market)				

	Kyuso(Mal ava) Kyuso(Mik wa) Ngaie(Mik wa) Kora(Muk eka)				
Rehabilitation of earth dams	Mbui earth dam Kamulu earth dam Maanzui earth dam Tii earth dam Kamavui earth dam Ngai earth dam				
Rain water harvesting tanks (10,000L each)	Kitangui primary school Mugero primary school				

	Kingingo primary school Mutambani primary school Kaliani primary school Kanana primary school Kamwengi primary school				
Ward: Athi					
Priority 1 (Drought)		Priority 2 (Human-Wildlife conflict)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Interven tion required	Where
Construction of mega earth dams	Tiva River,and	Improve response to	Kisiio, Lower	Create awarenes	Maluma MoNguni

	Ndilui stream meeting point At ndilui stream (Ngomano) Rehabilitation of Nguni earth dam	human-wildlife conflict reports	Kituti, Mwambani, Katilini, Kilawa	s on health and sanitation	Upper kituti Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu
Extension of pipeline water supply	Kangu pipeline to other villages	Community sensitization and awareness creation on poaching and encroachment	Kisiio, Lower Kituti, Mwambani, Katilini, Kilawa	Equipping existing health facilities, constructing new health facilities	Maluma MoNguni Upper kituti Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu
Establish a water purifying plant	Muangen, moNguni, ilengi, nduuni, kyanduuni				
Construction of sand dams	Along Tiva Kwa kituku				

	Kwa nzaki Kwa ho.Muoki Kwa Tisya Kwa Kisingo Kwa Matemani Kwa kasoka Kwa imathoka				
Rehabilitation of degraded sites through tree growing	Mbakoni Kisiio Lower kituti Upper Kitui				
Establishment of tree nurseries at least 1 in each village	Maluma MoNguni Upper kituti Lower kituti Katilini Kilawa				

	Kisiio Makaiye Kalivu				
Trainings and capacity building Climate Change planning teams	Maluma MoNguni Upper kituti Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu				
Ward: Voo Kyamatu					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Extension of water pipeline	From Muthungu	Rehabilitation of water	Kinzou Inguu	Construction of	Kyango Imale

	to Itikie to Kamwii to Nditine From NzuNguni to Ndulani, Kithekethe, Twalimu to makutano	catchment areas	Malembwa kaluasi	new health facilities Equipping of existing health facilities	Muthungue Kyamatu NzuNguni
Construction of earth dams	Kyandeeve Kemwaa Kwa muii Kwa ngila Kwa mbaa ndungi Masimbani Katulu Kwa muvithu Menguuwe Indoo Kwa mulatya Kwa musyoka Syetundo	Ecosystem restoration and soil conservation through check dams	Wangila Mbuku Mwinga Kwa muti Kwa kimande Kyanngo Ikukuma Kamakuvu Kanzilu Isalava		
Sumpwells	Kaluasi				

	Kwanzung u nditime Kwa Mwangu kamwiu Thua Tukili Ikitioni				
Desilting earth dams	Kwa Mbivya Kithanako Kwa Kalavati Kwa Kalowe Katolongw e				
Improve response on human-human conflict reported	Kyamatu, Nzanzu, Muthungue, NzuNguni				
Improve response on human-wildlife conflict reported	Kyamatu and Muthungue				
Ward: Kisasi					

Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams and sand dams	Kwa mutunga Kwa katumi Kwa kalovo Isyuko ikuthumula Mililuni Kwa kakonge nungu Kwa philomena muthoka Kwa kimote Kaloloo Nduni Mwala ivu	Designate a solid waste dumping site	Mosa	Inclusion of 10 community health promoters per vilage	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni

	Kya mioni Koma one Koma two Nzeeu ilungusu Kwa kyalo Kwa kinyoo Kilonzo Kwa maluki Kilonzo Kwa kaamba Kitamba Miumbu Katakali Koma kwa john Ngasani Kwa isoni katombya Kiwa ngei				
Rock catchment water harvesting	Ituki Kwa nduluku Mbuthani	Establish tree nurseries at least one in each village	Masimbini Maaliku Mbusyani Kavisuni	Sensitizat ion and awarenes s on	Masimbini Maaliku Mbusyani Kavisuni

	Mathendu Nguutu Muloso		Ngiluni Mosa nguuni	health and nutrition	Ngiluni Mosa nguuni
Water harvesting tanks	Masimbini Ngiluni Mbusyani Maaliku Kavisuni Nguuni Mosa				
Water pans	Each village 3 water pans and 3 farm ponds				
Distribution of piped water	Kisasi to savat Kisasi to kivini Maaliku to mission Ngiluni to tunduni kasevi Kavasya to mathumbi ndivo				

	Mbusyani to kilimbitini Kavisuni to kivuthi				
Promote drought tolerant crops and CSA	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni				
Employ more extension agriculture officers	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni				
Employ more extension livestock officers	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni				

Promote poultry farming	Masimbini Maaliku Mbusyani Kavisuni Ngiluni Mosa nguuni				
Ward: Nu					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati	Improve response to human-wildlife conflict reports	Nuu, Mwambiu, Wingemi, Kyangati, Nyaani, Mutyangombe, Nguuni	Create awareness on health and sanitation	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati
Extension of pipeline water supply	Kangu pipeline to	Community sensitization	Nuu, Mwambiu,	Equipping existing	Nuu Mutyangombe

	other villages	and awareness creation on poaching and encroachment	Wingemi, Kyangati, Nyaani, Mutyangome, Nguuni	health facilities, constructing new health facilities	Mwambiu Nyaani Wingemi Nguuni kyangati
Establish a water purifying plant	Nuu				
Construction of sand dams	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati				
Rehabilitation of degraded sites through tree growing	Nuu Mutyangombe Mwambiu Nyaani Wingemi Nguuni kyangati				
Establishment of tree nurseries at least 1 in each village	Nuu Mutyangombe				

	Mwambiu Nyaani Wingemi Nguuni kyangati Makaiye Kalivu				
Trainings and capacity building Climate Change planning teams	Maluma MoNguni Upper kituti Lower kituti Katilini Kilawa Kisiio Makaiye Kalivu				
Ward: Mui					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention	Where

				tion required	
Construction of mega earth dams	Itiko Kitise Ngungi Ngoo Ngiluni	Rehabilitation of degraded lands	Itiko Kitise Ngungi Ngoo Ngiluni	Create awareness on health and sanitation	Itiko Kitise Ngungi Ngoo Ngiluni
Extension of pipeline water supply	Itiko Kitise Ngungi Ngoo Ngiluni	Community sensitization and awareness creation on encroachment	Itiko Kitise Ngungi Ngoo Ngiluni	Equipping existing health facilities, constructing new health facilities	Itiko Kitise Ngungi Ngoo Ngiluni
Establish a water purifying plant	Itiko Kitise Ngungi Ngoo Ngiluni				
Construction of sand dams	Itiko Kitise Ngungi Ngoo Ngiluni				

Rehabilitation of degraded sites through tree growing	Itiko Kitise Ngungi Ngoo Ngiluni				
Establishment of tree nurseries at least 1 in each village	Itiko Kitise Ngungi Ngoo Ngiluni				
Trainings and capacity building Climate Change planning teams	Itiko Kitise Ngungi Ngoo Ngiluni				
Construction of mega earth dams	Itiko Kitise Ngungi Ngoo Ngiluni	Improve response to human-wildlife conflict reports	Itiko Kitise Ngungi Ngoo Ngiluni	Create awareness on health and sanitation	Itiko Kitise Ngungi Ngoo Ngiluni
Extension of pipeline water supply	Itiko Kitise Ngungi Ngoo Ngiluni	Community sensitization and awareness creation on poaching and encroachment	Itiko Kitise Ngungi Ngoo Ngiluni	Equipping existing health facilities, constructing new	Itiko Kitise Ngungi Ngoo Ngiluni

				health facilities	
Ward: Nguutani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni	Rehabilitation of degraded lands	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni	Create awareness on health and sanitation	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni
Extension of pipeline water supply	Kangu pipeline to other villages	Community sensitization and awareness	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni	Equipping existing health facilities, constructing new health facilities	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni

Establish a water purifying plant	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni				
Construction of sand dams	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni				
Rehabilitation of degraded sites through tree growing	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni				
Establishment of tree nurseries at least 1 in each village	Nzawa Muthioni Nzauni Muivu Nzala Nguutani				

	Ngongoni				
Trainings and capacity building Climate Change planning teams	Nzawa Muthioni Nzauni Muivu Nzala Nguutani Ngongoni				
Ward: MutoNguni					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi	Rehabilitation of degraded areas	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi	Create awareness on health and sanitation	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi
Extension of pipeline water supply	Mithini	Community sensitization	Mithini MutoNguni	Equipping existing	Mithini MutoNguni

	MutoNgun i Musengo Yalatani Kakeani Kangaondi	and awareness creation on poaching and encroachment	Musengo Yalatani Kakeani Kangaondi	health facilities, constructi ng new health facilities	Musengo Yalatani Kakeani Kangaondi
Establish a water purifying plant	Mithini MutoNgun i Musengo Yalatani Kakeani Kangaondi				
Construction of sand dams	Mithini MutoNgun i Musengo Yalatani Kakeani Kangaondi				
Rehabilitation of degraded sites through tree growing	Mithini MutoNgun i Musengo Yalatani Kakeani Kangaondi				

Establishment of tree nurseries at least 1 in each village	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi				
Trainings and capacity building Climate Change planning teams	Mithini MutoNguni Musengo Yalatani Kakeani Kangaondi				
Ward: Kyangwithya West					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kavuta Ndumoni Utooni	Rehabilitate degraded areas	Kavuta Ndumoni Utooni	Create awareness on	Kavuta Ndumoni Utooni

	Itoleka Mulutu Tunguta		Itoleka Mulutu Tunguta	health and sanitation	Itoleka Mulutu Tunguta
Extension of pipeline water supply	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta	Community sensitization and awareness	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta	Equippin g existing health facilities, constructi ng new health facilities	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta
Establish a water purifying plant	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Construction of sand dams	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				

Rehabilitation of degraded sites through tree growing	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Establishment of tree nurseries at least 1 in each village	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Trainings and capacity building Climate Change planning teams	Kavuta Ndumoni Utooni Itoleka Mulutu Tunguta				
Ward: Kyangwithya East					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	

Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini	Rehabilitation of degraded areas	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini	Create awareness on health and sanitation	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini
Extension of pipeline water supply	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini	Community sensitization and awareness creation	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini	Equipping existing health facilities, constructing new health facilities	Kalawa/kabaa Museve Mutune Mulundi Misewani Ivaini
Establish a water purifying plant	Kalawa/ka baa Museve Mutune Mulundi Misewani				

	Ivaini				
Construction of sand dams	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini				
Rehabilitation of degraded sites through tree growing	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini				
Establishment of tree nurseries at least 1 in each village	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini				

Trainings and capacity building Climate Change planning teams	Kalawa/ka baa Museve Mutune Mulundi Misewani Ivaini				
Ward: Kithumula Kwa Mutonga					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Rehabilitation of degraded areas	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Create awareness on health and sanitation	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani

Extension of pipeline water supply	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Community sensitization and awareness creation on poaching and encroachment	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Equipping existing health facilities, constructing new health facilities	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani
Establish a water purifying plant	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Construction of sand dams	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Rehabilitation of degraded sites through tree growing	Kwa mulungu Mutonga				

	Kithumula Kasaini Mithikwani				
Establishment of tree nurseries at least 1 in each village	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Trainings and capacity building Climate Change planning teams	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani				
Construction of mega earth dams	Kwa mulungu Mutonga Kithumula Kasaini	Improve response to human-wildlife conflict reports	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani	Create awareness on health and sanitation	Kwa mulungu Mutonga Kithumula Kasaini Mithikwani

	Mithikwan i				
Ward: Mutomo					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Mwala Kandae Kibwea Kawelu Uae Kitoo	Rehabilitation of degraded lands	Mwala Kandae Kibwea Kawelu Uae Kitoo	Create awareness on health and sanitation	Mwala Kandae Kibwea Kawelu Uae Kitoo
Extension of pipeline water supply	Mwala Kandae Kibwea Kawelu Uae Kitoo	Community sensitization and awareness creation on poaching and encroachment	Mwala Kandae Kibwea Kawelu Uae Kitoo	Equipping existing health facilities, constructing new health facilities	Mwala Kandae Kibwea Kawelu Uae Kitoo

Establish a water purifying plant	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Construction of sand dams	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Rehabilitation of degraded sites through tree growing	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Establishment of tree nurseries at least 1 in each village	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Trainings and capacity building Climate Change planning teams	Mwala Kandae Kibwea				

	Kawelu Uae Kitoo				
Construction of mega earth dams	Mwala Kandae Kibwea Kawelu Uae Kitoo	Improve response to human-wildlife conflict reports	Mwala Kandae Kibwea Kawelu Uae Kitoo	Create awareness on health and sanitation	Mwala Kandae Kibwea Kawelu Uae Kitoo
Extension of pipeline water supply	Mwala Kandae Kibwea Kawelu Uae Kitoo	Community sensitization and awareness creation on poaching and encroachment	Mwala Kandae Kibwea Kawelu Uae Kitoo	Equipping existing health facilities, constructing new health facilities	Mwala Kandae Kibwea Kawelu Uae Kitoo
Ward: Mbitini					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where

Construction of mega earth dams	Mwala Kandae Kibwea Kawelu Uae Kitoo	Rehabilitate degraded areas	Mwala Kandae Kibwea Kawelu Uae Kitoo	Create awareness on health and sanitation	Mwala Kandae Kibwea Kawelu Uae Kitoo
Extension of pipeline water supply	Mwala Kandae Kibwea Kawelu Uae Kitoo	Community sensitization and awareness creation on poaching and encroachment	Mwala Kandae Kibwea Kawelu Uae Kitoo	Equipping existing health facilities, constructing new health facilities	Mwala Kandae Kibwea Kawelu Uae Kitoo
Establish a water purifying plant	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Construction of sand dams	Mwala Kandae Kibwea Kawelu Uae Kitoo				

Rehabilitation of degraded sites through tree growing	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Establishment of tree nurseries at least 1 in each village	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Trainings and capacity building Climate Change planning teams	Mwala Kandae Kibwea Kawelu Uae Kitoo				
Ward: Nzambani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention	Where

				tion required	
Construction of mega earth dams	Kavalula Kilonzo Ikuyuni Kyanika Kangweni	Rehabilitation of degraded areas	Kavalula Kilonzo Ikuyuni Kyanika Kangweni	Create awareness on health and sanitation	Kavalula Kilonzo Ikuyuni Kyanika Kangweni
Extension of pipeline water supply	Kavalula Kilonzo Ikuyuni Kyanika Kangweni	Community sensitization and awareness creation on poaching and encroachment	Kavalula Kilonzo Ikuyuni Kyanika Kangweni	Equipping existing health facilities, constructing new health facilities	Kavalula Kilonzo Ikuyuni Kyanika Kangweni
Establish a water purifying plant	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Construction of sand dams	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				

Rehabilitation of degraded sites through tree growing	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Establishment of tree nurseries at least 1 in each village	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Trainings and capacity building Climate Change planning teams	Kavalula Kilonzo Ikuyuni Kyanika Kangweni				
Ward: Mulango					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention	Where

				tion required	
Construction of mega earth dams	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani	Rehabilitation of degraded areas	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani	Create awareness on health and sanitation	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani
Extension of pipeline water supply	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani	Community sensitization and awareness creation	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani	Equipping existing health facilities, constructing new health facilities	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani
Establish a water purifying plant	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani				
Construction of sand dams	Wii Kwamuli Wikililye				

	Kyangunga Kathungi Kyambiti Katulani				
Rehabilitation of degraded sites through tree growing	Wii Kwamuli Wikililye Kyangunga Kathungi Kyambiti Katulani				
Ward: Tseikuru					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kaivirya Kaningo Katumbi Masyungwa Musavani	Improve response to human-wildlife conflict reports	Musavani, Kaningo, Katumbi, Mulangoni, Masyungwa	Create awareness on health and sanitation	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange

	Ngalange Tseiukuru mulangoni				Tseiukuru mulangoni
Extension of pipeline water supply	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni	Community sensitization and awareness creation on poaching and encroachment	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni	Equipping existing health facilities, constructing new health facilities	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni
Establish a water purifying plant	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni				
Construction of sand dams	Kaivirya Kaningo Katumbi Masyungwa Musavani				

	Ngalange Tseiukuru mulangoni				
Rehabilitation of degraded sites through tree growing	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni				
Establishment of tree nurseries at least 1 in each village	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni				
Trainings and capacity building Climate Change planning teams	Kaivirya Kaningo Katumbi Masyungwa Musavani				

	Ngalange Tseiukuru mulangoni				
Construction of mega earth dams	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni	Improve response to human-wildlife conflict reports	Kisiio, Lower Kituti, Mwambani, Katilini, Kilawa	Create awareness on health and sanitation	Kaivirya Kaningo Katumbi Masyungwa Musavani Ngalange Tseiukuru mulangoni
Ward: Kivou					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Kivou Kisana Ithumbi Kyanika kanzui	Rehabilitation of degraded areas	Kivou Kisana Ithumbi Kyanika kanzui	Create awareness on health	Kivou Kisana Ithumbi Kyanika kanzui

				and sanitation	
Extension of pipeline water supply	Kivou Kisana Ithumbi Kyanika kanzui	Community sensitization and awareness creation	Kivou Kisana Ithumbi Kyanika kanzui	Equipping existing health facilities, constructing new health facilities	Kivou Kisana Ithumbi Kyanika kanzui
Establish a water purifying plant	Kivou Kisana Ithumbi Kyanika kanzui				
Construction of sand dams	Kivou Kisana Ithumbi Kyanika kanzui				
Rehabilitation of degraded sites through tree growing	Kivou Kisana Ithumbi Kyanika kanzui				

Establishment of tree nurseries at least 1 in each village	Kivou Kisana Ithumbi Kyanika kanzui				
Trainings and capacity building Climate Change planning teams	Kivou Kisana Ithumbi Kyanika kanzui				
Ward: Miambani					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio	Rehabilitation of degraded areas	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio	Create awareness on health and sanitation	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio

Extension of pipeline water supply	Nzaaya Kanzau Kavalo Mutual Mung'ang' a Kamandio	Community sensitization and awareness creation	Nzaaya Kanzau Kavalo Mutual Mung'ang' a Kamandio	Equipping existing health facilities, constructing new health facilities	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio
Establish a water purifying plant	Nzaaya Kanzau Kavalo Mutual Mung'ang' a Kamandio				
Construction of sand dams	Nzaaya Kanzau Kavalo Mutual Mung'ang' a Kamandio				
Rehabilitation of degraded sites through tree growing	Nzaaya Kanzau Kavalo Mutual				

	Mung'ang'a Kamandio				
Establishment of tree nurseries at least 1 in each village	Nzaaya Kanzau Kavalo Mutual Mung'ang'a Kamandio				
Ward: Endau					
Priority 1 (Drought)		Priority 2 (Human-Human/human-wildlife conflicts)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of mega earth dams	Twambu, Makuka, Katumbi, Ndetani, Kathua, Yiuku, Malalani	Improve response to human-human conflict reports Improve response to	Twambu, Makuka, Katumbi, Ndetani	Create awareness on health and sanitation	Twambu, Makuka, Katumbi, Ndetani, Kathua, Yiuku, Malalani

		human-wildlife conflict reports	Kathua, Yiuku, Malalani		
Extension of pipeline water supply	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani	Community sensitization and awareness creation on poaching and encroachment	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani	Equipping existing health facilities, constructing new health facilities	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani
Establish a water purifying plant	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani				
Construction of sand dams	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani				

Rehabilitation of degraded sites through tree growing	Twambu, Makuka, Katumbi, Ndetani Kathua, Yiuku, Malalani				
Ward: Mwingi Central					
Priority 1 (Drought)		Priority 2 (Environmental Degradation)		Priority 3 (Human Diseases)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Construction of earth dams, sand dams, and rock catchment	Mathyakani Mulanga Kanzanzu Kalisasi	Establish solid waste reuse and recycle systems	Central	Construct new health facilities across the ward	Mathyakani Mulanga Kanzanzu Kalisasi
Promote CSA	Mathyakani Mulanga Kanzanzu	Develop waste disposal regulatory framework	Mwingi Municipality	Increase the number of	Mathyakani Mulanga Kanzanzu Kalisasi

	Kalisasi Central			community health promoters	Central
Trainings and capacity building farmers – 5,000 farmers across the ward	Mathyakan i Mulanga Kanzanzu Kalisasi Central	Awareness and sensitization on environmental protection across the ward	Mathyakan i Mulanga Kanzanzu Kalisasi Central	Equip mwingi level 4 hospital	Central
		Develop a sewerage system	Mwingi Municipality (Central village)	Sensitization on health and nutrition across the ward	Mathyakani Mulanga Kanzanzu Kalisasi Central
Increase the number of agriculture extension officers by 1 per village	Mathyakan i Mulanga Kanzanzu Kalisasi Central				
Promote sustainable livestock keeping	Mathyakan i Mulanga Kanzanzu				

	Kalisasi Central				
Ward: Kitui Township					
Priority 1 (Poor Waste Disposal)		Priority 2 (Water Pollution)		Priority 3 (Air Pollution)	
Action or Intervention required	Where	Action or Intervention required	Where	Action or Intervention required	Where
Designate a new and appropriate solid waste dumping site	Outside the busy kalundu market	Construction of proper drainage and sewerage system	Kaveta Town Majengo Ngiini Kalundu	Develop air pollution control regulatory framework	Kitui municipality
Sorting solid waste at the source points (residential and commercial areas)	Kaveta Town Majengo Ngiini Kalundu	Install a water treatment plant	Kaveta Town Majengo Ngiini Kalundu	Train and sensitize institutions on air pollution control	Kitui municipality
Conduct public and awareness	Kaveta Town	Construction of a new and	Kaveta Town		

sensitization of proper waste disposal	Majengo Ngiini Kalundu	suitable solid waste dumping site	Majengo Ngiini Kalundu		
Formulation of waste management policies and regulatory framework	Kitui municipality	Construct soil conservation structures	Kaveta Town Majengo Ngiini Kalundu		
Develop regulatory framework for Kitui County Waste Management	Kitui Municipality	Formulate water pollution control regulatory framework	Kitui municipality		
Establish a solid waste recycling plant	Town Majengo Kalundu				
Mobilize organized youth groups to develop solid waste recycling proposals	Town Majengo Kalundu				

6. CONCLUSION AND RECOMMENDATIONS

The County Government of Kitui fully supports Kenya's dedicated adaptation ambition by committing to bridging the implementation gaps by: enhancing the adaptive capacity and climate resilience across all the sectors of the economy while exploring innovative and sustainable livelihood strategies for enhancing climate resilience of local communities through supporting locally led Climate Change actions. Considering that the country's GDP relies on climate sensitive sectors such as agriculture, tourism, industry and manufacturing. County Government of Kitui has put in place various policies and legal framework, Various institutions and systems have also been instituted and established. Moving forward more resources shall be devoted in supporting and strengthening these structures and systems. County Government of Kitui shall continue sharing information and learning from other counties on the best practices for effective knowledge management and upscaling of the initiated interventions. County Government of Kitui shall continue allocating resource annually to support community adaptation actions in the County.

Adaptation is thus the highest priority for the County, not only through preventing further losses and damage, but underpinning infrastructure and economic

development, while safeguarding lives, livelihoods, and social development in line with Kitui County Integrated Development Plan (CIDP) and Kenya Vision 2030.

Enhanced risk-based approach to Climate Change adaptation at the County level through development and application of comprehensive climate risk management tools as outlined above would help in addressing and adaptively managing climate risks; addressing residual Climate Change impacts, loss and damage especially in the productive sectors of the economy; enhance generation, packaging and widespread uptake and use of climate information in decision making and planning across sectors and counties with robust early warning systems (EM/S); Enhance uptake of adaptation technology especially of women, youth and other vulnerable groups, incorporating scientific and indigenous knowledge; Institutional strengthening of the County Climate Change oversight, planning and implementation structures and community organizations; and Strengthening tools for adaptation monitoring, evaluation and learning (MEL) at the County level.

To achieve the above, the County Government of Kitui intends to develop the Kitui County Climate Change action plan. This will be the guiding tool to implement various priority actions, to attain the Triple Adaptation Dividend namely, avoid environmental damages and losses; Maximize on economic benefits; social and environmental

benefits. These interventions will result into building the climate resilience of the Kitui County communities.

References

1. Bhowmik, A.; Bhunia, S.; Debsarkar, A.; Mallick, R.; Roy, M.; Mukherjee, J. Development of a Novel Helical-Ribbon Mixer Dryer for Conversion of Rural Slaughter house Wastes to an Organic Fertilizer and Implications in the Rural Circular Economy. *Sustainability* 2021, 13, 9455. [CrossRef]
2. Brumă, I.S.; Ulman, S.-R.; Cautisanu, C.; Tanasă, L.; Hoha, G.V. Sustainability in the Case of Small Vegetable Farmers: A Matrix Approach. *Sustainability* 2021, 13, 10320. [CrossRef]
3. Circle Economy. The Circularity Gap Report 2023; Circle Economy: Amsterdam, The Netherlands, 2023; pp. 1–64.
4. County Government of Kitui. (2018). Kitui County Second County Integrated Development Plan 2018-2022.
5. Republic of Kenya, Nairobi, Kenya. Gill, H.K & Garg, H. (2013). Environmental Impacts and Management Strategies. Retrieved from <https://bit.ly/3bVtfzE>

6. Descheemaeker K, Oosting SJ, Homann-Kee Tui S, Masikati P, Falconnier GN, Giller KE. Climate Change adaptation and mitigation in smallholder crop–livestock systems in sub-Saharan Environment Change. 2016 Dec;16(8):2331–43. doi: 10.1007
7. FAO and OECD. Food security and nutrition: challenges for agriculture and the hidden potential of soil; 2020. www.fao.org/publications. Jan 1;42:738–50. doi: 10.1016/j.landusepol.2014.10.012.
8. GoK. (2010). National Climate Change Response Strategy. Nairobi, Kenya.
9. IPCC. (2018). Summary for Policymakers. In IPCC, M. Allen, M. Babiker, Y. Chen, H. de Coninck, S. Connors, et al. (Eds.), Global Warming of 1.5° : An IPCC Special Report on the impacts of global Warming of 1.5° above pre-industrial levels and related global green house gas emission pathways, in the context of strengthening the global response to the threat of Climate Change, sustainable development, and efforts to eradicate poverty. Geneva : World Meteorological Organisation.
10. Kienzle, J. & Sims, B. (2015). "Mechanization of Conservation Agriculture for Smallholders: Issues and Options for Sustainable Intensification Environments 2015 2(2),139166.<https://www.researchgate.net/publication/275960649>.
11. Kitui County Government. (2022). Short Rains Food Assessment Report


12. KNBS (2019). Kenya Population and housing Census. <https://www.knbs.or.ke/?p=5621>.
13. KNBS. (2019a). Kenya Population and Housing Census, Population by County and Sub-County, Volume 1. Retrieved from <https://bit.ly/3bQAysD>
14. **KNBS. (2019b).** Kenya Population and Housing Census Volume II: Distribution of Population by Administrative Units. Retrieved from <https://bit.ly/3oZ6z75>
15. Luvanda A. M.a , Kitheka, E., Oduor, N., Kyalo, E. M. and Githiomi, J. (2016). Impact and assessment of charcoal marketing system through community associations in Kitui County, Kenya. Octa Journal of Environmental Research 4(2), 086-09. <http://www.sciencebeingjournal.com>
16. Makee, A., Kitheka, E., Oduor, N., Kyalo, E.M & Githiomi, J. (2016). Impact and assessment of charcoal marketing system through community associations in Kitui County, Kenya.
17. Ministry of Education (2008) Report of the Task Force to Harmonise Education, training and Research, MOE, Nairobi;
18. Ministry of Education (2012) Draft Report of the Task Force on Task Force on the Re-alignment of the Education Sector to the New Constitution of Kenya 2010, MOE, Nairobi

19. Sasol Foundation. (2015). Green Grams Manual. Retrieved 27 November 2020, from <https://bit.ly/3bW0sv4>
20. Shalaby, H., & Aboelnaga, S. (2017). Climate Change Impacts on Urban Planning in the Cities. Retrieved 27 November 2020, from <https://bit.ly/3uiLw0t>

Annex 1 Sector Working Technical group Nomination

COUNTY GOVERNMENT OF KITUI

Cell Phone:
0702615888/0702615444
0731717100
Email: Kituicounty@kenya.go.ke



Tanathi Works Development
Agency Building,
Ground Floor,
P.O Box 33 – 90200
Kitui

**MINISTRY OF ENERGY, ENVIRONMENT, CLIMATE CHANGE, FORESTRY,
NATURAL AND MINERAL RESOURCES**

Ref No. CGKTI/MEECCFNMR/ENV/4/71 27th April, 2023

TO:

FROM: Chief Officer
Environment, Climate Change and Forestry

**RE: NOTIFICATION FOR YOUR NOMINATION TO PARTICIPATE IN WARD LEVEL
PARTICIPATORY CLIMATE RISK ASSESSMENT EXERCISE**

The Government of Kenya's Financing Locally-Led Climate Action (G-FLLoCA) program is one of the transformative actions taken by the Kenyan Government to reduce community-level vulnerability and build resilience to climate change impacts. The program is being implemented by the National Treasury and Planning in collaboration with County Governments and their line departments, with financial support from the World Bank, DANIDA, SIDA, World Food Program among others.

The overall goal of the program is to strengthen local communities' resilience to the impacts of climate change, natural hazards, and other shocks and stressors by building local capacity to plan, budget, implement, monitor and report resilience investments in a way that promotes collaborative partnership between communities, national and county governments. As one of the requirements in readiness for climate resilience investment support, the County Government of Kitui, through the Department of Environment, Climate Change and Forestry, is in the process of conducting a county Participatory Climate Risk Assessment (PCRA) and County Climate Change Action Plan (CCCAP).

Following your participation in the PCRA Training Workshop held on 19th to 21st of April, 2023 in Mutomo Town, Kitui South Sub County, Kitui County, you are hereby nominated to participate in PCRA Ward Level workshops scheduled between **02nd May, 2023 and 12th May, 2023**. See the attached list and program for your information thereof.

Thank you for your continued support.

ENVIRONMENT, CLIMATE CHANGE AND FORESTRY
CHIEF OFFICER
APR 2023
David Sol Masai
CHIEF OFFICER – ENVIRONMENT OF KITUI
CC: COUNTY GOVERNMENT OF KITUI
P.O. Box 33
Sign:

✓ CECM – Ministry of Energy, Environment, Climate Change, Forestry, Natural and Mineral Resources




Annex 2: Participants invitation for PCRA Training Workshop

File copy

COUNTY GOVERNMENT OF KITUI

Cell Phone:
0702615888/0702615444
0731717100
Email: Kituicounty@kenya.go.ke



Tanathi Water Works
Development Agency Building, Ground
Floor
P.O BOX 33 – 90200
KITUI

**MINISTRY OF ENERGY, ENVIRONMENT, CLIMATE CHANGE,
FORESTRY, NATURAL AND MINERAL RESOURCES**
KITUI COUNTY CLIMATE CHANGE UNIT (KCCCU)

14th April, 2023

Ref. No. CGKTI/MEECCFNMR/ENV/4/55

Dear

**INVITATION FOR PARTICIPATORY CLIMATE RISK ASSESSMENT
(PCRA) TRAINING WORKSHOP SCHEDULED TO BE HELD AT
CAPITAL INN, MUTOMO TOWN BETWEEN 19TH – 21ST APRIL, 2023**

County Government of Kitui is in the process of developing Kitui County Climate Change Action Plan (KCCCAP) through Participatory Climate Risk Assessment (PCRA) approach. KCCCAP is being prepared through extensive consultative processes involving key players and stakeholders in all county's 40 wards. KCCCAP will be integrated together with similar plans from other 46 counties to develop National Climate Change Action Plan (NCCAP). Climate Change Action Plans both at National and County Government level play a catalytic role that enable Governments to deliver climate action results through appropriately structured interventions by responding to existing

1



Annex 3: List of data collection teams

TEAM	WARDS	OFFICERS	CONTACT	ROLE
Team 1	Tseikuru	Damaris Musyoka	0727446761	Team Leader/Facilitator
	Kivou	Justus Loki	0748627300	Note Taker
	Nuu	Doris Kanini	0720602705	Facilitator
Team 2	Mui	Wilson Oduor	0721492676	Team Leader/Facilitator
	Nguutani	Faith Moki	0729876992	Note Taker
	MutoNguni	Joy Mutanu James	0707975171	Facilitator
Team 3	Kyangwithya West	Titus Muvea	0728096183	Team Leader/Facilitator
	Kyangwithya East	Winfred Paul	0721293668	Note Taker
	Kwa Mutonga Kithumula	Paul Musili	0704040754	Facilitator
Team 4	Athi	Kelvin Kitonga	0711175484	Team Leader/Facilitator
	Kanziko	Hellen Muli	0713270969	Facilitator
	Mutomo/Kibweya	Dr. John Nyamai	0721413195	Facilitator
Team 5	Mbitini	Nicodemus Mwanzia	0723659311	Team Leader/Facilitator
	Kisasi	Evelyne Kitavi	0723324505	Note Taker
	Nzambani	Eng. Ann Mutie	0711401284	Facilitator
Team 6	Mulango	Lilian Musili	0712008613	Team Leader/Facilitator
	Miambani	Miriam Muli	0726834669	Note Taker
	Endau/Malalani	Margret Mawia	0711404818	Facilitator
Team 7	Kitui Central (Urban resilience context)	Jacinta Museo	0757334354	Team Leader/Facilitator
	Mwingi Central (Urban resilience context)	Sam Mwendwa	0722491545	Facilitator
	Voo Kyamatu	Jackson Mwendwa	0726755466	Facilitator/Note Taker

		Marian John	0719373433	Note Taker
--	--	-------------	------------	------------

TEAM	WARDS	OFFICERS	CONTACT	ROLE
Team 8	Tharaka	Oras Murithi	726967094	Team Leader/Facilitator
	Mumoni	Tabitha Mweu	724945561	Facilitator
	Kyuso	Daniel Mbithi	715255171	Note Taker
Team 9	Ngomeni	Cosmus Mwanzia	729680663	Team Leader/Facilitator
	Nguni	Alex Muthyoi	724334403	Facilitator
	Waita	Diana Mugo	723205357	Note Taker
Team 10	Kiomo Kyethani	Dominic Mumbu	724445406	Team Leader/Facilitator
	Kyome Thaana	Catherine Wamaitha	7111669652	Note Taker
	Migwani	Roy Aseka	722832432	Facilitator
Team 11	Kauwi	Paul Katheka	706532199	Facilitator
	Matinyani	Charles Kitonga	724175426	Facilitator
	Kwa Vonza	Stanley Marioko	723856810	Note Taker
Team 12	Chuluni	Damaris Musyoka	0727446761	Team Leader/Facilitator
	Zombe/Mwitika	Justus Loki	0748627300	Note Taker
	Mutito Kaliku	Doris Kanini	0720602705	Facilitator
Team 13	Ikanga/Kyatune Kyatune	Jacinta Museo	0757334354	Team Leader/Facilitator
	Ikutha Kasala	Sam Mwendwa	0722491545	Facilitator
	Mutha	Jackson Mwendwa	0726755466	Facilitator/Note Taker
	Kyangi	Marian John	0719373433	Note Taker

Annex 4: List of ward PCRA process participants

Mutomo Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Fredrick wambua	23584215	0714362593	/			/
2.	Muluka Meshack	13783213	0723831299	/			/
3.	Kibwea mwendwa	27002639	0740714588	/			/
4.	Erickson mooki	11276785	0711954469	/			/
5.	Stephen mungami	25994552	0726347068	/		/	
6.	Rose kavutha	22118901	0727906164		/		/
7.	Lena kula	26687632	0707339399		/		/
8.	Benjamin kinyangu	24281555	0711239415	/			/
9.	Rachel mutisya	26415358	0726992189		/	/	
10.	Benson lucas	22717717	0700221584	/			/
11.	Philip mutaki	52607542	0726967524	/			/
12.	Leonard syengo	3355293	0722513529	/			
13.	Penina kula	4640098	0701874215		/		/
14.	Reuben kinyangu	1110388	0714269504	/			/
15.	Felistus mwende	28278901	0713901553		/	/	
16.	Augustus ndaka	29170205	0702610775	/		/	
17.	Juduth musango	34609215	0742006165		/	/	
18.	Zaituny nzomo	12961305	0798047444		/		/
19.	Patricia K musau	13595452	0725085763		/		/
20.	Elizabeth musyoki	20039274	0716461112		/		/
21.	Cosmas mutia	10878796	0759147584	/			/
22.	Philip kituku	1103223	0711880548	/			
23.	Kinyamasyo ngui	32710055	0700040483	/		/	
24.	Benson mutisya	9147584	0715641745	/			/
25.	Augustus musyoka	28577773	0718642936	/		/	

26.	Sam Mwendwa	26102500	0722491845	/		/	
27.	Jackson Mwendwa	27348084	0726755466	/		/	
28.	Marian John						

Kanziko Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Fredrick wambua	23584215	0714362593	/			/
2.	Muluka Meshack	13783213	0723831299	/			/
3.	Kibwea mwendwa	27002639	0740714588	/			/
4.	Erickson mooki	11276785	0711954469	/			/
5.	Stephen mungami	25994552	0726347068	/		/	
6.	Rose kavutha	22118901	0727906164		/		/
7.	Lena kula	26687632	0707339399		/		/
8.	Benjamin kinyangu	24281555	0711239415	/			/
9.	Rachel mutisya	26415358	0726992189		/	/	
10.	Benson lucas	22717717	0700221584	/			/
11.	Philip mutaki	52607542	0726967524	/			/
12.	Leonard syengo	3355293	0722513529	/			
13.	Penina kula	4640098	0701874215		/		/
14.	Reuben kinyangu	1110388	0714269504	/			/
15.	Felistus mwende	28278901	0713901553		/	/	
16.	Augustus ndaka	29170205	0702610775	/		/	
17.	Juduth musango	34609215	0742006165		/	/	
18.	Zaituny nzomo	12961305	0798047444		/		/
19.	Patricia K musau	13595452	0725085763		/		/
20.	Elizabeth musyoki	20039274	0716461112		/		/
21.	Cosmas mutia	10878796	0759147584	/			/
22.	Philip kituku	1103223	0711880548	/			
23.	Kinyamasyo ngui	32710055	0700040483	/		/	
24.	Benson mutisya	9147584	0715641745	/			/
25.	Augustus musyoka	28577773	0718642936	/		/	
26.	Sam Mwendwa	26102500	0722491845	/		/	
27.	Jackson Mwendwa	27348084	0726755466	/		/	
28.	Marian John						

Athi Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35

1.	Fredrick wambua	23584215	0714362593	/			/
2.	Muluka Meshack	13783213	0723831299	/			/
3.	Kibwea mwendwa	27002639	0740714588	/			/
4.	Erickson mooki	11276785	0711954469	/			/
5.	Stephen mungami	25994552	0726347068	/		/	
6.	Rose kavutha	22118901	0727906164		/		/
7.	Lena kula	26687632	0707339399		/		/
8.	Benjamin kinyangu	24281555	0711239415	/			/
9.	Rachel mutisya	26415358	0726992189		/	/	
10.	Benson lucas	22717717	0700221584	/			/
11.	Philip mutaki	52607542	0726967524	/			/
12.	Leonard syengo	3355293	0722513529	/			
13.	Penina kula	4640098	0701874215		/		/
14.	Reuben kinyangu	1110388	0714269504	/			/
15.	Felistus mwende	28278901	0713901553		/	/	
16.	Augustus ndaka	29170205	0702610775	/		/	
17.	Juduth musango	34609215	0742006165		/	/	
18.	Zaituny nzomo	12961305	0798047444		/		/
19.	Patricia K musau	13595452	0725085763		/		/
20.	Elizabeth musyoki	20039274	0716461112		/		/
21.	Cosmas mutia	10878796	0759147584	/			/
22.	Philip kituku	1103223	0711880548	/			
23.	Kinyamasyo ngui	32710055	0700040483	/		/	
24.	Benson mutisya	9147584	0715641745	/			/
25.	Augustus musyoka	28577773	0718642936	/		/	
26.	Sam Mwendwa	26102500	0722491845	/		/	
27.	Jackson Mwendwa	27348084	0726755466	/		/	
28.	Marian John						

Athi Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Fredrick wambua	23584215	0714362593	/			/
2.	Muluka Meshack	13783213	0723831299	/			/
3.	Kibwea mwendwa	27002639	0740714588	/			/
4.	Erickson mooki	11276785	0711954469	/			/
5.	Stephen mungami	25994552	0726347068	/		/	
6.	Rose kavutha	22118901	0727906164		/		/
7.	Lena kula	26687632	0707339399		/		/
8.	Benjamin kinyangu	24281555	0711239415	/			/
9.	Rachel mutisya	26415358	0726992189		/	/	
10.	Benson lucas	22717717	0700221584	/			/

11.	Philip mutaki	52607542	0726967524	/			/
12.	Leonard syengo	3355293	0722513529	/			
13.	Penina kula	4640098	0701874215		/		/
14.	Reuben kinyangu	1110388	0714269504	/			/
15.	Felistus mwende	28278901	0713901553		/	/	
16.	Augustus ndaka	29170205	0702610775	/		/	
17.	Juduth musango	34609215	0742006165		/	/	
18.	Zaituny nzomo	12961305	0798047444		/		/
19.	Patricia K musau	13595452	0725085763		/		/
20.	Elizabeth musyoki	20039274	0716461112		/		/
21.	Cosmas mutia	10878796	0759147584	/			/
22.	Philip kituku	1103223	0711880548	/			
23.	Kinyamasyo ngui	32710055	0700040483	/		/	
24.	Benson mutisya	9147584	0715641745	/			/
25.	Augustus musyoka	28577773	0718642936	/		/	
26.	Sam Mwendwa	26102500	0722491845	/		/	
27.	Jackson Mwendwa	27348084	0726755466	/		/	
28.	Marian John						

Kivou Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Fredrick wambua	23584215	0714362593	/			/
2.	Muluka Meshack	13783213	0723831299	/			/
3.	Kibwea mwendwa	27002639	0740714588	/			/
4.	Erickson mooki	11276785	0711954469	/			/
5.	Stephen mungami	25994552	0726347068	/		/	
6.	Rose kavutha	22118901	0727906164		/		/
7.	Lena kula	26687632	0707339399		/		/
8.	Benjamin kinyangu	24281555	0711239415	/			/
9.	Rachel mutisya	26415358	0726992189		/	/	
10.	Benson lucas	22717717	0700221584	/			/
11.	Philip mutaki	52607542	0726967524	/			/
12.	Leonard syengo	3355293	0722513529	/			
13.	Penina kula	4640098	0701874215		/		/
14.	Reuben kinyangu	1110388	0714269504	/			/
15.	Felistus mwende	28278901	0713901553		/	/	
16.	Augustus ndaka	29170205	0702610775	/		/	
17.	Juduth musango	34609215	0742006165		/	/	
18.	Zaituny nzomo	12961305	0798047444		/		/
19.	Patricia K musau	13595452	0725085763		/		/
20.	Elizabeth musyoki	20039274	0716461112		/		/

21.	Cosmas mutia	10878796	0759147584	/			/
22.	Philip kituku	1103223	0711880548	/			
23.	Kinyamasyo ngui	32710055	0700040483	/		/	
24.	Benson mutisya	9147584	0715641745	/			/
25.	Augustus musyoka	28577773	0718642936	/		/	
26.	Sam Mwendwa	26102500	0722491845	/		/	
27.	Jackson Mwendwa	27348084	0726755466	/		/	
28.	Marian John						

Tseikuru Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Fredrick wambua	23584215	0714362593	/			/
2.	Muluka Meshack	13783213	0723831299	/			/
3.	Kibwea mwendwa	27002639	0740714588	/			/
4.	Erickson mooki	11276785	0711954469	/			/
5.	Stephen mungami	25994552	0726347068	/		/	
6.	Rose kavutha	22118901	0727906164		/		/
7.	Lena kula	26687632	0707339399		/		/
8.	Benjamin kinyangu	24281555	0711239415	/			/
9.	Rachel mutisya	26415358	0726992189		/	/	
10.	Benson lucas	22717717	0700221584	/			/
11.	Philip mutaki	52607542	0726967524	/			/
12.	Leonard syengo	3355293	0722513529	/			
13.	Penina kula	4640098	0701874215		/		/
14.	Reuben kinyangu	1110388	0714269504	/			/
15.	Felistus mwende	28278901	0713901553		/	/	
16.	Augustus ndaka	29170205	0702610775	/		/	
17.	Juduth musango	34609215	0742006165		/	/	
18.	Zaituny nzomo	12961305	0798047444		/		/
19.	Patricia K musau	13595452	0725085763		/		/
20.	Elizabeth musyoki	20039274	0716461112		/		/
21.	Cosmas mutia	10878796	0759147584	/			/
22.	Philip kituku	1103223	0711880548	/			
23.	Kinyamasyo ngui	32710055	0700040483	/		/	
24.	Benson mutisya	9147584	0715641745	/			/
25.	Augustus musyoka	28577773	0718642936	/		/	
26.	Sam Mwendwa	26102500	0722491845	/		/	
27.	Jackson Mwendwa	27348084	0726755466	/		/	
28.	Marian John						

Mbitini Ward**PCRA Workshop Participants**

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Charles k masia	21406883	0722272425	\			\
2	Christine milinge	23590946	0727684169		\		\
3	David mutambi	24354555	0723375114	\			\
4	Nyamai nzukio	10354563	0727947568	\			\
5	Debora agnes	13234434	074863150		\		\
6	Stephen nzengula	13465664	0710666244	\		\	
7	Gladys kioko	11266858	0770523767		\		\
8	Mbai mwale	12347576	0712273191	\			\
9	Mwania mwolo	45354636	0700069818	\			\
10	Mwikali munyoka	8677624	0702401617		\		\
11	John matonyi	1003654	0754768465	\		\	
12	Rober tmutunga	12234556	0710563564	\		\	
13	Virginia kinyua	25050646	0746576667		\	\	
14	Felistus wambua	0574737	0711675758		\		\
15	Ngalia nguengo	35467537	0753564653		\		\
16	Benard waife	14354564	0724342342	\			\
17	Esther kavindu	25665676	0763564554		\	\	
18	Isaac kalungu	3665763	0754545659	\		\	
19	David munyaka	13425364	0752546672	\		\	
20	David matheka	4456576	0746656655	\			\
21	Peter mumo	15344756	0734567657	\			\
22	Phailp matata	54124635	0713454455	\			\
23	Nzembi mutivo	45464567	0723564655		\		\
24	Jane mwangangi	1435455	0764565345		\		\
25	Miriam muli	14342435	0723543566		\		\
26	Margaret myamai	15363674	0725565666		\		\
27	Kelvin muthui	13545646	0752636566	\			\
28	Dominic mumbu	1534655	0723556457	\			\
29	Vexina mueni	13545564	0714325466		\		yes
30	vemako	20181397	0721328236	yes			yes
31	Moly hura	9445545	0721546646	yes			yes
32	Joyce moraa	36546557	0753545464		yes	yes	
33	Damaris musyoka	24465757	0755465666		yes	yes	

MutoNguni Ward**PCRA Workshop Participants**

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35

1	Christine k	12236534	0724565345		\		\
2	cecilia kimanzi	12423545	0111345456		\		\
3	Rhoderster muthui	45652665	0724354356		\		\
4	Muse muthengi	15445345	0714455435	\			\
5	Titus muthnya	12532545	0712543254	\			\
6	Joshua kiseu	1039485	0714245435	\			\
7	Joseph S N	3255452	0112353545	\		\	
8	Stella martha	13674675	0724354354		\	\	
9	Elizabeth patrick	13654565	0712546546		\	\	
10	Anna kyende	35464666	0752343455		\		\
11	Miriam ngangi	14325545	0741254555		\		\
12	Maria kimeu	23354635	0723546566		\		\
13	Mutua kitemu	23354665	0725445646	\			\
14	Justus m	31324545	0712455452	\		\	
15	Mbesa mutisya	0435445	0713235455		\	\	
16	alexander	42354656	0111244345	\		\	
17	Robert nzoka	13454561	0112337532	\			\
18	Mutual mali	3445666	0765321112	\			\
19	Onesmun itula	32454667	0774534242	\			\
20	Munyali nzomo	13355656	0725423546	\			\
21	Lydia kimanzi	10004565	0765985524		\	\	
22	Kavanga nganga	14646577	0756634554		\	\	
23	Musyoki kathumo	12434455	0734654564	\			\
24	Agneta munyoki	23142555	0765421344		\		\
25	James simba	24354646	0763423425	\			\
26	Kavata mutindi	3666637	0717227570		\		

Mwingi central Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Jonah naumi	23400382	0113684949	/			\
2.	Japheth Kitui	20255376	0112647324	\		\	
3.	Jeremiah muthui	7234170	0722737764	\			\
4.	Charles mulatya	0777519	0700303606	\		\	
5.	John mbai	0270905	0791359780	\			\
6.	Abdallah ngonga	6282695	0724799848	\		\	
7.	Muimi mulyungi	30536787	0703312090	\			\
8.	Kevin kimwea	27689493	0713152504	\			\
9.	Janet sammy	22936191	0728638663		\		\
10.	Mutua nutia	13444758	0794869057	\		\	
11.	John kimanzi	22223148	0727738485	\			\
12.	Samuel mwangangi	20010851	0711111274	\		\	

13.	Breta ngumbali	21047167	0729986120		\		\
14.	Magdaline mbuvi	23786689	0715136441		\	\	
15.	Caleb k ngei	33826818	0792961980	\			\
16.	Josphine kithingi	13811324	0726799770		\	\	
17.	Ngute muthui	23827480	0729379722	\			\
18.	Dorcus luka	12625923	0715513453		\	\	
19.	Samson michael	33351974	0722548790	\			\
20.	Virginia grace	21695073	0768534678		\	\	
21.	Anna ngui	10095091	0789653788		\		\
22.	Stephen kilonzi	0780021	0745726963	\			\
23.	Esther luka	10879010	0726361272		\	\	
24.	Martha sajja	34456768	0757554445		\		\
25.	Faith kitema	25655776	0746453634		\	\	
26.	Sam Muthamba	10567859	0764535655	\			\
27.	Jackson mwendwa	27348054	0726755466	\			\
28.	Marian john	29473425	0719707999		\		\
29.	Pennina sammy	39056475	0117548595		\		\

Mui Ward**PCRA Workshop Participants**

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1	Janet muluu	12526465	0723545653		\	\	
2	Mbaluka nzamo	26465656	0723656868	\			\
3	John vumo	32656576	0753565677	\			\
4	Patrick ndambu	6465667	0763556867	\			\
5	Timothy mwinye	1232435	0773576877	\			\
6	Joshua mbuvi	24325465	0111234665	\			\
7	Mary mwendwa	32435465	0112434563		\		\
8	David maweu	12432546	0725365421	\			\
9	Petromila mumo	23234354	0735656154		\	\	
10	Nzoka mutaa	2114356	0712556456	\		\	
11	Josphine muse	24354657	0713215431		\	\	
12	James kilonzo	3243546	0763451432	\		\	
13	Joseph kimanzi	24354657	0763524123	\			\
14	Mutia muvengei	15340574	0754645252	\			\
15	Jackson kunu	12437546	0734645521	\			\
16	Fransis mutama	23421561	0745624522	\			\
17	Patricia kituku	3426577	0723554655		\		\
18	Martha muthika	10437354	0756452244		\	\	
19	Breta muthui	14354657	0723557236		\	\	
20	Julius mwania	23143467	0734645245	\			\
21	Benjamin kilonzi	12564654	0725346524	\			\

22	Kitonga mwola	34565754	0745235435	\			\
23	Fransica mulonza	13545653	0756234235		\	\	
24	Danstan kasalu	3413235	0735255254	\		\	
25	Felix masya	13454656	0735216453	\		\	
26	Mutie sanzivo	13245657	0732554745	\			\
27	Renson munene	4131535	0742564562	\			\
28	Erasus mutinda	15346554	0735658632	\			\
29	Chris mwendw	42545465	0734645623	\			\

Kisasi Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1	Samuel mutie	8721146	0727816004	\		\	
2	Benard sivi	7147290	0722953654	\			\
3	Cosmos muithi	0272903	0722862640	\		\	
4	Jethro kitili	28079666	0700902239	\			\
5	Liske m musenyai	24362719	0723309924	\		\	
6	Mumbe mwei	14455525	0723707385		\		\
7	Luciana ikuthu	13444338	0706896965		\	\	
8	Faith mumo	25532912	0729997451		\		\
9	John mwanza	86891819	0722655987	\		\	
10	Partick nzembei	21524243	0725343848	\			\
11	Winfred mwanzia	11720273	0713515029		\		\
12	Josphine malingo	7439880	0715829585		\	\	
13	Dorcas nzomo	12719706	0712251985		\		\
14	Emma mwaniku	4572217	0710108008		\		\
15	Victoria mwkau	25856151	0713178113		\		\
16	Purity mboya	42260829	0794355873		\	\	
17	Titus ishui	1012611	0726164227	\		\	
18	Dominic mutinda	10878524	0724448083	\			\
19	Maluki mumo	8990747	0720983840	\			\
20	Joseph m mboka	10095351	0710779553	\			\
21	Josphat kithome	13781224	0724067388	\			\
22	Amos k martin	21822478	0722976732	\			\
23	Muse malii	11277607	0795641345	\		\	
24	Patrick kiema	7424010	0711846335	\		\	
25	James k kweta	35379213	070645781	\			\
26	Benson wambua	10206192	0714845842	\			\
27	Jackson ngala	34479276	0792286785	\			\

Nguutani Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1	Henderson	12453654	0764653444	\		\	
2	Patrick	45253674	0722544533	\			\
3	James kyalo	21345566	0724326456	\			\
4	Peter muimi	134324562	0724435545	\			\
5	Rose kalai	35454664	0715345554		\		\
6	Monica mutemi	25346465	0725465466		\	\	
7	Margaret mia	43256456	0735465525		\		\
8	John m kioko	5343165	0714354651	\			\
9	Pius kiu	12344367	0725354655	\			\
10	Roephine kiilu	45426465	0711556576		\	\	
11	Eunice kavovi	13354546	0715364656		\		\
12	Nicholus litwa	3425436	0756425645	\			\
13	Janet mbindyo	13344656	0726346456		\	\	
14	Nina malia	2241445	0111275456		\		\
15	Alex mulunga	345143	0723534645	\		\	
16	Felistus ithiku	2545465	0752355456		\		\
17	Dominic lius	14352656	0734556234	\			\
18	Mutei munywoki	13435456	0724565634		\	\	
19	Makaa ikilu	22314465	0723565656	\		\	
20	Julius nzomo	01143254	0762165756	\		\	
21	Paul mutinda	10002454	0723564556	\		\	
22	Mukula ndemwa	22223354	0763657346	\		\	
23							

Nzambani Ward**PCRA Workshop Participants**

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1	Paul mutunga	20013275	0723065476	\		\	
2	Gladys musyoka	1135600	0745363758		\		\
3	Susan katusya	3610736	0764554667		\		\
4	Michael ndeto	12449566	0722223475	\		\	
5	Purity david	24048766	0766445557		\		\
6	Benedict m kilui	22129045	0746375757	\			\
7	Anna p david	15457736	0746575746		\		\
8	Pauline m nguu	22578474	0720665553		\		\
9	Nicholus kiauni	07475647	0720342636	\		\	
10	Christopher kimwele	8959587	0723904323	\		\	
11	Jane l	1020702	0746347448		\	\	

12	Mary mwalimu	25514156	0745362654		\	\	
13	Richard nzuki	1224354	0743323434	\			\
14	Alex john	23451335	0732323433	\			\
15	musevemu	25555243	0723144523	\			\
16	Mercy kyambai	23344534	0734255624		\		\
17	Veronica wambua	112222334	0713345245		\		\
18	Tabitha mutwii	22213355	0734233324		\		\
19	Joyce mwikali	37382635	0724454524		\	\	
20	Jacinta mutisya	28846454	0718661877		\		\
21	Jacob katila	11006680	0728116355	\			\
22	Joseph nzioka	24084372	0743435655	\		\	
23	Peter nzelya	11006380	0728116273	\			\
24	Eric mutinda	24088904	0729844105	\			\
25	Endrick mwikali	31685948	0712123565		\		\
26	Gloria mutema	22947805	0702981652		\	\	
27	Musyoka kauka	3381422	0702774636	\		\	
28	Dorothy mutia	35552535	0735346577		\	\	
29	Miriam munyi	10453454	0753563546		\		\
30	Benson kioo	13444555	0743246426	\			\
31	Magaret nyamai	13444672	0711404818		\		\
32	Kelvin muthui	29243433	0711175484	\			\

Zombe Mwitika Ward

PCRA Workshop Participants List

S/N	PARTICIPANTS NAME	DEPARTMENT/I NSTITUTION		Female	Male
1.	SYENGO MWANZIA	WARD CLIMATE CHANGE PLANNING TEAM	0729592097		M
2.	SYLVESTER N WAMBUA	WARD CLIMATE CHANGE PLANNING TEAM	0729771240		M
3.	JACINTA M MATI	WARD CLIMATE CHANGE PLANNING TEAM	0727541693	F	
4.	PENINNAH MWONGELA	CBO	0720355323	F	
5.	FELISTUS MAKAU	CBO	0705095203	F	
6.	ANNASTACIA MAITHYA	WARD CLIMATE CHANGE PLANNING TEAM	0728040659	F	

7.	PETER KAVILU	WAPC	0723062315		M
8.	JONATHAN KANYI	ASST. CHIEF	0714093923		M
9.	SOPHIA MUTHEWA	WAPC	0720841841	F	
10.	JORUM M KAMULI	WAPC	0700349617		M
11.	SAMUEL MUNYASYA	WAPC	0724398638		M
12.	STELLA KATETHYA	WAPC	0703335638	F	
13.	LAWRENCE K JOSEPH	ASST. CHIEF	0727499107		M
14.	JACOB MUTUA	UCCS	0729451681		M
15.	JUBILANT NDINDA	UCCS	0101450850	F	
16.	KARIMI MAINA	KFS	0720395250		M
17.	CHARLES GITONGA	KFS	0722912765		M
18.	REV M NZUNI	WAPC	0722231447		M
19.	LILIAN KIMANZI	CHIEF	0724050398	F	
20.	JAMES N KITONYO	DACEO-MUTITO DISTRICT	0723979240		M
21.	TALIB K MUTONGI	ASST. CHIEF	0723653143		M
22.	SAMMY M MWENGEI	WAPC	0703911361		M
23.	CHRISTINE KILUNDU	ASST. CHIEF	0727013696	F	
24.	MULWA UVYALU	FARMER	0723673107		M
25.	JOSEPH M NTHENGE	DEPT. AGRICULTURE	0724467757		M
26.	CAXTON K KOTHO	WAPC	0719152828		M
27.	REBECCA MWANDIKA	WARD COMMITTEE	0714544747	F	
28.	RODAH KITHEKA	WARD COMMITTEE	0715246107	F	
29.	KATHENDU MASYA	WARD COMMITTEE CHAIRMAN	0704042602		M
30.	DARIUS N MUTHUI	ASST. CHIEF	0704733741		M

Waita Ward

PCRA Workshop Participants Lists

SN.	names	organisation	Phone Number	gender
1	alex mutuku	waita	254720324184	M
2	Rhoda Mati	waita	254714600943	F
3	paul mwenga	waita	254727813714	M
4	paul kyalo	waita	254724748258	M
5	shadrack wambua	waita	254722760153	M
6	munyoki mutemi	waita	254724848737	M
7	oliver Muthama	waita	254724119770	M
8	patrick muthui	waita	254728778463	M
9	samuel mulwa	waita	254798774366	M

10	peter kimanzi	waita	254714385485	M
11	joseph mbunge	waita	254716621468	M
12	samuel maithya	waita	254711122925	M
13	mumbi mati	waita	254729762743	F
14	naom mbaluka	waita	254715852554	F
15	philip mutemi	waita	254714095639	M
16	kalunda munyoki	waita	254720654519	M
17	peter mwanzia	waita	254726911468	M
18	benard mwangangi	waita	254700618142	M
19	ngui kamothe	waita	254702753214	M
20	steve muema	W/ADMN	254790508994	M
21	everlyne nthambi	ADSE	254707523254	F
22	festus kalulu	waita	254721591107	M
23	jackson mwendwa	CGoKTI	254791610260	M
24	juma emmily	waita	254725611181	F
25	japheth mutuku	waita	254729853241	M
26	winfrend mutinda	CGoKTI	254725404775	F

Tharaka Ward

PCRA Workshop Participants Lists

No.	NAME	DEPT/ INSTITUTION	TELEPHONE	GENDER		AGE	
				M	F	< 35	> 35
1	SAMMY MAUKI	CHIEF THARAKA	0717955577	√			√
2	MARGARET STANLEY	COMMUNITY	0710581031		√		√
3	DORCAS K. Karii	CGoKTI	0719550228		√		√
4	ANGELAH M. KIREMA	ASST. CHIEF	0727540287		√		√
5	MARY KAMWARA	ASST. CHIEF	0726644036		√		√
6	JOSEPHAT MWENDWA	Tharaka WCCPT	0727958341	√			√
7	AGNES KATHINI	Tharaka WCCPT	0708760071		√		√
8	DANIEL M. NJAGI	ACTING A/CHIEF	0727502360	√			√
9	FRANCIS KITHAMBA	Tharaka WCCPT	0701885821	√		√	
10	DAVID NJAGI	Tharaka WCCPT	0729605005	√		√	
11	DANSON M. KIRYA	Tharaka WCCPT	07111161439	√			√
12	DAVID GITONGA	Tharaka WCCPT	0724897470	√			√
13	JAMES K. NDAGARA	SNR.A/CHIEF	0724933679	√			√
14	SAMUEL M. MBIRI	ACK	0727731047	√			√
15	JULIUS NDATHO	ASST.CHIEF	0725252930	√			√
16	TABITHA MURUARA	COMMUNITY	0728886544		√		√
17	RUTH MWINJI	COMMUNITY	N/A		√		√
18	ELIZABETH MWENDE	COMMUNITY	0716028636		√		√
19	JOSEPH MUTEGI	CHAIR GATORONI PS	0701630582	√			√
20	JULIUS KITHINJI	Tharaka WCCPT	0708523008	√			√
21	PETER ITHARYA	Tharaka WCCPT	0729383320	√			√
22	FRANCIS MUTHENGI	CHIEF	0729783731	√			√
23	JOSEPH KIMENCHU	ASS/CHIEF	0721968377	√			√
24	KANGOLA MWANTHI	AGRICULTURE	0728749291	√			√

25	JACOB MUTUA	CGoKTI	0735567681				
26	JAPHETH MUTEKI	CGoKTI	0724799490	√		√	
27	MIRIAM MULI	CGoKTI	0717552092		√	√	
28	MERCY MAWIA	CGoKTI	0721342444		√	√	
29	REV.DAN MUTUNGA	CGoKTI	0726830675	√			√
30	JUSTUS M KITHONGA	SCSDO	0710421945	√			√

Kyuso Ward

PCRA Workshop Participants Lists

No.	PARTICIPANT'S NAME	CONTACT	ORGANIZATION/CATEGORY
1	Sam Mwendwa	0722491545	ADSE
2	Jackson Mwendwa	0726755466	CGOKTI
3	Fr. Samuel Musili	0726853305	Religious Leader
4	Christine M. Kimuli	0716885289	Business Lady
5	Peter Musong'a	0720738452	Livestock Rep.
6	Angeline K. Mwendaka	0710941226	Village Admin.
7	Bunny Museo Muthami	0705408733	Female Youth Rep.
8	Marylin K. Kilonzo	0726088055	Village Admin.
9	Marylin M. Muthui	0715146160	CBO Rep.
10	John Muisyo	0702496638	Youth Rep.
11	Dominic K. Kabwere	0707657593	Crop Rep.
12	Boniface Wambua	0792365236	Water Officer Rep.
13	James Mutuku Mwendwa	0792538443	Pwds
14	David M. King'ori	0727628158	MPSMA
15	Peter M. Nzioki	0725439529	MPSMA
16	Joshua R. Kilonzo	0715449614	MPSMA
17	Evans Lumumba	0725238031	LIHUD
18	Dominic Nzoka	0727246170	MPSMA
19	Wilson K. Maanzo	0727517930	NGAO
20	Priscah Mawia Mwinzi	0701818676	Women Rep.
21	Anthony M. Kavisi	0725973792	Agricultural Extension
22	Josphat M. Makuyu	0729579590	CBO

23	Stephen N. Wambua	0707671979	MPSMA
24	Alfred Somoni	0723108907	LIHUD
25	Purity Mwangangi	0718889658	ADSE
26	Saul Makali	0715711237	MPSMA-Ward Admin.
27	Christine M. Kimanthi	0723359865	MPSMA

Nguni Ward

PCRA Workshop Participant Lists

names	Department	Phone Number	gender	
raphael syengo	Nguni WCCPT	254715150476	F	
kyalo Ngei	Nguni WCCPT	254794807228	M	
Andrew Mwikya	Nguni WCCPT	254727775738	M	
Samuel Kitema	Nguni WCCPT	254711940449	M	
John Mbiti	Nguni WCCPT	254713637964	M	
Joseph Kimanzi	Nguni WCCPT	254792344004	M	
Benjamin Kithuka	ADMN	254721962539	M	
kevin mwendwa	Nguni WCCPT	254742044262	M	
Annah Judah	Nguni WCCPT	254711363099	F	
John Mutunga	Nguni WCCPT	254713560694	M	
Meshack Mwendwa	Nguni WCCPT	254713149141	M	
Mary Mukuni	Nguni WCCPT	254720614643	F	
Sammy Kimwele	Nguni WCCPT	254729655204	M	
Kasyoka Kyembeni	Nguni WCCPT	254792663230	M	
Elizabeth Kithuka	Nguni WCCPT	254713268176	F	
Jackson Ndengu	Nguni WCCPT	254710716007	M	
Daniel Kimwele	Nguni WCCPT	254716034752	M	
Peter Wambua	Nguni WCCPT	254725760623	M	
Jacob Munyambu	Nguni WCCPT	254718005313	M	
Doris Mbuti	Nguni WCCPT	254710716007	F	
Beatrice Mutie	Nguni WCCPT	254706811373	F	
Damaris Kyalo	Nguni WCCPT	254746123133	F	
Mary Nduku	Nguni WCCPT	254714303812	F	
Meshack Mulyungi	Nguni WCCPT	254790508994	M	
Everlyne Nthambi	ADSE	254707523254	F	
Festus Kalulu	SP	254721591107	M	
Jackson Mwendwa	CGoKTI	254791610260	M	
Ann Waita	SP	254701110432	F	

japheth mutuku	ADSE	254729853241	M	
Winfrend Mutinda	CGoKTI	254725404775	F	
Flora Mbui	CGoKTI	254727030563	F	
Faith Musee	Nguni WCCPT	254725445944	F	

Ngomeni Ward

PCRA Workshop Participants List

NO.	PARTICIPANT'S NAME	DEPARTMENT/ INSTITUTION	CONTACT	GENDER		AGE	
				M	F	<35	>35
1	LAZARUS KIMANZI	WARD CLIMATE CHANGE PLANNING TEAM	0715177107	✓		✓	
2	PURITY MUENI	CGoKTI	0714788381		✓	✓	
3	AUSTIN OKOTH	CGoKTI	0727380802	✓		✓	
4	NANCY MUSYOKA	WARD CLIMATE CHANGE PLANNING TEAM	0723000492		✓		✓
5	JOHN M KIMWELE	WARD CLIMATE CHANGE PLANNING TEAM	-		✓		
6	ACOTHY M NDOO	WARD CLIMATE CHANGE PLANNING TEAM	0726113651	✓			✓
7	REBECCA MUTHUI	WARD CLIMATE CHANGE PLANNING TEAM	0725996768		✓		✓
8	KIMANZIMASAI	WARD CLIMATE CHANGE PLANNING TEAM	0714120823		✓		✓
9	TIMOTHY KIMWELE	National Govt-Admin	0724347531	✓			✓
10	MAURICE S. NDOO	WARD CLIMATE CHANGE PLANNING TEAM	0728176207	✓			✓
11	REV. DANIEL MUTUNGU	CGoKTI	0726830675	✓			✓
12	JACKSON MUSILIKANGA/KYAT UNENGI	Chair Ngomeni ward	0713188959	✓			✓
13	JOSEPH K. GITHIJI	Agricultural officer	0726524689	✓			✓
14	DAVID M. MWANZI	Vet Ngomeni ward	0723000326	✓			✓
15	NICODEMUS B. MENGI	MBR. Kamusiliu	0719601803	✓			✓
16	JOSEPH M. KITHEKA	Peace comm. chair	0711260578	✓			✓
17	SIMON M. MUTEMI	CGoKTI	0727718087	✓			✓
18	STEPHEN MUNYITHYA	CGoKTI	0724521070	✓			✓
19	JULIUS MUSUNGU	CGoKTI	0729977508	✓			✓
20	REV. BENJAMIN M. MTHUI	WARD CLIMATE CHANGE PLANNING TEAM	0727730995	✓			
21	PRISCILLA MUTINDA	WARD CLIMATE CHANGE PLANNING TEAM	0726618862			✓	
22	REGINA KIMANZI	WARD CLIMATE CHANGE PLANNING TEAM	0713152989		✓		✓
23	JOSPHAT K. MUISYO	WARD CLIMATE CHANGE PLANNING TEAM	0710713891	✓			✓

24	PRISCILLA NDITHYA	Youth representative	0717745779		✓	✓	
25	PURITY KIMWELE	Youth Representative	0712745779		✓		
26	MICHAEL MUTIE	WARD CLIMATE CHANGE PLANNING TEAM	0733786260	✓			✓
27	DAVID KILONZI	WARD CLIMATE CHANGE PLANNING TEAM	0705300053	✓			✓
28	BENSON KIMOTE	CGoKTI	0728699737	✓		✓	
29	CHARLES MBUVI	CGoKTI	0723135639	✓		✓	
30	JOSHUA N MUTUA	WARD CLIMATE CHANGE PLANNING TEAM	0729608397	✓		✓	

Mutito Kaliku Ward

PCRA Workshop Participants List

S/N	PARTICIPANTS NAME	DEPARTMENT/INSTITUTION		Female	Male
1.	SYENGO MWANZIA	WARD CLIMATE CHANGE PLANNING TEAM	0729592097		M
2.	SYLVESTER N WAMBUA	WARD CLIMATE CHANGE PLANNING TEAM	0729771240		M
3.	JACINTA M MATI	WARD CLIMATE CHANGE PLANNING TEAM	0727541693	F	
4.	PENINNAH MWONGELA	CBO	0720355323	F	
5.	FELISTUS MAKAU	CBO	0705095203	F	
6.	ANNASTACIA MAITHYA	WARD CLIMATE CHANGE PLANNING TEAM	0728040659	F	
7.	PETER KAVILU	WAPC	0723062315		M
8.	JONATHAN KANYI	ASST. CHIEF	0714093923		M
9.	SOPHIA MUTHEWA	WAPC	0720841841	F	
10.	JORUM M KAMULI	WAPC	0700349617		M
11.	SAMUEL MUNYASYA	WAPC	0724398638		M
12.	STELLA KATETHYA	WAPC	0703335638	F	
13.	LAWRENCE K JOSEPH	ASST. CHIEF	0727499107		M
14.	JACOB MUTUA	UCCS	0729451681		M
15.	JUBILANT NDINDA	UCCS	0101450850	F	
16.	KARIMI MAINA	KFS	0720395250		M
17.	CHARLES GITONGA	KFS	0722912765		M

18.	REV M NZUNI	WAPC	0722231447		M
19.	LILIAN KIMANZI	CHIEF	0724050398	F	
20.	JAMES N KITONYO	DACEO-MUTITO DISTRICT	0723979240		M
21.	TALIB K MUTONGI	ASST. CHIEF	0723653143		M
22.	SAMMY M MWENGEI	WAPC	0703911361		M
23.	CHRISTINE KILUNDU	ASST. CHIEF	0727013696	F	
24.	MULWA UVYALU	FARMER	0723673107		M
25.	JOSEPH M NTHENGE	DEPT. AGRICULTURE	0724467757		M
26.	CAXTON K KOTHO	WAPC	0719152828		M
27.	REBECCA MWANDIKA	WARD COMMITTEE	0714544747	F	
28.	RODAH KITHEKA	WARD COMMITTEE	0715246107	F	
29.	KATHENDU MASYA	WARD COMMITTEE CHAIRMAN	0704042602		M
30.	DARIUS N MUTHUI	ASST. CHIEF	0704733741		M

Mutha Ward

PCRA Workshop Participants Lists

NO	NAME OF PARTICIPANTS	DEPARTMENT/INSTITUTION	CONTACTS	GENDER	
				MALE	FEMALE
1.	RICHARD K.KAMWOLO	WARD CLIMATE CHANGE PLANNING TEAM	0723884212	X	
2.	JAMES R. MAWIOO	WARD CLIMATE CHANGE PLANNING TEAM	0710422606	X	
3.	RAPHAEL T. MWONGELA	COMMUNITY	0715867053	X	
4.	DOMINIC KINYUNZO	MIDP-CBO	0723659389	X	
5.	MUTUA MULANDI	ELDER	0724569737	X	
6.	JACKSON MUTUA	PASTOR	0717001355	X	
7.	FAITH MAKAU	MICNG	0724663785		X
8.	AGNES MWANZIA	WARD CLIMATE CHANGE PLANNING TEAM	07189559316		X
9.	MARY K. KAMOE	WARD CLIMATE CHANGE PLANNING TEAM	0716399316		X
10.	FEDELIS M. LINGILI	WARD CLIMATE CHANGE PLANNING TEAM	0725906726		X
11.	SOLOMON M.MUSYA	CHIEF MUTHA	0719861488	X	
12.	PAUL GEOFFREY	YOUTH REP	0718149582	X	
13.	NGWIO MULATYA	LOCAL ELDER	0718799821	X	
14.	KOKI MULU MUTOKAA	MUTHA	0727541753		X
15.	JOSEPH MAKAU	EDUCATION	0726305561	X	
16.	MUENI KYALO	MEMBER	0705279570		X
17.	ANDREW NGUI	PASTOR	0725650901	X	
18.	SOLOMON K. MULU	WATER	0725056125	X	
19.	MARY MASILA	BUSINESS LADY	0708408088		X

20.	JENIFFER N.MWATHE	LEADER	0702943329		X
21.	STEVE MUEMA	WARD ADMIN(MUTHA)	0710122237	X	
22.	PETER KILWENGE	PASTOR	07288490777	X	
23.	MICHAEL KAVEVA	CARITUS KITUI	0727416516	X	
24.	MARTIN M. KAMWANZA	ADS-E RAPPORTEUR	0728377940	X	
25.	ELIZABETH N. KAMAU	TEAM LEADER	0723075025		X
26.	ESTHER MAKALI	ASSISTANT LOGISTIC	0726167807		X
27.	ISAAC MASWILI	WARD CLIMATE CHANGE PLANNING TEAM	0711309039	X	
28.	JACKSON IVUTI	PASTOR	0717001335	X	
29.	MUTIA MULANDI	ELDER	N/A	X	
30.	DNIEL K. KOMU	MICNG	0172235407	X	
31.	STEPHEN K.GITAU	ACC	0720450995	X	
32.	HELEN N. MULI	LOGISTICIAN-ADS-E	0713270696		X

Mumoni Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Norah Kithome	13590833	0724546627		/		/
2.	John mutisya	20999335	0728024763		/		/
3.	Patrick m. kitiva	22194819	0711929562	/			/
4.	Raphael K. Mbiu	6220900	07216683263	/			/
5.	Paul kasimu	12960402	0757861625	/			/
6.	Peter nzioka	3714505	0713152652	/			/
7.	Michael kimanzi	11354237	0713166607	/			/
8.	Esther ngau	12719026	0700693744		/		/
9.	Angelina Muthanga	1177703	0729677855		/		/
10.	Grace k. ngui	0273706	0726919595		/		/
11.	Sabina mutia	317923	0704463687		/		/
12.	Kamene kingoo	11858138	0721613507		/		/
13.	Regina katilo	3672455	0713388472		/		/
14.	Benedict nguthu	3457132	0729142764	/			/
15.	James mutembei	27457688	0729013289	/		/	
16.	Benard muthombe	1737827	0711298213	/			/
17.	Nickson kimanzi	25550960	0727066766	/			/
18.	Pastor james mulwa	22023560	0727223582	/			/
19.	Richard mulwa	232877648	0724788053	/		/	
20.	Richard mungola	27799021	0714823257	/		/	
21.	Veronica muinde	2018201	072080854		/		/
22.	Jacinta nzioki	9276090	0722350548		/		/
23.	Edward mutual	1163965	0721689333	/			/
24.	Nzomo mitau	0273812	0723453500	/			/
25.	Laureen Tabitha	28875501	0791343886		/	/	
26.	Grace Kilonzo	11208507	0720404099		/		/

27.	Caroline musyoki	27310120	0700384635		/	/	
28.	Catherine kamanda	28531839	0721624336		/	/	
29.	Richard mwanzia	25946249	0714823257	/			/
30.	Paulina kalungu	12960402	0757819001		/	/	
31.	Esther kavinya	13178190	0700693744		/		/
32.	Virginia kilui	25817071	0717445610		/		/

Migwani Ward

PCRA Workshop Participants

Entry.	Name	Gender	Phone	Designation.
1.	Sam Mwendwa	M	0722491545	ADSE
2.	Lawrence Ikuku	M	0710503096	Chief
3.	Jackeline K. Vasi.	F	0721174153	Village Admin
4.	Grace Muli.	F	0710891869	Chief
5.	Kasyoki Kongo	M	0706477891	Chief
6.	Regina Mwendwa	F	0715746517	Village Admin
7.	Josephine Mathenge	F	0724079004	Chief
8.	Agnes Mwangangi	F	0725657455	
9.	Esther Ngeta	F	0725996527	CGOK
10.	Erastus Mwendwa	M	0713322490	
11.	Elijah M. Kavindu	M	0728387370	WCCPT
12.	Carole K. Kamote	F	0722929635	CGOK
13.	Stella M. David	F	0718143349	CGOK
14.	Rose Stephene.	F	0718413883	WCCPT
15.	Priscila Mutua	F	0748236544	WCCPT
16.	Francis Ilai	M	0723062274	WCCPT
17.	Stephen Kauna	M	0723087033	CGOK
18.	Lucia M. Katwa.	F	0715003156	WCCPT
19.	Carol M. Tito	F	0713049701	WCCPT
20.	Charles M. Musai	M	0724314401	WCCPT
21.	Patrick Kalinda	M	0712682303	SCWO
22.	Joseph Mue	M	0725396247	Chief
23.	Theophilus K. Kalundu	M	0712235433	Village Admin
24.	Jackson Mwendwa	M	0726755466	CGOK
25.	Rose Kavili	F	0705814736	CGOK
26.	James Ithoka	M	0726755466	MCA office.

Matinyani Ward

PCRA Workshop Participants Lists

SN.	names		Phone Number	gender
1	felix	mutinda	254722620483	M
2	mirriam	musee	254729680214	F
3	nyerere	kimuli	254720205082	M
4	mulaa	katuva	254114926992	M
5	mutethya	kali	254723105357	F
6	annastatcia	musyoka	254792114667	F
7	titus	muthui	254741786544	M
8	george	ndua	254720416904	M
9	stephene	mussembi	254720550352	M
10	onesmus	kasilu	254723485371	M
11	justus	musee	254723555437	M
12	annastatcia	ngome	254728427430	F
13	lorna	dennis	254716988932	F
14	gladys	kyalo	254700601837	F
15	john	boit	254721815646	M
16	anthony	kavai	254726150894	M
17	benjamin	kilonzo	254712876935	M
18	fredrick	mangwii	254722731067	M
19	stephene	mitau	254723724329	M
20	julius	kalinga	254726846602	M
21	stephen	nguta	254725297144	M
22	antony	kyalo	254111748976	M
23	hellen	zakayo	254722687408	F
24	clief	musyimi	254720804663	F
25	nelyen	mwema	254746069429	F
26	lena	wambua	254748917203	F
27	dennis	makau	254741364042	M
28	jane	kimanzi	254721619622	F
29	josephat	kiema	254748301330	M
30	carol	kimanzi	254715688385	F
30	everlyne	nthambi	254707523254	F
31	festus	kiswili	254721591107	M
32	Flora	mbui	254727030563	F
33	Rhoda	mati	254722286950	F
34	purity	mbithe	254799795120	F
35	japheth	mutuku	254729853241	M

Kyome Thaana Ward

PCRA Workshop Participants

Entry.	Name	Gender	Phone	Designation.
27.	Sam Mwendwa	M	0722491545	ADSE
28.	Lawrence Ikuku	M	0710503096	Chief
29.	Jackeline K. Vasi.	F	0721174153	Village Admin
30.	Grace Muli.	F	0710891869	Chief
31.	Kasyoki Kongo	M	0706477891	Chief
32.	Regina Mwendwa	F	0715746517	Village Admin
33.	Josephine Mathenge	F	0724079004	Chief
34.	Agnes Mwangangi	F	0725657455	
35.	Esther Ngeta	F	0725996527	CGOK
36.	Erastus Mwendwa	M	0713322490	
37.	Elijah M. Kavindu	M	0728387370	WCCPT
38.	Carole K. Kamote	F	0722929635	CGOK
39.	Stella M. David	F	0718143349	CGOK
40.	Rose Stephene.	F	0718413883	WCCPT
41.	Priscila Mutua	F	0748236544	WCCPT
42.	Francis Ilai	M	0723062274	WCCPT
43.	Stephen Kauna	M	0723087033	CGOK
44.	Lucia M. Katwa.	F	0715003156	WCCPT
45.	Carol M. Tito	F	0713049701	WCCPT
46.	Charles M. Musai	M	0724314401	WCCPT
47.	Patrick Kalinda	M	0712682303	SCWO
48.	Joseph Mue	M	0725396247	Chief
49.	Theophilus K. Kalundu	M	0712235433	Village Admin
50.	Jackson Mwendwa	M	0726755466	CGOK
51.	Rose Kavili	F	0705814736	CGOK
52.	James Ithoka	M	0726755466	MCA office.

Kwa Vonza Yatta Ward

PCRA Workshop Participants

NO.	NAME OF PARTICIPANT	INSTITUTION
1	ABEDNEGO MUNGUTI	CHIEF
2	SHARRIF MUKULU	CGoKTI
3	SAM MWENDWA	ADS-E
3	RISPER WAENI	CGoKTI

4	MERCY VUNDI	CGoKTI
5	EMMA LANYO	CGoKTI
6	FAITH KILUNGU	CGoKTI
7	JOSEPH KITHUKA	WATER
8	ALEX NGUMBI	CHIEF
9	ESTHER KASOA	CHIEF
10	PETER KIEMA	CHIEF
11	WILLIE MULWA	CHIEF
12	REV. CANON MWOVA	REV.
13	AGNES K. CHARLES	CHIEF
14	BONFACE MUNYAO	MEMBER
15	JOHN K. MAINGA	CHAIR WAPC
16	RICHARD MULI	CHAIR-WDDC
17	MATHIAS NZYAKA	WARD CLIAMTE CHANGE PLANNING TEAM
18	ALPHONSE KITAI	WARD CLIAMTE CHANGE PLANNING TEAM
19	KITILI KIVALI	WARD CLIAMTE CHANGE PLANNING TEAM
20	PHOEBE NDUNDA	WARD CLIAMTE CHANGE PLANNING TEAM
21	DAMARIS MWAMBUI	WARD CLIAMTE CHANGE PLANNING TEAM
22	MARY K. MUTUNGA	WARD CLIAMTE CHANGE PLANNING TEAM
23	AGNES MWANZIA	WARD CLIAMTE CHANGE PLANNING TEAM
24	ELIZABETH WAITA	WARD CLIAMTE CHANGE PLANNING TEAM
25	MARY MITAU	WARD CLIAMTE CHANGE PLANNING TEAM
26	CAROLINE ISIKA	WARD CLIAMTE CHANGE PLANNING TEAM
27	CHARLES M. KILIKU	WARD CLIAMTE CHANGE PLANNING TEAM
28	BENJAMIN MAKANDA	WARD CLIAMTE CHANGE PLANNING TEAM
29	ALICE K KIMEU	WARD REP.

Kiomo/Kyethani Ward

PCRA Workshop Participants

NO.	PARTICIPANT'S NAME	Department/ institution	Gender	
			M	F
1.	RICHARD TUTA	WARD ADMIN	M	

2.	HELLEN MWASYA	WARD CLIMATE CHANGE PLANNING TEAM		F
3.	KIANDA MUTUNGA	WARD CLIMATE CHANGE PLANNING TEAM	M	
4.	TABITHA MUTHUI	WARD CLIMATE CHANGE PLANNING TEAM		F
5.	DANIEL KITEME	WARD CLIMATE CHANGE PLANNING TEAM	M	
6.	MUVENGEI MWENDWA	WARD CLIMATE CHANGE PLANNING TEAM	M	
7.	DANIEL KATUKU NZOKA	WARD CLIMATE CHANGE PLANNING TEAM	M	
8.	STEPHEN MUNENE	KFS	M	
9.	DAVID MULYUNGI	WARD CLIMATE CHANGE PLANNING TEAM	M	
10.	FRANCIS MUSYIMI	CHIEF	M	
11.	MWINZI MUVENGEI	CHIEF	M	
12.	BENEDETTA WAMUA	A SST CHIEF		F
13.	DANIEL KYUMBU	ASST CHIEF	M	
NO.	PARTICIPANT'S NAME	Department/ institution	Gender	
			M	F
15.	PATRICK MULONZYA	WARD CLIMATE CHANGE PLANNING TEAM	M	
16.	KASEE KIUSYA	CHIEF	M	
17.	ESTHER KAVATA MUTHUI	CBO		F
18.	MWIKALI MUSILI MUOKA	CBO		F
19.	RICHARD MASUSU	COMMUNITY MEMBER	M	
20.	KIMANZI MUSYOKA	COMMUNITY MEMBER	M	
21.	EUNICE MUTEMI	COMMUNITY MEMBER		F
22.	JUSTUS MUTEMI	COMMUNITY MEMBER	M	
23.	KASUKULU MAVINDYA	COMMUNITY MEMBER	M	

24.	PETER MUKULU	COMMUNITY MEMBER	M	
25.	PETER KIMANZI	COMMUNITY MEMBER	M	
26.	STEPHEN MULI	ADSE	M	
27.	JENIFFER KANINI JUMA	ADSE		F
28.	EDWARD MAKAU	ADSE	M	
29.	JOHN MWENDWA	COMMUNITY MEMBER	M	
30.	EDITH KAVUTHA MUSILI	COMMUNITY MEMBER	M	

Kanyangi Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Boniface K. Malii	23814726	0723061996	/			/
2.	Elijah Mutua Miwa	262555135	0711423002	/		/	
3.	Felix Mutemi	20029115	0721952527	/			/
4.	John Masila	22585300	0710263479	/			/
5.	Joseph Kilonzi	10434143	0723796294	/			/
6.	Jackson Ngandi	28036352	0705765195	/		/	
7.	Rose M. Mati	21174567	0721519617		/		/
8.	Bostina Nzungo	7004046	0726909996		/		/
9.	Patrick Munyoki	20165258	0724537022	/			/
10.	Ann Mwanzia	24795158	0712669317		/		/
11.	Frida K. Kavindu	28912416	0724527953		/	/	
12.	Muema Kilonzo	6536829	0740718247	/			/
13.	Gabriel Ivui	11859397	0728467382	/			/
14.	Beatrice Makasi	7417907	0715314939		/		/
15.	Anna Musyoka	23811620	0706480880		/		/
16.	Kavula Daniel	25660471	0700444799		/		/
17.	Gilbert Wia	14457668	0727731339	/			/
18.	Meshack Musyoka	31582523	0710928566	/		/	
19.	Juliana K. Kyaliwa	36492682	0705739156		/	/	
20.	John Mwangangi	8990194	0706333007	/			/
21.	Shadrack Mwaniki	21859655	0724920773	/			/
22.	Felistus Mbaluka	32865227	0703094700		/	/	
23.	Marcos Kyunuve	13782292	0723943719	/			/
24.	Petronila Ngui	13095837	0721586286		/		/

25.	Benjamin kitavi	21735507	0721171185	/			/
26.	Jacob Mburu	22440823	0724607135	/			/
27.	Daniel Kiema	14698707	0758574243	/			/
28.	Nicodemus Mwanzia						
29.	Jacinta Museo						
30.	Cosmas Mwanzia						

Ikutha Ward

PCRA Workshop Participants

No	Participants name	Department/ Institution	Contact/Telephone	Gender			
				M <35>		F <35>	
1	MESHACKMUTUKU	KASAALA	0711994803	✓			
2	MILCAKYAMBIA	KYOANI SUB LOCATION	0729841311				✓
3	JUSTUS M. NGOMO	IKUTHA	0727725074		✓		
4	PETER M KIVELANGE	SAMBA SUB LOCATION	0727867291	✓			
5	GLADYS K MASINGU	WAPC	0729079758			✓	
6	NDUKU SARAH	NDILI SUB LOCATION	0703654718			✓	
7	RHODAHMWANDUKA	IKUTHA	0724448812			✓	
8	FRANCIS K KITUKU	IKUTHA	0724995861		✓		
9	CHARLES MUNYI	IKUTHA	0727498049		✓		
10	PATRICK MUSANGE	KASAALA	0727217793		✓		
11	MUTHAMIKYAMOTE	KASAALA	0711957003		✓		
12	IRENE KITAVI	KASAALA	0721255929				✓
13	NDINDA K KYALO	IKUTHA	0713894296				✓
14	JACKLINE JAMES	NDILI	0729876969			✓	
15	PAUL MUSEMBI	WAES IKUTHA	0725085795		✓		
16	SHARLET M MUSIMGI	WAPC	0710286850			✓	
17	DICKSON W MWAZIKU	WAPC	0728053315		✓		
18	BERNARD J KISENGESE	WAPC	0729072193		✓		
19	PHILIP K KATEE	IKUTHA	0704957441		✓		
20	JOHN N MUTUNGA	KASAALA	0711465591		✓		
21	DAVID MATUKU	NGAWUNI	0728113228		✓		
22	ENOCK M MUKWA	WAPC	0721593703		✓		
23	PHILIP M IVULI	IKUTHA	0701077512		✓		
24	MUTINDAMAUNDU	KASAALA	0721562207		✓		
25	SHADRACKMUTUA	ADS-E	0726348584	✓			
26	BENJAMIN M. NGUMBI	ADS-E	0729259734	✓			
27	WACHIRASHELMITH	ADS-E	0700429494			✓	
28	EUNICE MUSANGI	ADS-E	0716817526			✓	
29	ISAACMUTUKU	ADS-E	0704443650	✓			
30	KYALO J. MATUKU	WARD ADMINISTRATOR	0721593703		✓		

Ikanga/Kyatune Ward

PCRA Workshop Participants

Entry	Name	Gender	Phone	Category/Organization
1.	Sam Mwendwa	M	0722491545	ADSE
2.	Joycaster S. Mumina	F	0729224606	Ward Admin
3.	Michael O. Otieno	M	0720794770	ACC Ikanga/Kyatune
4.	Faith Kilungu	F	0714549242	ADSE
5.	Joshua Muasya	M	0729466234	Chief
6.	Onesmus Mutaula	M	0712184182	ASS. Chief
7.	Jeremiah Kalenga	F	0729672461	Village Admin
8.	David Mutua	M	0714936740	Committee Member
9.	Petronilla M. Musembi	F	0705666393	Committee Member
10.	Celestinne R. Matundu	F	0701821762	Village Admin
11.	Julius J. Masavi	M	0722856123	Village Admin
12.	Annastacia Mary Maleve	F	0741032827	MCA Rep
13.	Petronila Malii	F	0711494792	Committee Member
14.	William S. Katuva	M	0727162406	Village Admin
15.	Paul Kathenge	M	0722817197	RCSD.
16.	Japheth M. Ndunda	M	0724960027	Ward Clerk
17.	Rose Kivili	F	0705814736	ENVIRONMENT
18.	Jackson Mwendwa	M	0726755466	ENVIRONMENT
19.	Elizabeth Sumaili	F	0716012139	WAES
20.	John David Musyala	M	0728374706	Village Admin
21.	Mwamto Fadhili	M	0717190175	Committee Member
22.	John K. Mwangangi	M	0729596497	Chairperson
23.	Caroline M. Kivindy	F	0717227543	Member
24.	Frominah M. Mwati	F	0799202999	Member
25.	Patricia K. Joseph	F	0700874762	Member
26.	Angela Michael	F	0727563789	Village Admin
27.	Peter K. Mbuvi	M	0724330213	Member
28.	Joseph K. Kilatya	M	0722856123	Village Admin
29.	Shedrack Mutinda	M	0721248325	Village Admin

Chuluni Ward

PCRA Workshop Participants Lists

No.	Participant's Name	Mobile Number	Organization/Category
1	Sam Mwendwa	0722491545	ADSE
2	Jackson Mwendwa	0726755466	CGOK MENR
3	Marian John	0719707999	CGOK MENR

4	Dickson Mwilu	0768264488	WCCPT
5	Bernard M. Katee	0726820067	WCCPT
6	Blaise Malii	0706301673	CGOK-VA
7	Alexander Mwangangi	0713193172	CGOK-VA
8	Kimanga Kasyani	0727155205	FOR MCA
9	Gladys J Ndinda	0713639745	MCA
10	Lenah Muema	0702071276	WCCPT
11	Everlyn Sofa	0719311578	WCCPT
12	Linah Ndulu	0702170830	FOR MCA
13	Julius Ndambuki	0721828631	WCCPT
14	Isaiah M. Kieti	0728310653	VA-MPSMA
15	Christopher M. Mutambuki	0722816220	WCCPT
16	Titus Kakundi	0728390320	WCCPT
17	Mary K. Nyamai	0720464585	WCCPT
18	Kisalu Musili	0790136632	WCCPT
19	Jennifer Mulatya	0710902916	VA
20	Colleen Mweke	0711711011	WARD ADMIN
21	Miriam Monyi	0702929561	WARD ADMIN
22	Alex Kilunda	0720528275	W/A MPSMA
23	Jackson Maingi	0729466373	VA(GOK)

Kauwi Ward

PCRA Workshop Participants List

NO	PARTICIPANT NAMES	CONTACT	GENDER	
			M	F
1.	CHARLES M. KISEWA	0720715737	M	
2.	PHYLLIS N. MUTUKU	0722244770		F
3	FELISTUS MALOMBE	0713873566		F
4.	FESTUS K. KASAU	0729995722	M	
5.	PST. BENSON NGILA	0723229700	M	
6.	LUCY WAMBUI	0720762520		F
7.	NAOMI MUMO	0716801875		F
8.	JOSEPH M. VETELO	0718792333	M	
9.	TIMOTHY MBITI	0725549631	M	
10.	FELISTUS MUTHENGI	0727643201		F
11.	ROSALIA MUTHYA	0703300216		F
12.	NDUNDA MINDA	0717650420	M	
13.	DOUGLAS .M. ITHUKU	0720358065	M	

14.	REV.JOEL M.KIVOU	0727356155	M	
15.	JEREMIAH MUKWATE	0729625813	M	
16.	CHARITY SILA	0720981480		F
17.	GEORGE MUTUNGA	0728322889	M	
18.	SUMMERLEE MITAU	0721313008	M	
19.	FLORENCE OKOTH	0725012855		F
20.	JOHN MAINGA	0722250400	M	
21.	BENRODGERS MATUANGA	0712398369	M	
22.	ANNAH KITHEKA	0727720690		F
23.	CHRISTINE KONGO	0710665436		F
24.	EMMA LANYO	0723857360		F
25.	CHRISTOPHERKAPULA	0722461247	M	
26.	PATRICK MATUU WILSON	0721776201	M	
27.	PETER LIRU	0701651009	M	
28.	BENJAMIN .M. KIKUU	0725436339	M	
29.	JANE MWANIA	0727414172		F
30.	JAMES .M. MUEMA	0712511931	M	

Voo Kyamatu Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Fredrick wambua	23584215	0714362593	/			/
2.	Muluka Meshack	13783213	0723831299	/			/
3.	Kibwea mwendwa	27002639	0740714588	/			/
4.	Erickson mooki	11276785	0711954469	/			/
5.	Stephen mungami	25994552	0726347068	/		/	
6.	Rose kavutha	22118901	0727906164		/		/
7.	Lena kula	26687632	0707339399		/		/
8.	Benjamin kinyangu	24281555	0711239415	/			/
9.	Rachel mutisya	26415358	0726992189		/	/	
10.	Benson lucas	22717717	0700221584	/			/
11.	Philip mutaki	52607542	0726967524	/			/
12.	Leonard syengo	3355293	0722513529	/			
13.	Penina kula	4640098	0701874215		/		/
14.	Reuben kinyangu	1110388	0714269504	/			/
15.	Felistus mwende	28278901	0713901553		/	/	
16.	Augustus ndaka	29170205	0702610775	/		/	
17.	Juduth musango	34609215	0742006165		/	/	
18.	Zaituny nzomo	12961305	0798047444		/		/
19.	Patricia K musau	13595452	0725085763		/		/
20.	Elizabeth musyoki	20039274	0716461112		/		/
21.	Cosmas mutia	10878796	0759147584	/			/

22.	Philip kituku	1103223	0711880548	/			
23.	Kinyamasyo ngui	32710055	0700040483	/		/	
24.	Benson mutisya	9147584	0715641745	/			/
25.	Augustus musyoka	28577773	0718642936	/		/	
26.	Sam Mwendwa	26102500	0722491845	/		/	
27.	Jackson Mwendwa	27348084	0726755466	/		/	
28.	Marian John						

Township Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	James malonza	24156134	0707835236	/			/
2.	Jacqufolin peter	24707225	0727858316		/		/
3.	Danstan kilonzi	0272430	0722267092	/			/
4.	Fredrick kisuva	12720345	0726148399	/			/
5.	Paul kitemange	112726605	0728141147	/			/
6.	Elizabeth muinde	31375557	0700778968		/	/	
7.	Jeniffer David	11277044	0727730346		/		/
8.	Lucy mwendwa	23351291	0700519403		/		/
9.	Charles k. mungalu	13592058	0727633388	/			/
10.	Ben m kitheka	12718937	0722955120	/			/
11.	Edwin weke	33659761	0796561587	/		/	
12.	Johnstone kimanzi	30455965	0745050872	/		/	
13.	Beatrice muthui	2824886	0702019200		/	/	
14.	Geofrey mulwa	339990307	0700423458	/		/	
15.	Patricia willy	25226756	0726405735		/	/	
16.	Linda kimoli	9933932	0721248339		/		/
17.	Margaret mutisya	24630974	0769631267		/		/
18.	Esther mulandi	3150242``	0720276069		/		/
19.	Juan mwendwa	10752692	0720829447	/			/
20.	Agiki Hamis	0398088	0705769237	/			/
21.	Fredrick mwongela	29908020	0724371072	/		/	
22.	Fredrick Kisuva	12720345	0726148398	/			/
23.	danstan kilonzi	0272431	0722267092	/			/
24.	Mark ndete	21636244	0724796515	/			/
25.	Kainda mutie	160088262	07051207			/	
26.	Dominic malombe	7520578	0723867293	/			/
27.	Marian john	29473425	0719907999		/	/	
28.	Sam mwendwa	28102000	0722491519	/		/	
29.	Wilfrida moses	9402585	0719547554		/		/
30.							
31.							

Kyangwithya West Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Samuel musyoki	8364660	0724229843	/			/
2.	Japheth malombe	2087854	0720816830	/			/
3.	Wiliam kavuve	21217433	0723130602	/			/
4.	Winfred s katua	27040522	0720620786		/		/
5.	Onesmus kilului	0776693	0722108382	/			/
6.	Winfred munyoki	22836518	0715042620		/		/
7.	Mwendwa mbula	6742853	0722705937	/			/
8.	Timothy mutisya	27393897	0728398739	/			/
9.	Ngomwa mwanzia	21848955	0712760989	/			/
10.	Emmah mwalili	21874806	0713275207		/		/
11.	Brigid mutanda	3597992	0715792425		/		/
12.	Magaret malombe	02717983	0722351952		/		/
13.	Charles mutanda	25315393	0746547606	/			/
14.	Anthony mutambu	11639079	0722926001	/			/
15.	Calvin mwalavu	24617819	0722802253	/		/	
16.	Stephen munyao	25221538	0716128841	/		/	
17.	Lucas mutual	27196892	0712800830	/		/	
18.	David musyoka	29668942	0714098959	/		/	
19.	Mary kinguta	25929596	0713494682		/		/
20.	Teddy juma	27828088	0723938196	/		/	
21.	Josiphine malusi	3789892	0710932843		/		
22.	Miriam kimbu	282199166	0719817920		/	/	
23.	Breta Patrick	0271335	0710662238		/		/
24.	Joyce maithya	0273895	0727293700		/		/
25.	Nicolas Kilonzo	231447765	0725663669	/			/
26.	Uenice mutanda	2502871	0728783054		/		/
27.	David maina		072869911	/			/
28.	Sebastain sausi	14698065	0721817850	/			
29.	Francis musakui	36133158	0795021026	/		/	
30.	Benjamin Wambui	135919521	0723311231	/			/
31.							

Kyangwithya East Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35

1.	Dominic Kithusi	24616305	0720175541	/			/
2.	Godfrey kathea	32219961	0719432454	/		/	
3.	Fred mbua	6273440	072014863	/			/
4.	Telesia kite me	0574633	0710657679		/		/
5.	Robert muoi	11355493	0724455270	/			/
6.	Farida peter	32936608	0746130927		/	/	
7.	Christine muema	19502168	0725719668		/	/	
8.	Eve Michael	20749448	0715697361		/		/
9.	Francis muli	22744955	0719554079	/			/
10.	Farida mutisya	31043650	0710670695		/	/	
11.	Benjamin munyoki	24613527	0728599964	/		/	
12.	Jedida muema	22287373	0710913073		/		/
13.	Jeniffer mueni	20063908	0723107301		/		/
14.	Patrick muteta	35949986	0716015529	/			/
15.	John K. Malombe	9932789	0721580827	/			
16.	Alice kimeu	22380359	0720109452		/		/
17.	Stella Lilian	32379254	0708631694		/	/	
18.	Stanely nguve	11209943	0721679043	/			/
19.	Boniface mbuvi	0273554	0722254018	/			/
20.	Oscar Kitoo	14455559	0723536370	/			/
21.	Muli malombe	0572641	0723357834	/			/
22.	Maggie john	14457178	0726435069	/			/
23.	Nyamai vuvu	20318419	0728629501	/			/
24.	Patrick muthui	22628765	0790116310	/			/
25.	Petronilla Mutua	22421191	0721324572		/		/
26.	Cecelia musyoka	20633050	0724085393		/		/
27.	Rachel muthengi	247770519	0723054725		/		/
28.	Rosa muema	20833481	0712832845		/		/
29.	Monica Dominic	13094887	0710940143		/		/
30.	Pauline kamuiru	12960402	0757819001		/	/	
31.	Edwin muia	32705101	0741060821	/		/	
32.	Sara mutual	30245210	0727523410		/	/	

Kwa Mutonga Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Norah Kithome	13590833	0724546627		/		/
2.	John mutisya	20999335	0728024763		/		/
3.	Patrick m. kitiva	22194819	0711929562	/			/
4.	Raphael K. Mbiu	6220900	07216683263	/			/
5.	Paul kasimu	12960402	0757861625	/			/
6.	Peter nzioka	3714505	0713152652	/			/

7.	Michael kimanzi	11354237	0713166607	/			/
8.	Esther ngau	12719026	0700693744		/		/
9.	Angelina Muthanga	1177703	0729677855		/		/
10.	Grace k. ngui	0273706	0726919595		/		/
11.	Sabina mutia	317923	0704463687		/		/
12.	Kamene kingoo	11858138	0721613507		/		/
13.	Regina katilo	3672455	0713388472		/		/
14.	Benedict nguthu	3457132	0729142764	/			/
15.	James mutembei	27457688	0729013289	/		/	
16.	Benard muthombe	1737827	0711298213	/			/
17.	Nickson kimanzi	25550960	0727066766	/			/
18.	Pastor james mulwa	22023560	0727223582	/			/
19.	Richard mulwa	232877648	0724788053	/		/	
20.	Richard mungola	27799021	0714823257	/		/	
21.	Veronica muinde	2018201	072080854		/		/
22.	Jacinta nzioki	9276090	0722350548		/		/
23.	Edward mutual	1163965	0721689333	/			/
24.	Nzomo mitau	0273812	0723453500	/			/
25.	Laureen Tabitha	28875501	0791343886		/	/	
26.	Grace Kilonzo	11208507	0720404099		/		/
27.	Caroline musyoki	27310120	0700384635		/	/	
28.	Catherine kamanda	28531839	0721624336		/	/	
29.	Richard mwanzia	25946249	0714823257	/			/
30.	Paulina kalungu	12960402	0757819001		/	/	
31.	Esther kavinya	13178190	0700693744		/		/
32.	Virginia kilui	25817071	0717445610		/		/

Mulango Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Annah Ndambuki	21735999	0722845677		/		/
2.	Felistus john	12962834	0726560497		/		/
3.	Ziporah kiasa	20834929	0714650444		/		/
4.	Asael abel	27972412	0718583279	/		/	
5.	Denis mutual	22949832	0722216760	/			/
6.	Moses kikungu	2122123	0718902390	/			/
7.	Eunice Mutua	29665851	0718614881		/	/	
8.	Phoebe kamwaki	36691319	0794507176		/	/	
9.	Dorothy wambua	22468838	0727513076		/		/
10.	Kalungu nzau	23997060	0725705276	/			/
11.	Sherry Syokau	26693127	0768824485		/		/
12.	Rhoda nguthu	21947280	0718093741		/		/

13.	Musangi nzuki	10586876	0700337869		/		/
14.	Mary k. mwaniki	1150233	0713214301		/		/
15.	Robert masika	0270879	0113954913	/			/
16.	Jeremiah mwanza	29555451	0742080658	/		/	
17.	Kiema Muthanga	2572827	0717034162	/			/
18.	Wiclif Fundi	11640648	0728932869	/			/
19.	Nduku Kitheka	10878443	0726084736		/		/
20.	Godwin musembi	13444267	0727485959	/			/
21.	Griffin Kameta	24516619	0728129853	/			/
22.	Gabriel mutual	22947442	0720981029	/			/
23.	Gedion Mwangangi	22520993	0728506979	/			/
24.	Paul muthoki	6821823	0724005740	/			/
25.	David muasya	682486	0721668556	/			/
26.	Jacinta museo	29589215	0757334354		/		
27.	Nicodemus mwanzia	2491774	0723659311	/			/
28.	Kikungu Mutunga	2122123	0718902390	/			/
29.	Cosmas Mwanzia						

Miambani Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	Boniface K. Malii	23814726	0723061996	/			/
2.	Elijah Mutua Miwa	262555135	0711423002	/		/	
3.	Felix Mutemi	20029115	0721952527	/			/
4.	John Masila	22585300	0710263479	/			/
5.	Joseph Kilonzi	10434143	0723796294	/			/
6.	Jackson Ngandi	28036352	0705765195	/		/	
7.	Rose M. Mati	21174567	0721519617		/		/
8.	Bostina Nzungo	7004046	0726909996		/		/
9.	Patrick Munyoki	20165258	0724537022	/			/
10.	Ann Mwanzia	24795158	0712669317		/		/
11.	Frida K. Kavindu	28912416	0724527953		/	/	
12.	Muema Kilonzo	6536829	0740718247	/			/
13.	Gabriel Ivui	11859397	0728467382	/			/
14.	Beatrice Makasi	7417907	0715314939		/		/
15.	Anna Musyoka	23811620	0706480880		/		/
16.	Kavula Daniel	25660471	0700444799		/		/
17.	Gilbert Wia	14457668	0727731339	/			/
18.	Meshack Musyoka	31582523	0710928566	/		/	
19.	Juliana K. Kyaliwa	36492682	0705739156		/	/	
20.	John Mwangangi	8990194	0706333007	/			/
21.	Shadrack Mwaniki	21859655	0724920773	/			/

22.	Felistus Mbaluka	32865227	0703094700		/	/	
23.	Marcos Kyunuve	13782292	0723943719	/			/
24.	Petronila Ngui	13095837	0721586286		/		/
25.	Benjamin kitavi	21735507	0721171185	/			/
26.	Jacob Mburu	22440823	0724607135	/			/
27.	Daniel Kiema	14698707	0758574243	/			/
28.	Nicodemus Mwanzia						
29.	Jacinta Museo						
30.	Cosmas Mwanzia						

Endau Malalani Ward

PCRA Workshop Participants

S/N	NAME	ID	Mobile	GENDER		AGE	
				M	F	Below 35	Above 35
1.	William mwanzia	1666921	0726128705	/			/
2.	Ezekiel mweu	3715332	0714005755	/			/
3.	Aaron s. Munyu	6814662	0724987934	/			/
4.	Geofrey malombe	371294	0720343924	/			/
5.	Joshua K. Makau	9073802	0712378501	/			/
6.	Malii Kiema	12644853	0716541176	/			/
7.	Esther Nzumbi	11276940	0702722418		/		/
8.	Agnes B. muli	3693886	0721384939		/		/
9.	Jacob Muthembwa	13592117	0726437389	/			/
10.	Michael Mbuvi	11277426	0722943634	/			/
11.	Elijah M. Kisilu	1737648	0741657140	/			/
12.	Joel Muthui	29419964	0715651720	/		/	
13.	Mwikali Kyule	14458548	0710537762		/		/
14.	Paul Musili	31721135	0712550899	/		/	
15.	Cynthia Sera	22405182	0704152758		/	/	
16.	Paul Mwaniki	27310271	0729676541	/		/	
17.	Sammy Mulimui	27937112	0719346977	/		/	
18.	Angeline Musilu	26382197	0711888108		/		/
19.	Mulwa Katee	10095930	0745242740	/			/
20.	Daniel M. Kisovi	12631736	0700224507	/			/
21.	Rev. Nicholas Musili	21888417	0723805305	/			/
22.	David M. Wambua	20631400	0701815454	/			/
23.	Raphael M. Kimanzi	24343777	0719248958	/			/
24.	Nzilu Syengo	11050028	0741046237	/			/
25.	Nduku Vulunza	32459816	0718526086		/	/	
26.	Chris Wambua	36080188	079154817	/		/	
27.	Dominic Muasya	23239569	0795364061	/			/
28.	Priscah Mutie	21930747	0725046475		/		/
29.	David M. Nzomo	24949787	0110577113	/			/

30.	Daniel M. Kisovi	12631736	0700224507	/			/
31.	Nicodemus Mwanzia						
32.	Jacinta Museo Ngui						
33.	Cosmas Mwanzia Musee						

Annex 5: Validation workshop participants

Cell Phone: 0702615888/0702615444
0731717100
Email: KituiCounty@kenya.go.ke

COUNTY GOVERNMENT OF KITUI



Tanathi Works Development
Agency Building,
Ground Floor,
P.O. Box 33 - 90200
Kitui

MINISTRY OF ENERGY, ENVIRONMENT, CLIMATE CHANGE, FORESTRY, MINERAL AND NATURAL RESOURCES

ENVIRONMENT, CLIMATE CHANGE AND FORESTRY DEPARTMENT

ATTENDANCE FORM

FINANCING LOCALLY-LED CLIMATE ACTION (FLLCA) PROGRAM

DATE:

30/05/2023 → PCRA Report X CCA's validation exercise
P2CMIER Report - Kitui Town

S/No.	Name	ID No	Organization	Mobile number	Gender		Living with Disability Yes/No	Age			Sign
					Male	Female		18-35	35-60	Above 60	
1.	David Jai	2417817	Ecok	072736458	✓				✓		
2.	Dominic Mubayi	21036403	Climate	072445466	✓				✓		
3.	Neel John	39712435	CTOAT	0719707990		✓		✓			
4.	Paul Lyetic Mwangi	18434454	ADSE	0722284550		✓			✓		
5.	Russell Ndaga Ngweni	2125026	Govment	0722842430		✓			✓		
6.	Amrah K. Mwangi	33372366	Chk. Matter	0111401354		✓		✓			
7.	Fredrick Klen	26494592	MECEENML	0722224355		✓		✓			
8.	Max Muliya	31093591	GREEN CARE	0734433443	✓				✓		
9.	Lennox Mutia	31997536	GREEN CARE ASSOCIATION.	0728426570	✓		NO	✓			

[illegible]

Annex 6: Validation workshop group photo

