THE REPUBLIC OF KENYA
THE COUNTY GOVERNMENT OF NYAMIRA

HIS EXCELLENCE GOVERNOR
AMOS KIMWOMI NYARIBO,

I assent

A Policy of the County Government to Enhance Integrated Climate Change Adaptive and Mitigative Actions for Sustainable Economic and Socio-Ecological Development

Governor

21 / 1 /2021
Date Month

21 JAN 2021

THE NYAMIRA COUNTY CLIMATE CHANGE POLICY, 2020

I certify that this printed impression is a true copy of the Policy passed by the County Assembly, on the **29th October, 2020 in conformity with the issues raised in the Governor's memorandum.**

_____ _____**/January/2021**

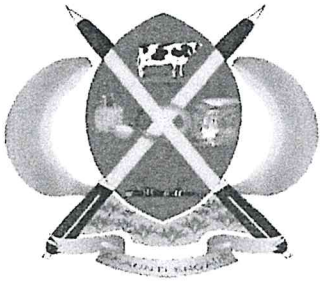
Clerk of the County Assembly

Presented for assent in accordance with the provisions of the constitution of Kenya and the County Government Act, 2012 on the.....at the hour of.....

_____

The Speaker of the County Assembly

COUNTY GOVERNMENT OF NYAMIRA



NYAMIRA COUNTY CLIMATE CHANGE POLICY

JANUARY 2021

Vision

An Outstanding Climate Resilient and Sustainable Agro-industrialized County

Mission Statement

To Enhance Integrated Climate Change Adaptive and Mitigative Actions for Sustainable Economic and Socio-Ecological Development.

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EXECUTIVE SUMMARY

Nyamira County's economy is highly dependent on Agriculture as a natural resource base, making it highly vulnerable to Climate variability and change. This is exhibited through rising temperatures, and changing rainfall patterns resulting in increased frequency and intensity of extreme weather events such as droughts and flooding hence threatening sustainability of the County's development. In its fulfillment of safeguarding sustainable development, the County Government of Nyamira has developed this County Climate Change Policy to provide a clear and concise articulation of overall response priorities to climate variability and change.

Nyamira County has shown commitment to protect the Climate system for the benefit of the present and future generations by supporting the National Climate Change Policy Framework and international treaties and conventions such as the United Nations Framework Convention on Climate Change (UNFCCC) process; the Kyoto Protocol in 2005, Climate Change Strategy for the Nairobi Convention (UNEP 2016); and contributing to Climate Change initiatives.

The Policy's provides an inter-link between sustainable national development and Climate Change that is critical since climate change adversely impacts key sectors that are important to the economy and society: Environment, Water and Forestry; Agriculture, Livestock and Fisheries; Trade; Extractive industries; Energy; Physical Infrastructure; Tourism and Health.

CHAPTER ONE

INTRODUCTION AND BACKGROUND

Position and Size

Nyamira County is one of the forty seven counties in Kenya. The County borders Homabay County to the north, Kisii County to the west, Bomet County to the south east and Kericho County to the

east. The County covers an area of 899.4km2. It lies between latitude 0□ 30'and 0□ 45'South and between longitude 34□ 45'and 35□ 00'East.

The County is a member of Lake Region Economic Bloc (LREB). Under the overall county vision of an outstanding agro-industrialized county with high quality of life for residents; the county Climate Change policy vision of "An outstanding climate resilient and sustainable agro-industrialized county", fits well within the county vision. The policy mission of the county Climate

Change policy is to enhance integrated Climate Change adaptive and mitigative actions for sustainable economic and socio-ecological development.

1.2 Physiographic and Natural Conditions

1.2.1 Physical and Topographic Features

The county's topography is mostly hilly *"Gusii highlands"*. The Kiabonyoru, Nyabisimba, Nkoora, Kemasare hills and the Manga ridge are the most predominant features in the county. The two topographic zones in the county lie between 1,250 m and 2,100 m above the sea level. The low zones comprise of swampy, wetlands and valley bottoms while the upper zones are dominated by the hills. The high altitude has enabled the growth of tea which is the major cash crop and income earner in the county.

The permanent rivers and streams found in the county include Sondu, Eaka, Kijauri, Kemera, Charachani, Gucha (Kuja), Bisembe, Mogonga, Ramasha and Egesagane. All these rivers and several streams found in the county drain their water into Lake Victoria. River Eaka is important to Nyamira residents as this is where the intake of Nyamira water supply is located. On the other

hand river Sondu has a lot of potential for hydro-electricity power generation which if harnessed can greatly contribute towards the county's economic development and poverty reduction efforts. The levels of these rivers have been declining over years due to environmental degradation especially improper farming methods and planting of blue gum trees in the catchments areas and along river banks.

The major types of soil found in the county are red volcanic (Nitosols) which are deep, fertile and well-drained accounting for 75 per cent while the remaining 25 per cent are those found in the valley bottoms and swampy areas suitable for brick making. Though the red volcanic soils are good for farming, they make construction and road maintenance expensive.

1.3 Administrative and Political Units

1.3.1 Administrative subdivision

Administratively, Nyamira County is divided into 5 sub-counties namely Nyamira South, Nyamira North, Borabu, Manga and Masaba North. It is also further divided into 20 wards. The newly created Nyamira municipality which covers Township ward, and parts of Bomwagamo, Nyamaiya, Kiabonyoru, Bogichora, Bosamaro and Bonyamatuta wards. The county has 14 divisions with 38 locations and 90 sub-locations. Borabu sub-county is the largest with an area of 248.3km^2 followed by Nyamira North sub-county with an area of 219.3km^2 while Manga sub-county is the smallest with an area of 111.3 km^2.

Table 1: Administrative and Political Units

County Statistical Abstract KNBS 2018

Sub-county	Wards	Constituency	No. of Divisions	No. of locations.	No. of sub-locations.
Nyamira South.	5	West Mugirango	2	7	19
Nyamira North.	5	North Mugirango	3	10	19
Borabu.	4	Borabu	3	5	11
Manga.	3	Kitutu Masaba	3	7	22
Masaba North.	3		3	9	19
TOTAL.	20	4	14	38	90

1.3.2 Population and Size

According to the 2019 Kenya National Housing and Population Census (KNHPC), the population of Nyamira County is 605,576 persons having increased from 598,252 persons in the 2009 Census. The number of women being 314,656 and the number of men being 290,907.this number is distributed across the 5 administrative boundaries and further within towns, centers and villages. The population has seen a growth of 1.22% in the last 10 years.

The table below shows the population of Men and women in the various Sub counties

Table 2: Population data

Source: KNBS 2019 Census

Sub-county	Land Area (km2)	Men	Women	Intersex	Total
Nyamira South.	181.5	76,105	82,965	3	159,073
Nyamira North.	215.7	80,314	86,947	6	167,267
Borabu.	246.9	36,736	36,431	0	73,167
Manga.	111.5	44,868	49,339	2	94,209
Masaba North.	141.7	52,884	58,974	2	111,860
TOTAL.	897.3	290,907	314,656	13	605,576

CHAPTER TWO

SITUATIONAL ANALYSIS OF CLIMATE CHANGE

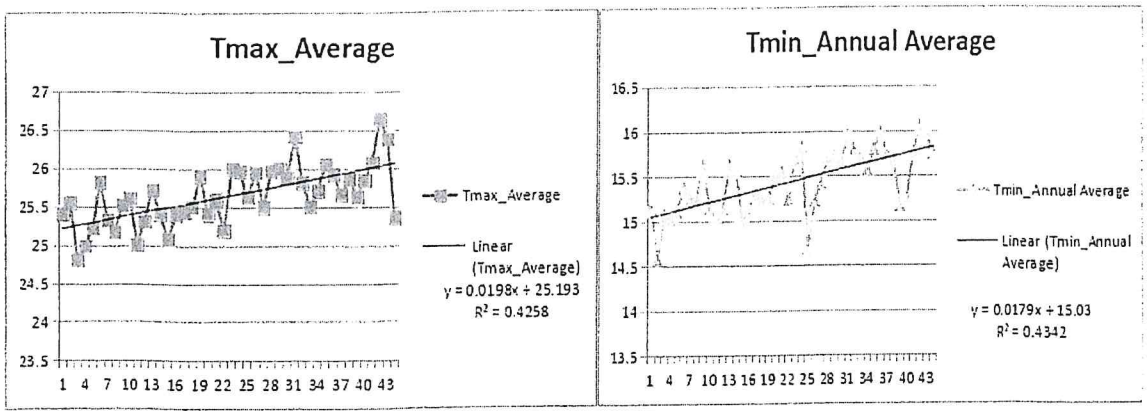
2.1 Evidence of Climate Change in Nyamira County

Evidence of climate change is based on statistical analysis of trends in historical records of temperature, rainfall, sea level rise, mountain glacier coverage and climate extremes.

In Kenya, the Kenya Meteorological Department (KMD) has been providing data of temperature and rainfall changes for the last 50 years. Analysis of both minimum and maximum temperatures based on standard seasons reveals the rise in temperature. From the early 1960s, Kenya has experienced increasing temperature trends over most areas. According to KMD Kisii station, which covers both Kisii and Nyamira Counties the trends in both minimum (night/early morning) and maximum (day time) temperatures depict a general warming (increasing) trend with time. However, the increase in minimum temperatures is steeper than in maximum temperatures. The implication of the steeper increase in minimum temperature and less steeper in maximum temperature is a reduction in the diurnal temperature range (the difference between the maximum and minimum temperatures).

The graph below shows the maximum and minimum temperatures for Nyamira County for the past 50 years

Figure 1: Maximum and Minimum temperatures

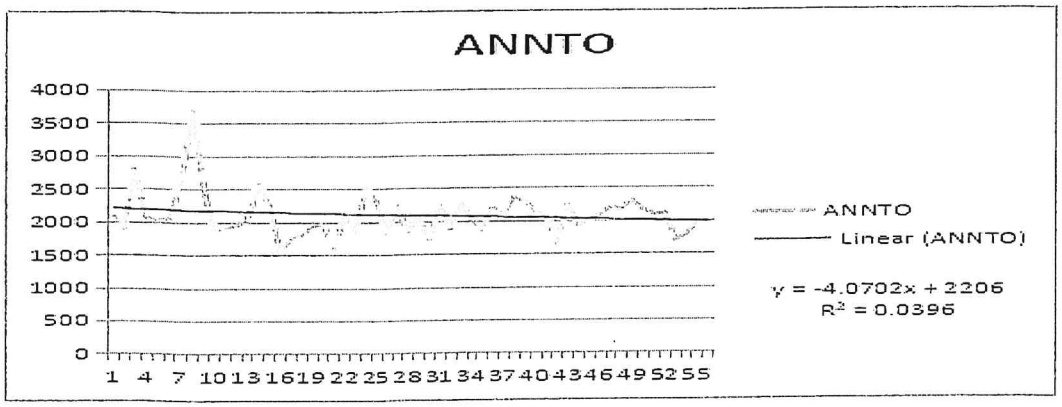


Source: County Meteorological Department 2020

Further, Daily and monthly rainfall records are used to determine trends that have characterized rainfall since the early 1960's. The series of annual and seasonal rainfall for the main seasons indicate that the amount of rainfall to the annual totals over most parts of the county apart from the March - May rainfall season, shows an increasing trend while the rest over time shows a decreasing trend.

The graph below shows the Annual rainfall totals (ANNTO) for the last 50 years

Figure 2 :Annual Rainfall



Source: County Meteorological Department 2020

Climate Change has affected the county's trimodal rainfall pattern. It is now difficult to predict the onset of the short and long rains.

Further, there have been widespread changes in extreme temperatures in the county. Hot weather conditions in the day have led to serious decline in water levels in running springs and rivers like Sondu Miriu.

2.2 Impacts of Climate Change in the County

Climate change has already had observable effects on agriculture, ecosystems, biodiversity, road networks, tourism, energy and human health in the County.The adverse impacts of climate change have the potential to significantly inhibit the sustainable development of the County in key priority areas:

(i) **Environment, Water and Forestry**

Natural ecosystems have been adversely affected by climate change, including through variations of temperature and precipitation. The decline in environmental quality brings social and economic hardship to the people who depend on these ecosystems, and increases contestation and the likelihood of conflict over diminishing natural resources. It also creates a window for invasive species, new pests and diseases.

The county has 1,945 shallow wells, 2,521 protected springs, 694 dams as well as over 3,301 unprotected springs and 7 permanent rivers. Depletion of water quality and quantity through the deforestation and destruction of catchments and underground aquifers has had consequences. However, increased scarcity of water resources during the dry season is a core concern, making resource management more difficult and increasing the likelihood of conflict. Water scarcity will affect energy production and agricultural systems. Potential impacts include declining forest coverage, reduced water quality and quantity for domestic and industrial use, high water pricing and increases in water borne diseases.

Forests are highly sensitive to climate change .The county has no gazetted forest currently. However, there are 10 non-gazetted forests covering 256.2ha in the county. Forest degradation and deforestation, exacerbated by climate change, have led to reduced canopy cover and altered biodiversity composition. Biodiversity supplies important sources of food and income, and provides environmental services in the county. There has also been encroachment, poaching of biological genetic resources; invasive species; pests and diseases; further, there have been Floods and prolonged dry spell in the County. Attributed to Climate Change, degradation of riparian areas, changing weather patterns, deforestation and destruction of water reservoirs including dams and wetlands.This affects the ecosystem services that forests provide, such as reducing soil erosion, natural pest control, preserving water availability and maintaining water quality. Deforestation and forest degradation also increase GHG emissions.

(ii) **Agriculture**

Agriculture forms the backbone of Nyamira County's economy. The county is endowed with natural conditions that favors the growth of food crops, industrial crops and horticultural crops. Nyamira County has high irrigation potential due to its good drainage by rivers: Gucha, Nyambiri, Nyabomite, Charachani, and Eyaka, good underground water and high yielding springs spread

across the county. The average farm size ranges from 0.816 - 22.55ANN ha for small- and large-scale farming.

A majority of the population of the population are dependent on rain-fed subsistence agriculture, and are therefore significantly impacted by declining agricultural production due to unpredictable rainfall, reduced soil productivity through erosion and increased evapo-transpiration.

Further, Livestock management systems in the county, rely extensively on natural systems such as rain fed pasture. These livestock systems are very climate sensitive, being vulnerable to the impacts of changing and irregular rainfall patterns and droughts. Combined effects of these factors have a negative impact on the socio-economic status and livelihoods of the fisher folk.

(iii) **Trade**

A robust, diversified and climate resilient trade sector is imperative for Kenya to attain low carbon climate resilient development. The trade sector depends on products and services developed by other sectors of the economy, and therefore any adverse climate change impacts of such sectors, will likely impact trade. The agriculture, manufacturing and transportation sectors, which are key cogs for internal and international trade, are highly vulnerable to climate variability and extreme weather events. A successful trade sector will therefore require building resilience across the economy of the County.

(iv) **Physical Infrastructure**

An improved and expanded physical infrastructure is an important and necessary enabler of socio-economic development. Climate Change impacts have the potential to compromise infrastructure design, function and performance across a range of settings. This is witnessed through occurrence of riverine flooding and landslides which cause significant damage to physical infrastructure such as roads, bridges, water pipelines and power lines, resulting in widespread disruption.

Climate change has led to Destruction of infrastructure including roads and bridges during storms, Extreme weather conditions such as storms interrupt construction and maintenance of roads, Asphalt degradation and shorter replacement cycles due to storm waters, Blocked drainage systems, culverts due to heavy rains, Encroachment on road reserves leading to destruction and blockage of road drainages and Open quarries which need to be rehabilitated or secured

The target is increased investments in the road network and ater and sanitation services; rail, sea and air transport; and energy supply services. One approach is to climate proof infrastructure, which refers to the integration of climate change risks and opportunities in the design, operation and management of infrastructure. Another consideration is the promotion of investment in infrastructure that supports transformation to a low carbon economy while creating employment and reducing poverty.

(v) Energy

Energy production and utilisation has a close connection with climate change. Biomass energy, such as charcoal and firewood, continues to be used in the county's households. Security in access to biomass energy is important for building resilience. However, it is equally critical to ensure efficienct production and use of this biomass energy, including through sustainable plantation forests, sustainable tree harvesting techniques for commercial charcoal production, and efficient charcoal kilns and cook stoves. Energy production and utilization has a close connection with Climate Change. Biomass energy, such as charcoal and firewood, continues to be used in the County's urban and rural households.The county residents are over reliant on wood fuel as main source of energy. Search for wood fuel has affected the existing forest cover. The use of lanterns for lighting have contributed to extensive use of paraffin which is a non-renewable energy thus generation of carbon dioxide into the atmosphere.

(vii) Tourism

Nyamira County has no national parks or game reserves however there are potential tourist attraction sites like the hilly nature referred as *"Gusii highlands"* with a series of ridges. The Manga Orotuba ridge, Kiabonyoru, Nyabisimba, Nkoora, Kiomachingi and Kemasare hills, Keera,

Eaka falls are the most predominant features in the county which can be tapped as tourist attractions. Also the Manga escarpment, whose scenery is quite unique, can be marketed as a tourist attraction site. Primates and a number of bird species have found a habitation in forest conservation sites maintained by Tea estates these can be harnessed as tourist attraction sites.

Figure 3: Manga Ridge

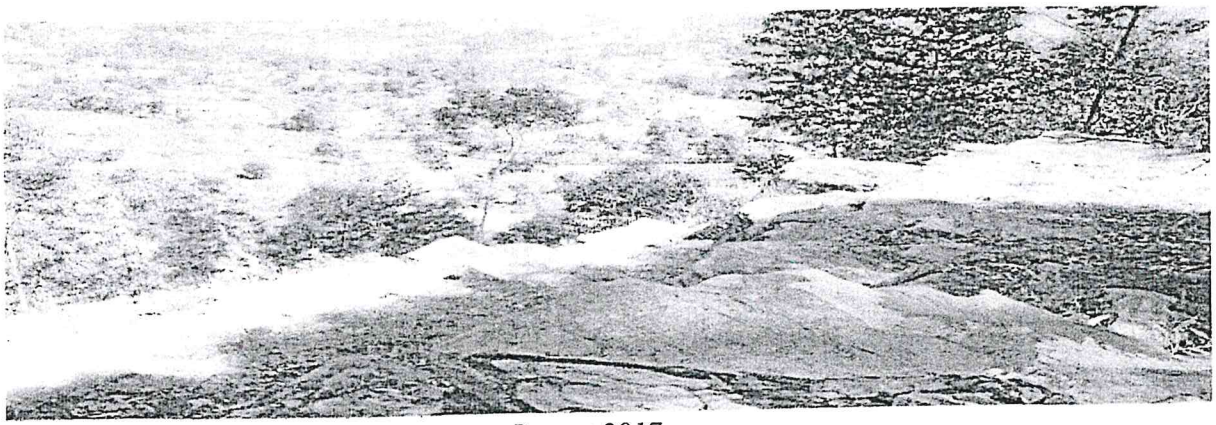


Photo of Manga ridge Annual Progress Report 2017

Due to climate change there is a Lack of defined wildlife habitat, Invasive plant and animal species, Decline in species numbers e.g. of monkeys and birds due to encroachment. The County provides mitigation measures such as Rehabilitation of degraded areas by planting trees and building enclosures to allow regrowth, Promotion of indigenous and bamboo trees in the county and Manual control of invasive species.

(viii) Health

Human health has been affected adversely by climate change impacts in the County. The county has a high degree of risk from climate-sensitive infectious diseases such as food or waterborne diseases like diarrhoea, hepatitis A, and typhoid fever. Vector-borne diseases such as malaria, dengue fever, and Rift Valley Fever are also common. High temperatures and intense rainfall,

which are some of the effects of climate change, are known to be critical factors in initiating malaria epidemics in the county.

CHAPTER 3.
GOAL, OBJECTIVES AND GUIDING PRINCIPLES

3.1 Goal

The goal of this Policy is to enhance adaptive capacity and resilience to Climate Change, promote low carbon development for the sustainable development of Nyamira County and lay strategies for limiting the magnitude of future climate change.

3.2 Objectives

The objectives of this Policy are to:

(i) Establish and maintain an effective and efficient institutional framework to mainstream climate change responses across relevant sectors and into integrated planning, budgeting, decision-making and implementation, at both the national and county levels.

(ii) Reduce vulnerability to the impacts of climate change by building adaptive capacity, enhancing climate change resilience and strengthening capacities for disaster risk reduction.

(iii) Incentivize private sector involvement in building climate change resilience and engaging in low carbon development opportunities.

(iv) Mainstream climate change issues into county development plans and programs.

(v) Facilitate widespread public awareness, participation, ownership and oversight of the County's climate change response efforts .

(vi) Ensure the capacity building of climate change experts in the County.

(vii) Ensure effective and transparent utilisation of the resources set aside for climate change mitigation and deterrence.

(viii) Adopt intergenerational, special needs and gender mainstreaming approaches across all aspects of the County's climate change response.

(ix) Provide the policy framework to facilitate effective implementation of regularly updated and scientifically informed Climate Change Action Plans.

(x) To improve planning, coordination and management for better governance of the county Climate Change sector.

(xi) Enhance research and use of science and technology in policy decisions and sustainable management of resources.

3.3 Guiding Principles

Common but differentiated responsibilities and respective capabilities

Given negligible historical responsibilities for causing local Climate Change and limited capability to mitigate Climate Change and adapt to its impacts in light of its state of development.

Partnership

Building partnership, collaborations and synergies among various stakeholders from the public, government, non-governmental organizations, civil society and private sector, as well as vulnerable communities and populations including women and youth will be prioritized to achieve effective implementation of this policy

Sustainable Development

This principle recognizes that the development initiatives in the county should be such that the residents fully benefit economically by taking into account environmental and social needs that build human capabilities, improves people welling and enhances quality of life yet do not compromise the future livelihoods of the citizenry.

Right to a clean and healthy environment

Under the 2010 Constitution every person in Nyamira County has a right to a clean and healthy environment and a duty to safeguard and enhance the environment.

Sectoral relations

Embracing a system of consultation, negotiation and consensus building in government administration between and within the national and county governments.

Equity and social inclusion

Ensuring a fair and equitable allocation of effort and cost, as well as ploughing back of benefits in the context of the need to address disproportionate vulnerabilities, responsibilities, capabilities, disparities, and inter– and infra-generational equity.

Special needs and circumstances

The special needs and circumstances of people and geographic areas that are particularly vulnerable to the adverse effects of Climate Change will be prioritized. This includes, but is not limited to, vulnerable groups such as women, children, the elderly and persons living with disabilities.

Avoiding Mal-adaptation

The Climate Change response will be conducted in such a way so as to avoid maladaptation, defined by the UNFCCC as any changes in natural or human systems that inadvertently increase vulnerability to climatic stimuli.

Integrity and Transparency

The mobilisation and utilisation of financial resources shall be undertaken with integrity and transparency in order to eliminate corruption and achieve optimal results in Climate Change responses.

Cost effectiveness

The selection of Climate Change interventions will take into account available alternatives in order to identify appropriate choices that provide most benefit to society at least cost.

CHAPTER FOUR

4.0 CLIMATE CHANGE GOVERNANCE

Functioning governance structures, legal and policy instruments as well as institutional capacity for judicious implementation and enforcement are prerequisite for effective climate change governance.

4.1 LEGISLATIVE FRAMEWORK

The County requires appropriately designed legislative and policy frameworks that provide a regulatory architecture comprising the vital components of climate change governance. It is imperative to ensure compliance with the constitutional framework of public administration. It therefore requires the County government to undertake various core interventions, including the enactment of overarching climate change legislation to provide the framework for coordinated implementation of climate change responses and action plans.

The eventual climate change regulatory framework must observe the requirements for gender equality mandated by the 2010 Constitution. The adoption of a gender mainstreaming approach involves assessing the implications for women and men of any planned climate change action, including legislation, policies or programmes, in any area and at all government levels to achieve gender equality. It is also important that the policy and law account for the youth when planning and executing climate change responses because the youth represent a crossover between the present and future generations, and play a critical role in socio-economic development. The overarching climate change legislation and amendments to sectoral laws must therefore carve out specific roles and opportunities for the youth to participate in decision-making in climate change governance and pursue opportunities that arise through climate change actions.

Policy Statements

The County Government will:

1. Ensure review of all laws to streamline it with the provisions of the Constitution and facilitate implementation of the climate change policy.

2. Ensure harmonisation of laws with the policy and their implementation.

4. 2 HUMAN RESOURCES DEVELOPMENTAND CAPACITY BUILDING

There is inadequate technical capacities, monitoring infrastructure and inadequate trained staff in climate change. Building a cadre of professionals in climate change resilience is an investment for the future that requires immediate and long term approach. Whereas short term training and targeted courses are important for skills and managerial development, the long term training in specific areas enhances specialisation.

Policy Statements

The County Government will:

1. Support and promote the development of expertise in government agencies, the private sector and civil society organisations in various areas of environmental management through targeted short and long term courses and awareness creation.

2. Develop a wide range of training opportunities and modules in the field of climate change for different levels of staff in the County Government taking into account gender equity and emerging climate change issues.

3. Enhance and promote networking between centres of excellence in climate change at the counties, national, regional and international levels.

4.3 PARTNERSHIPS AND STAKEHOLDER INVOLVEMENT

Partnerships, by their very nature, represent a sustained commitment to move forward together to reach a higher common objective. To ensure an inclusive partnership and stakeholder involvement in decision making, ways must be found to

(a) ensure wide representation from across the private sector and civil society organisations and

(b) ensure that community voices are brought forward. This is because private sector, civil society actors and communities play a central role in environmental conservation and management.

These non-state actors have the advantage of being more independent of political pressures than County governmental formal management agencies. Thus they are well positioned to play an important leading role in agenda setting and policy development processes. For example, NGOs can mediate in the resolution of resource conflicts at the local level by bringing considerable expertise and resources. At the national level, they can inform and shape the public debate on environmental protection issues and challenges.

Participation of these non-state actors can be encouraged through provision of incentives to enhance investment in the sector as well as through mechanisms that provide a framework for building partnerships between these entities and the County Government.

Policy Statements

The County Government will:

1. Develop and implement a Strategy on Partnerships and Stakeholder Involvement on climate change.

2. Promote investments in environmental efforts and programmes by providing appropriate fiscal and economic incentives.

3. Develop and implement mechanisms for conflict resolution and management in the conservation of environment and natural resources.

4.4 COUNTIES, NATIONAL AND INTERNATIONAL COOPERATION

Climate change solutions require cooperation. Significant benefits can be realised and effectiveness increased through cooperation with other Counties, the national government and international bodies.

Policy Statements

The County Government will:

1. Establish and strengthen coordination between counties, national government and international bodies in implementing climate change solutions.

2. Mobilise resources to support climate change policies.

4.5 MAINSTREAMING CLIMATE CHANGE

Given that climate change affects fundamental economic, social and environmental aspects of development, and an effective cross-sectoral climate change response must place mainstreaming at the core of climate change response efforts.

A climate change mainstreaming approach will provide the various coordinating and sectoral agencies of the county governments with the tools to effectively respond to the complex challenges of climate change. In this context, mainstreaming implies the integration of climate change policy responses into national, county and sectoral planning, budgeting and management processes.

The County governments are required by law to prepare and implement County Integrated Development Plans, through which climate change actions can be mainstreamed for subsequent implementation by county sectors. A mechanism facilitating linkages and exchange of climate change information and data with planning processes across all levels of government is an important element of the mainstreaming framework.

The benefits of a climate change mainstreaming approach are manifold: it ensures vulnerability

assessments are integral to major policy decisions, it facilitates a coordinated and comprehensive policy response across sectors and administrative levels, and it ensures Nyamira's prosperity in the context of a changing climate by explicitly linking its climate change response to sustainable development.

Policy Statements

The County Government will:

1. Mainstream climate change into county planning processes, including, County Integrated Development Plans, Performance Contracts, and the budget making process.
2. Develop a framework and tools for mainstreaming climate change responses into county government planning and budget procedures.
3. Ensure that county planning processes and documents account for climate risk analyses and vulnerability assessments, and identify opportunities to build climate resilience and achieve low carbon development.
4. Establish the institutional framework and build capacity to coordinate and enhance mainstreaming at the sector level.
5. Put in place mechanisms linking climate change data and information with county planning processes.

RESEARCH AND TECHNOLOGY

Research and technology will play a key role in climate change adaptation and mitigation strategies and interventions. The complex and dynamic nature of climate change and its impacts requires the county to expand and maintain systems for targeted and continuous research and technology advancement. These systems will assist in understanding and prediction of climate-related changes, and identification of optimal and cost effective remedial measures. Despite considerable effort, further research inputs are required to determine how climate change will impact various economic sectors, ecosystems and vulnerable groups. Empirical evidence is required to support policy, legislative, technological and other interventions.

Technological innovation, which involves expanding and adapting existing technologies to the County context, is an imperative component of Nyamira's climate change interventions. It requires not only strong capabilities of the various actors but a strategy to build, enhance and maintain the requisite human resource capacity. The youth, as the bridge between the present and future generations, can be tapped to provide this human resource capacity. Support to technological innovation requires an architecture that provides incentives and capacity to institutions and actors that contribute the technology, including enforcement of intellectual property rights, financing and other facilitation.

Environmentally sustainable and locally appropriate technology development is a necessary element of achieving low carbon climate resilient development. Knowledge and use of locally appropriate tools can enhance the adaptive capacity of society and institutions and help them maintain competent function under adverse climatic conditions. The County Government recognizes the need to accelerate development and diffusion of endogenous and locally adapted technologies, and will promote an enabling investment environment.

Indigenous, local and traditional knowledge is an important resource for adapting to climate change. Communities that depend on natural resources have a long history of adaptation that build on this knowledge. However, these systems are increasingly being challenged by a changing climate. In addition, this knowledge has often been ignored in policy and research, even though it can increase the effectiveness of adaptation strategies.

Policy Statements

The County Government will:

1. Identify research and technology needs; and promote strategic and systematic climate change-related research, impact and vulnerability assessments, and technology development and diffusion.
2. Put in place mechanisms to encourage and facilitate locally appropriate climate change technological development, including strategies to enhance and maintain human capacity, especially amongst the youth.
3. Enhance the capacity of the public and private sectors, civil society and research institutions to develop and utilise technological innovations.
4. Identify and implement incentives for the private sector and institutions of higher learning to undertake R&D and develop affordable and locally appropriate adaptation and mitigation technologies.
5. Enhance linkages between government, academia, private sector, civil society and global climate change innovation institutions.
6. Put in place mechanisms to facilitate the integration of indigenous, traditional and local knowledge into R&D and technology development.
7. Put in place mechanisms to enhance resource mobilisation for climate change R&D and technology development.

Resource Mobilisation

Funding required for financing climate change responses under this policy will be mobilised from both internal and external sources. In this context, resource mobilisation will be closely linked to Kenya's climate finance strategy, particularly in regard to mobilising external financing.

Governments at all levels will be required to integrate climate change response actions into budgetary processes. This will complement and be in addition to any external climate finance resources. In particular, sufficient budgetary allocation for all institutions performing climate change functions will be prioritised to ensure that the necessary human, technical and financial resources are available.

This Policy underscores the Government's commitment to increase PPP initiatives for actions that help to achieve low carbon climate resilience development.

Policy Statements

The County Government will:

1. Allocate resources for climate change actions in the county budgetary processes.
2. Build capacity to mobilise and enhance absorption of resources for climate change interventions.
3. Set aside funds for the implementation of climate change action and research.
4. Mobilise substantial levels of climate finance to fund implementation of this Policy and any Climate Change Action Plans from internal and external sources.
5. Put in place mechanisms to attract and leverage PPPs as a vehicle to mobilise resources and enhance private sector participation in low carbon climate resilient development activities.

Collaboration and stakeholders participation

Article 10 of the Constitution identifies public participation as a binding national value during the implementation of any public policy or decision, or in the making or implementation of any law. The County Government therefore recognizes the importance of building and sustaining partnerships with the public, at all levels of society, to ensure a collective national ownership of climate change responses.

The County Government will continue to play the lead role in the strategic planning and management of climate change responses. The County government will foster participatory partnerships between itself and other county governments, national government other public entities, the private sector, civil society, development partners, media and international agencies. Steps will be taken to consolidate and strengthen the working relations with development partners. Improved sectoral and donor coordination will be formalized through periodic meetings and fora.

Policy Statements

The County Government will:

1. Put in place and operationalise a climate change public participation strategy.
2. Ensure that public participation enhances consultation and awareness of citizens, including facilitating equitable roles for women and men, persons with special needs and the youth.
3. Establish and sustain partnerships with various categories of climate change stakeholders including development partners and sectoral departments.

PUBLIC AWARENESS AND ACCESS TO INFORMATION

Public awareness on climate change should integrate knowledge on critical and crosscutting policy issues such as mainstreaming of gender, youth and special needs. This approach is important because public awareness is central to the subsidiarity principle, which requires an active role of the people in governance, at the lowest possible level of public administration, when it is optimal to do so. Climate change interventions, such as those relating to building resilience or enhancing adaptive capacity are closely related to how people understand the impacts of climate change. These interventions can support the transition of people from victims of and contributors to climate change, to positive agents working against climate change. Hand in hand with public awareness is access to information.

The mainstreaming of climate change into the functions of various sector institutions and county governments is central to implementation of this Policy. These players therefore need to develop county specific public awareness and access to information strategies on climate change

Policy Statements

The County Government will:

1. Strengthen the integration of local and indigenous knowledge in climate information services.
2. Establish an information desk for the public to address climate change and disaster management issues.

3. Put in place a strategy for identifying, refining and disseminating climate change knowledge to the public and other stakeholders in user-friendly formats.
4. Mainstream climate change in basic, secondary and tertiary level education curricula.
5. Incorporate climate change knowledge into government implemented public awareness initiatives including civic education and extension programmes.
6. Collaborate with, and support, private sector and civil society in incorporating climate change knowledge into advocacy and public awareness raising programmes.
7. Strengthen the capacity and ensure sufficient resourcing of institutions engaged in climate change public awareness.
8. Put in place mechanisms for and undertake climate change knowledge and communication needs assessment in order to develop appropriate systems and processes for climate related data collection.
9. Develop a comprehensive communication strategy to enhance dissemination of timely, credible and reliable climate change information and research findings.
10. Put in place mechanisms to gather, document and promote application of traditional indigenous knowledge and practices on climate change.

MAINSTREAMING GENDER EQUITY

The adverse impacts of Climate Change overly burden the poorest and the most marginalized segments of the society (Women, children and people living with disabilities.) Gender based inequalities in law and in practice, gender defined roles in society and socio-cultural constrains render women disproportionately vulnerable to Climate Change. The Policy call for the participation of women in decision making on Climate Change, as well as factors leading to differential impacts and implications of Climate Change problems for women and men.

Policy Statements

The County Government will:

1. Promote women's access to knowledge related to agroecology, agroforestry and renewable energies.
2. Adopt a gender mainstreaming approach at all stages of the climate change policy cycle from research, to analysis, to the design and implementation of actions.
3. Adopt gender sensitive budgeting.
4. Put in place mechanism to ensure and enhance the participation of the youth in climate change governance and position them to take advantage of opportunities.
5. Undertake a systemic analysis of the various special needs and ensure that planning and climate change responses mainstream participation and protection to persons with special needs.

CHAPTER 5

IMPLEMENTATION

FRAMEWORK 5.1 Implementation Framework and Costs

Implementation of climate change policy priorities and other actions will require significant planning, including detailing the full cost to determine budgetary and other economic implications.

This Policy will be implemented through specifically developed and fully costed Change Action Plans and continuing through new and amended action plans developed in at least five-year intervals.

To facilitate climate change mainstreaming and realisation of the overall policy objective of climate resilient and low carbon development, current and future Climate Change Action Plans will be fully aligned with and integrated into the regular MTPs of Vision 2030 and any other County Government MTPS.

Policy Statements

The Government will:

1. Prepare and implement comprehensive, fully costed and periodically reviewed Climate Change Action Plans under the framework of this Policy.
2. Ensure that Climate Change Action Plans for implementation of this Policy are aligned with the regular MTPs of Vision 2030 and CountyMTPs.
3. Facilitate continuous consultations and public awareness across all sectors, interest groups and the public.

5.2 Monitoring and Evaluation of Policy Implementation

It is crucial to prioritize rigorous and continuous Monitoring and Evaluation (M&E) of this Policy.

Monitoring and evaluation will be critical in assessing implementation of this policy.In order to track the implementation of this Policy, it will be essential to record and measure progress and changes, as well as the overall performance of climate change actions. M&E will provide reliable and timely data on progress, results and shortcomings of the Policy implementation to inform decision makers, stakeholders and the public. A highly consultative and participatory M&E system will be adopted to facilitate periodic reviews of this Policy and its contribution to the national economy. Efforts will be made to link this system to the National Integrated Monitoring and Evaluation System. 33

The M&E system will monitor implementation by tracking inputs and actions to mainstream climate change by national and county government entities. Performance contracts provide a useful tool through which targets, inputs and the resultant outputs can be determined and evaluated.

An appropriate climate change M&E system will coordinate inputs from different sources, including various stakeholders, to provide reliable and timely information and data for planning purposes, and as inputs to national and county level reports.

M&E of this Policy will adopt a participatory approach that facilitates active engagement of stakeholders,

Policy Statements

The County Government will:

1. Put in place mechanisms to utilize actions plans and performance contracts as tools for review and evaluation of inputs and results under this Policy.
2. Develop and institutionalize an integrated monitoring and evaluation system
3. Set up M&E procedures for this climate change policy.
4. Enhance capacity for carrying out M&E
5. Incorporate climate change indicators into the Monitoring and Evaluation System.
6. Set up a coordination mechanism involving relevant stakeholders to undertake M&E of this Policy over five year intervals.
7. Disseminate the outcomes of reviews and evaluations for public and stakeholder discussion, and for parliamentary and county assembly debate and oversight.

LIST OF ABBREVIATIONS AND ACRONYMS

ANRMP	Allied Natural Resources Management Plans
ASDSP	Agricultural Support Development Programme
AFFR	Agricultural Farm Forestry Rules
BAP	Biodiversity Action Plan
CBO	Community Based Organizations
CCF	Climate Change Fund
CDMS	County Director of Meteorological Services
CECM	County Executive Committee Member
CEAP	County Environmental Action Plan
CFAs	Community Forest Associations
CIDP	County Integrated Development Plan
CIPWMPA	County Integrated Participatory Waste Management Policy and Act
EEP	Eligible Expenditure Program
EMCA	Environmental Management and Coordination Act
FMAs	Forest Management Agreements
GHE	Green House Effect
IFAD	International Fund for Agricultural Development
IWRM	Integrated Water Resource Management
KALRO	Kenya Agriculture Livestock Research Organization
KFS	Kenya Forest Service
KNHPC	Kenya National Housing and Population Census
KMD	Kenya Meteorological Department
LREC	Lake Region Economic Bloc
M&E	Monitoring and Evaluation
MTPs	Medium Term Plans
MSMIs	Micro, Small and Medium Industries
NARIGP	National Agricultural Rural Integrated Growth -Programme
NCCAP	National Climate Change Action Plan.
NCCFP	National Climate Change Framework Policy
NCCCF	Nyamira County Climate Change Fund

NEMA	National Environmental Management Authority
NLC	National Land Commission
PFMPs	Participatory Forest and Allied Natural Resources Management Plans
PHW	Public Health Workers
PSP	Participatory Scenario Planning
SME	Small and Medium Enterprises
SWGs	Sector Working Groups
UNEP	United Nations Environmental Programme
WRUA	Water Resource Users Association
WV	World Vision

Annex I – Terminology

Adaptation
Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Adaptive Capacity
The ability or potential of a system to respond successfully to climate variability and change, and includes adjustments in both behaviour and in resources and technologies.

Capacity building
In the context of climate change, the process of developing the technical skills and institutional capability in developing countries to enable them to address effectively the causes and results of climate change.

Climate
The average pattern for weather conditions occurs over a long time period. Weather refers to the atmospheric conditions at a specific place at a specific point in time. Climate has always varied because of natural causes. Increasingly, however, human increases in GHG emissions causing changes in climate as well.

Climate Change
Changes in global or regional climate patterns, including changes in temperature, wind patterns and rainfall. In particular, climate change refers to a change apparent from the mid to late 20th century onwards and attributed largely to human activities that increase levels of GHG emissions, especially atmospheric carbon dioxide produced by the use of fossil fuels. Climate change is sometimes referred to as global warming, which specifically refers to the long-term trend of a rising average global temperature.

Climate Finance
County, national or international financing that may be drawn from public, private and alternative sources of financing, and is critical to addressing climate change because large-scale investments are required for adaptation and mitigation.

Climate Resilience
Closely linked to adaptation, building climate resilience includes reducing vulnerability to climate change, making sure that the impacts of climate change are avoided or cushioned, and enabling people to respond to climate risks.

Conference of the Parties
The supreme governing body of the UNFCCC, which meets once a year to review the Convention's progress. The word "conference" is not used here in the sense of "meeting", but rather of "association".

Deforestation
The long-term or permanent loss of forest cover. The term implies transformation of forest into another land use, which is caused and maintained by a continued human-induced or natural

perturbation.

Intergovernmental Panel on Climate Change (IPCC)
Established in 1988 by the World Meteorological Organization and the UN Environment Programme, the IPCC surveys worldwide scientific and technical literature and publishes assessment reports that are widely recognized as the most credible existing sources of information on climate change. The IPCC also works on methodologies and responds to specific requests from the UNFCCC's subsidiary bodies. The IPCC is independent of the UNFCCC.

Kyoto Protocol
An international agreement standing on its own, and requiring separate ratification by governments, but linked to the UNFCCC. The Kyoto Protocol, among other things, sets binding targets for the reduction of GHG emissions by industrialized countries.

Mitigation
In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.

Measurement, Reporting and Verification Plus (MRV+)
An integrated framework proposed for Kenya to measure, monitor, verify and report results and impacts of mitigation, adaptation and climate finance actions, and the synergies between them.

National Adaptation Plan
A document prepared by developing countries that identifies urgent and immediate needs for adapting to climate change.

National Climate Change Action Plans
National plans of action, prepared at five-year intervals, that set out in detail the requirements and costs for the design and implementation of the various climate change interventions required for Kenya to attain low carbon climate resilient development.

Public Private Partnerships (PPPs)
Public-Private Partnerships are an association between government and private sector through which private financing is utilized to perform a public function, at a profit to the private sector.

REDD+
Reducing Emissions from Deforestation and Forest Degradation plus the role of conservation, sustainable management of forests and enhancement of forest carbon stocks. REDD+ is a mechanism under the UNFCCC designed to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands.

Sustainable development
Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Technology Transfer
A broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change among different stakeholders.

United Framework Convention on Climate Change (UNFCCC)
An international treaty signed by 195 countries that entered into force in 1994. The objective of the Convention is "...stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate systems..."

Vulnerability
The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude and rate of climate variation to which a system is exposed, its sensitivity and its adaptive capacity.