

**DRAFT NATIONAL CLIMATE CHANGE FRAMEWORK POLICY (Version of 22 September 2014)**



**REPUBLIC OF KENYA**  
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**STATE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

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## **EXECUTIVE SUMMARY**

### **Preamble**

Kenya's economy is highly dependent on the 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 country's development. In its fulfillment of safeguarding sustainable development, the Government of Kenya has developed this National Climate Change Framework Policy to provide a clear and concise articulation of overall response priorities to climate variability and change.

Kenya has shown commitment to protect the climate system for the benefit of the present and future generations by supporting the United Nations Framework Convention on Climate Change (UNFCCC) process; ratifying the Kyoto Protocol in 2005; and contributing to continental and regional climate change initiatives. Further, the country's Constitution has set out a legal commitment to attain ecologically sustainable development; hence providing a basis to address the challenge of climate change while striving to attain its development goals through the Kenya Vision 2030.

The Policy's focus on the interlink between sustainable national development and climate change is critical because 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.

### **Why a Climate Change Policy?**

This Policy was developed to facilitate a coordinated, coherent and effective response to the local, national and global challenges and opportunities that climate change presents. This will be achieved through the adoption of a mainstreaming approach that ensures integration of climate change considerations into the development planning process, budgeting, and implementation in all sectors and at all levels of government. This Policy therefore aims to enhance adaptive capacity and build resilience to climate variability and change, while promoting low carbon development pathways.

### **The Climate Change Governance Approach**

The response to climate change in Kenya must adhere to the constitutional governance framework and commitment to sustainable development, while addressing the goal of attaining low carbon climate resilient development. To attain the latter, this policy focuses on appropriate mechanisms to enhance climate resilience and adaptive capacity, and the transition to low carbon growth.

### **Enhancing Climate Resilience and Adaptive Capacity**

Key economic sectors in Kenya are particularly susceptible to climate change impacts and threaten to undermine Kenya's recent and impressive development gains. It is therefore important that the

country builds and enhances its climate resilience and adaptive capacity. Building climate resilience requires Kenyan systems of governance, ecosystems and society to have capability to maintain competent function in the face of climate change. This would aid a return to some normal range of function even when faced with adverse impacts of climate change. Adaptive capacity is key to improving socio-economic characteristics of communities, households and industry as it includes adjustments in both behaviour and in resources and technologies, and is a necessary condition for design and implementation of effective adaptation strategies. There is mutual reliance in that the national adaptive capacity depends on the resilience of its systems.

The sustainable development of Kenya therefore significantly depends on the design and implementation of mechanisms that trigger and enhance climate change resilience and adaptive capacity. Devolved governments present an opportunity to diversify and implement appropriate climate change responses to build resilience, as each level of government performs distinct functions while pursuing cooperation, with the other level of government, where necessary. In order to facilitate attainment of the enhanced climate change resilience goal of this policy, the government will, among other actions: put in place mechanisms for sustainable utilization of natural resources to enhance climate resilience and adaptive capacity to protect the natural capital of Kenya; ensure integration of climate change risk and vulnerability assessment in Environment Impact Assessment and Strategic Environment Assessment; identify and implement priority adaptation actions across key social, environmental and economic sectors; and promote public and stakeholder consultation and participation including vulnerable groups.

### **Low Carbon Growth**

While Kenya makes a low net contribution to global greenhouse gas (GHG) emissions, a significant number of priority development initiatives outlined in Vision 2030 and its Medium Term Plans will impact on Kenya's levels of GHG emissions. These actions include increased geothermal electricity in the energy sector, switching movement of freight from road to rail in the transport sector, reforestation in the forestry sector, and agroforestry in the agricultural sector.

The agricultural sector is the largest contributor of GHGs emissions in the country, accounting for 33 per cent of total emissions in 2010, with about 90 per cent of these emissions from livestock. Forestry contributed about 32 per cent of total GHG emissions mainly through deforestation and forest degradation resulting from the search for fuel wood, including charcoal production, and creation of further agricultural land. The transport sector contributed about 10 per cent of emissions in 2010, and industrial processing and waste were relatively small contributors to total GHG emissions in Kenya.

In order to attain low carbon growth, the government will: implement regulatory mechanisms which include mainstreaming low carbon growth options into the planning processes and functions of the national and county governments; establish a GHG inventory to achieve efficient and effective collection, recording and sharing of GHG emissions data; promote clean technologies and green jobs; and consider participating in voluntary emission reduction programmes that support the country's strategic interest of sustainable development.

### **Mainstreaming Climate Change into the Planning Process**

Climate change mainstreaming is necessary to equip various coordinating and sectoral agencies of the Kenyan national, and 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 and management processes. This requires explicitly linking climate change actions to core planning processes through cross-sectoral policy integration that operates both horizontally by providing an overarching guide for all sectors; and vertically, requiring all sectors and levels of government to implement climate change responses in their core functions. This is done, for instance, through the Medium Term Expenditure Framework for budget making and converting policies and plans into expenditure and action. Mainstreaming is a process that encourages cooperation across government departments in planning for a longer-term period; rather than fragmented, short-term and reactive budgeting. County governments are required by law to prepare and implement County Integrated Development Plans, through which climate change actions can be mainstreamed. A mechanism facilitating linkages and exchange of climate change information and data with planning processes is required across all levels of government. To attain climate change mainstreaming, the government will take develop a framework and tools to integrate climate change responses into national and county planning processes, including economic planning, development policies, performance contracting, and the budget making process.

### **Enabling Regulatory Framework**

Kenya requires appropriately designed legislative, policy and institutional 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, especially the devolved system of government. The Constitution has set up a renewed structure of public administration, with one national government and 47 County governments. These two levels of government, while distinct, are interdependent and expected to function consultatively in a cooperative manner to discharge their respective and concurrent mandates. The national government is mandated to make policy on climate change. Various functions assigned to county governments are integral to fulfilment of actions required to address climate change. In certain instances, there maybe concurrent performance of climate change related functions by the two levels of government. It is therefore necessary to review the overall legislative and institutional arrangements that govern climate change actions. Various sectoral laws and policies that will provide the legislative basis for specific actions will need to be analysed for potential amendments to enhance their capability to tackle the immense climate change challenges, and exploit emerging opportunities. This complex undertaking forms a foundation for attainment of low carbon climate resilience development, and sets the basis for climate change mainstreaming. It therefore requires the government to undertake various core interventions, including facilitating the enactment of an overarching climate change legislation to provide the framework for coordinated implementation of climate change responses and action plan. It is also necessary to have an institutional coordination mechanism with high-level convening power to enhance the inter-sectoral response to climate change; and a technical institutional framework to guide policy and functional implementation of climate change legal obligations of the national and county governments.

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 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 they 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.

## **1 INTRODUCTION**

### **1.1 Background**

- 1.1.1 Kenya is a developing country whose economy is highly dependent on the natural resource base, making it highly vulnerable to climate variability and change.
- 1.1.2 Realization of sustainable development in Kenya, despite significant progress to date, is threatened by climate change and its resultant impacts. The country has in the recent past seen increased evidence of climate change such as rising temperatures and changing rainfall patterns, and has experienced extensive climate related impacts through the increased frequency and intensity of extreme weather events such as droughts and flooding. These manifestations of climate change constitute a serious threat to Kenya's natural systems on which the country's sustainable development and future prosperity depends.
- 1.1.3 Climate change is defined by the United Nations Framework Convention on Climate Change (UNFCCC) as 'a change of climate 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.' Current data demonstrates that the climate in Kenya and globally is changing at an unprecedented rate and that unparalleled levels of human induced greenhouse gas (GHG), especially carbon dioxide, emissions are causing an increase in global temperatures that creates changes in the earth's weather. It is now clear that climate change has become an impediment to sustainable development in Kenya and urgent action is required.

### **1.2 International and Regional Context**

- 1.2.1 The Intergovernmental Panel on Climate Change (IPCC) has noted that Africa is highly vulnerable to climate change. Impacts of particular concern to Africa are related to water resources, food production, human health, desertification and coastal zones, especially in relation to extreme weather events. These impacts are already manifest in Kenya with shifts in rainfall patterns expected to have far reaching consequences.
- 1.2.2 Cognizant of this, the Government has, through the United Nations Framework Convention on Climate Change (UNFCCC) process committed to protect the climate system for the benefit of the present and future generations. Kenya ratified the UNFCCC in 1994 and the Kyoto Protocol in 2005. The country is a key player in the global climate change governance system, and annually participates in the Conference of the Parties to the UNFCCC and Conference of the Parties serving as Meeting of the Parties to the Kyoto Protocol, articulating the national interest and position during international negotiations
- 1.2.3 Kenya has also actively participated in regional initiatives to respond to climate change, including the development of the East African Community (EAC) Climate Change Policy, Masterplan and Strategy, which also inform this National Climate Change Framework Policy. The EAC regional Climate Change Master Plan (2011-2031), indeed, serves as the blue print to guide regional climate change response measures, in the long term.

- 1.2.4 Through this extensive global and regional engagement, Kenya recognizes the imperative of a transboundary approach to climate change response in addition to initiatives at the national, county and local levels.

### **1.3 Rationale for a National Climate Change Framework Policy**

- 1.3.1 The Constitution of Kenya set out a commitment to an ecologically sustainable development. The Sessional Paper No. 10 of 2012 on Kenya Vision 2030 set the goal for Kenya becoming a middle-income country providing a high quality life to all its citizens by the year 2030. Climate change poses a significant challenge to these sustainable national development goals.
- 1.3.2 Kenya's continuing vulnerability to climate change and the threat this poses to achieving long-term development goals has thus been clearly recognized. As a result, Kenya initiated a concerted national effort to respond to climate change, which commenced with development of a National Climate Change Response Strategy (NCCRS) in 2010. It was the first national planning document dedicated to addressing the threats posed by climate change and taking advantage of potential climate change related opportunities. The NCCRS identified the need to develop a comprehensive national policy on climate change.
- 1.3.3 Formulation of this Policy was initiated within the framework of the National Climate Change Action Plan (NCCAP, 2013-2017) whose objective is to implement the NCCRS. This Policy has been informed extensively by the NCCAP process and outputs.
- 1.3.4 A wide range of strategies and programmes have been pursued by various governmental and non-governmental entities to address the effects of climate change in Kenya. However, these initiatives have taken place without a coherent policy framework and therefore appeared reactive and uncoordinated. Accordingly, this Policy reflects the Government's commitment to formulating a proactive, coherent and integrated climate change response that focuses on reducing vulnerability and building the resilience of the Kenyan people, property, environment and economy. It will therefore position Kenya to capture the economic, social and environmental benefits of the transition to a low carbon climate resilient economy.
- 1.3.5 This Policy will facilitate a coordinated, coherent and effective response to the local, national and global challenges and opportunities that climate change presents. This will be achieved through the adoption of a mainstreaming approach that ensures integration of climate change considerations into the development planning, budgeting, and implementation processes.
- 1.3.6 This Policy is therefore designed to provide a framework to guide the development, and implementation of specific, detailed and costed climate change interventions through regular and periodic Climate Change Action Plans. This Policy therefore embodies Kenya's vision of achieving resilience to climate change variability and change, and promoting low carbon development. By putting in place this policy architecture, Kenya aims to safeguard

the wellbeing of its citizens, their property, and the country's prosperity in the face of a changing climate.

## **2 SITUATIONAL ANALYSIS OF CLIMATE CHANGE IN KENYA**

### **2.1 Evidence of Climate Change in Kenya**

- 2.1.1 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.
- 2.1.2 Temperature and rainfall records from the Kenya Meteorological Department over the last fifty years provide clear evidence of climate change in Kenya, with temperatures generally showing increasing trends in many parts of the country starting from the early 1960s. This evidence is also provided in the State of the Environment Reports published by the National Environment Management Authority.
- 2.1.3 Rainfall patterns indicate increased irregularity and variability with neutral to slightly decreasing trends in annual rainfall over most areas. Decreasing rainfall trends have been observed in the total annual rainfall and during the long rainfall season (March – May) in recent years. This season contributes the higher proportion of the total rainfall for most parts of the country. A general increase in rainfall amounts has, however, been observed during the months of September to February in some parts of the country. This increase has been attributed to a tendency of the 'Short Rains' (October-December) to extend into the normally hot and dry months of January and February. Generally, the 24-hour rainfall intensity has shown a decreasing trend.
- 2.1.1 Since the early 1960s, Kenya has experienced increasing temperature trends in many parts of the country. For example, meteorological data demonstrates that the arid and semi-arid lands (ASALs) have witnessed a reduction in extreme cold temperature occurrences.
- 2.1.2 Impacts of temperature increase include the depletion of glaciers on Mount Kenya, and sea level rise. These changes will have negative implications on biodiversity and ecosystem services in the country.
- 2.1.3 A changing climate impacts the frequency, intensity, spatial extent, duration and timing of extreme weather and climate events. In recent years, evidence of higher frequency and intensity of extreme climate events such as droughts and floods has been noted in Kenya. The country's famine cycles have reduced from 20 years (1964-1984), to 12 years (1984-1996), to two years (2004-2006) to yearly (2007-2008-2009-2010-2011-12).

### **2.2 Impacts of Climate Change In Kenya**

- 2.2.1 ASALs comprise 83 per cent of Kenya's landmass, making the country very vulnerable to climate change. The impacts of climate change cut across diverse aspects of society, the economy and the environment.

2.2.2 The adverse impacts of climate change have the potential to significantly inhibit the sustainable development of Kenya 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 ASALs are particularly vulnerable to climate change impacts. They are currently under threat from land degradation and desertification caused by climatic variations, and human impacts such as overgrazing of livestock and the creation of small cities or towns. Impacts include loss of biodiversity including threatening of species, change in vegetation composition and structure, decrease in forest coverage, rapid deterioration in land cover, and depletion of water quality and quantity through the destruction of catchments and underground aquifers.

Increased scarcity of water resources is a core concern, making resource management more difficult and increasing the likelihood of conflict. Water scarcity will affect energy production, and agricultural systems. Relevant indicators 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 Kenya Forest Service estimates a six per cent forest cover that include indigenous, open woodland and plantation forests. The five major water towers, Mt. Kenya, Mau Forests Complex, Cherangany Hills, Mt. Elgon and the Aberdare Ranges, act as the main water catchment areas. Forest degradation and deforestation, exacerbated by climate change have led to reduced canopy cover and altered biodiversity composition. 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, Livestock and Fisheries**

The agriculture, livestock and fisheries sector is one of the economic sectors in Kenya that is most vulnerable to climate change. Over 70 per cent of rural livelihoods are dependent on rain-fed subsistence agriculture, and significantly impacted by declining agricultural production due to unpredictable rainfall, reduced soil productivity through erosion, and increased evapo-transpiration.

Livestock is very climate sensitive and is already experiencing negative impacts from climate change. Greater frequency of droughts in the ASALs increases livestock morbidity and mortality because of reduced availability of forage, increased disease incidences and a breakdown of marketing infrastructure.

In the fisheries sector, temperature changes in the aquatic environment affect the breeding and feeding behaviour of fish, and have a significant effect on the species composition. There is evidence of a thinning of species and biomass abundance owing to the effects of

temperature increase on the nesting and feeding grounds. In some cases, catches of non-resident species have been reported, with a compounded risk of alien invasive species. The species of fish that can be farmed in certain areas, such as cold water aquaculture that has been practiced over the past decade, is increasingly becoming unsustainable. 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 manufacturing and transportation sectors, which are key cogs for internal and international trade, are highly vulnerable to climate variability and extreme weather events because of the impacts on access to raw materials and electricity. Since trade relies on the climate resilience of other sectors, a successful trade sector will require building resilience across the entire economy of Kenya.

**(iv) Extractive Industries**

The extractive industry in Kenya is rapidly developing into a potentially high contributor to economic growth. High value resources such as petroleum, coal, and titanium have been discovered. Natural resource extraction contributes to and is vulnerable to climate change. Extraction of resources such as petroleum and minerals utilizes copious quantities of water and energy, and releases GHG emissions. The exposure of sensitive infrastructure, such as pipelines, to extreme weather events could result in disasters with significant adverse impacts on the Kenyan environment, economy, people and their property Infrastructure investments by extractive industries have to internalize climate proofing in order to protect value for money. Kenya needs to put in place regulatory mechanisms that ensure resource extraction contributes to low carbon climate resilience development of Kenya.

**(v) Energy**

To achieve the goal of becoming a middle-income economy by 2030, it is imperative for Kenya to attain energy security and accessibility to address increasing demand for energy. Progression in increased energy uptake has been steady with peak electricity demand increasing from 899 Megawatts (MW) in 2004/05 to 1,194 MW in 2010/11, while the number of electricity consumers more than doubled from 735,144 in 2004/05 to 1,753,348 in 2011. This increase is mirrored in petroleum uptake with the country's energy consumption in 2010 standing at 3.77 million Tons of Oil Equivalent (TOE) up from 2.9 million TOE in 2004. Some of the factors that explain this variation in consumption include Gross Domestic Product (GDP) growth, increased electricity demand, population growth, urban population growth, and increased motorization and air transport.

Energy production and utilization has a close connection with climate change. Biomass energy, such as charcoal and firewood, continues to be used in the country's urban and rural households. Security in access to biomass energy is important for building resilience. However, it is equally critical to ensure efficiency in production of this biomass energy,

including through sustainable plantation forests, and the use of efficient charcoal kilns and cook stoves.

Hydroelectricity generation, which accounted for over 50 per cent of Kenya's electricity in 2013, is affected by extreme events such as droughts. Reductions in reservoir levels lead to decreased hydroelectricity generation, leading to higher prices and greater use of fossil fuels, which increase GHG emissions. Coal and petroleum as sources of electricity generation contribute to GHG emissions. Kenya possesses significant renewable energy potential, including geothermal, wind, solar, biomass and biofuels whose development should closely be aligned with knowledge and interventions to climate change.

**(vi) Physical Infrastructure**

Physical infrastructure is an important and necessary enabler of socio-economic development. An improved and expanded national physical infrastructure is a crucial cog in Kenya's wheel of development. Effective and reliable infrastructure is critical in lowering the cost of doing business and increasing competitiveness of the country. Kenya has experienced tremendous challenges in upgrading infrastructure that is key for economic development. The quality of roads, railways, airports and seaports, among others, has not been sufficient to support the desired economic progression. Vision 2030 aspires to develop world-class infrastructure facilities and services by focusing on quality, aesthetics and functionality of the infrastructure services. The target is increased investments in the road network; water and sanitation services; rail, sea and air transport; and energy supply services. The adverse impacts of climate change need to be identified and addressed when developing world-class infrastructure facilities. One approach is to invest in infrastructure that supports transformation to a low carbon economy that will reap the various employment, and poverty reduction benefits. Another approach is through the climate proofing of infrastructure, which refers to the integration of climate change risks and opportunities into the design, operation and management of infrastructure. Climate proofing infrastructure is thus a way of advancing towards climate change adaptation and strategic risk management.

**(vii) Tourism**

Tourism in the Kenyan context is highly climate sensitive because of its close connection to the natural environment. This is mainly because a large proportion of tourism depends directly on natural resources, and much is focused on protected areas. In addition, tourism is important for human development in Kenya because of its potential to reduce poverty and create employment, and it accounts for about 10 per cent of GDP. However climate variability is causing negative impacts that could inhibit the positive contribution of tourism to Kenya. Increasingly warmer temperatures are reducing plant and vegetation productivity in semi-arid environments, affecting wildlife diversity and distribution. This results in wildlife competing with domestic livestock and human beings for both food and water. Kenya's coastline and beaches are prime attractions for tourists, especially during the northern hemisphere winter months. However, the main coastal areas are susceptible to sea level rise due to low altitude, high temperatures and high humidity levels. Realizing the Vision 2030 objective of developing Kenya as a major tourism destination globally will require

consideration of climate change impacts and commencement of appropriate response and intervention measures.

### **(viii) Health**

Human health has been affected adversely by climate change impacts in Kenya. The country 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 Kenya. Though the country has pandemic readiness plans and the implementation of the Integrated Disease Surveillance and Response Strategy (IDSR) has been accelerated, Kenya's capacity to respond to a disease outbreak is suboptimal portraying a worrying scenario in the provision of response services in case of any outbreak or epidemic. The factors that encourage slow response include weak linkage of surveillance to response at lower levels due to lack of capacity, a weak reporting and communication system from health facilities to district/central levels, weak laboratory capacity, and the lack of adequate quarantine and isolation facilities. These result in insufficient early warning systems for epidemic occurrences and insufficient, untimely response to outbreaks. This state is compounded by insufficient disaster management and preparedness mechanisms in Kenya, which limit the capacity to deal with disaster and disease outbreaks.

## **2.3 Status of Climate Change Governance**

- 2.3.1 Climate change is a sustainable national development issue in Kenya. A coherent and coordinated regulatory framework must therefore guide the national, county, and, local level responses to the impacts of climate change. The absence of internal coherence in laws and policies has resulted in duplicity and overlap in execution of institutional mandates, with a suboptimal outcome for Kenya.
- 2.3.2 The various sectoral laws, policies and institutional mandates that define roles and functions required for climate change response should therefore be harmonized in order to enhance coordination and mainstream climate change into their functions.
- 2.3.3 The changes to the national governance framework in 2010, which introduced National and County levels of government, indicates a need to promptly ensure internal coherence and proper coordination of functions. This should be done in a manner that is complementary and respects the philosophy that specific sectoral functions should be undertaken by the most suitable sector or level of government.

## **2.4 Summary of the National Emissions Profile**

- 2.4.1 The last official GHG emissions inventory for Kenya was completed for the year 1994 for the First National Communication. Based on an inventory undertaken for the NCCAP in 2010, the agriculture and forestry sectors were the largest emitters, accounting for approximately two-thirds of emissions, mainly due to emissions from livestock and deforestation. Energy

demand was the next largest emitting sector accounting for about 16 per cent of emissions, followed by transportation at about 10 per cent. Industrial processes and waste contributed about four per cent and one per cent of GHG emissions respectively. The current total emissions, by Kenya, account for less than one per cent of total global emissions.

- 2.4.2 The NCCAP analysis suggests that GHG emissions in Kenya will increase up until 2030 in all sectors except forestry where emissions are likely to decline after 2020 due to the reduced clearing of forests and increases in the number and size of trees. Emissions in other sectors will grow significantly up to 2030, with transport emissions increasing by a factor of three , and those from waste sector doubling.

## **2.5 Climate Change Opportunities**

- 2.5.1 Despite the many and varied negative impacts, climate change also presents opportunities to government, businesses and the public at large, which this Policy aims to fully exploit. Above all, climate change represents an opportunity to catalyze realignment of Kenya's development model to one that is climate resilient, based on lower GHG emissions, and takes full advantage of the green economy. A more people-centred approach to development can be achieved by focusing on vulnerable groups, and building resilience to simultaneously addresses poverty, food insecurity and unemployment, concurrently with climate change.
- 2.5.2 Climate finance flows and carbon asset mechanisms present an opportunity to access new and additional levels of funding. For government this means accessing international financing for ambitious climate resilient and low emission development programmes. For the private sector this can entail engaging in projects to generate carbon credits for sale in international markets, exploiting new green economy opportunities and the creation of green jobs.
- 2.5.3 The introduction of a devolved system of government provides a new opportunity to reorganize climate change governance by ensuring that climate change responses are mainstreamed into the functions of the national and county levels of government, and by facilitating the effective participation of citizens in climate change governance.

## **3 GOAL, OBJECTIVES AND GUIDING PRINCIPLES**

### **3.1 Goal**

The goal of this Policy is to enhance adaptive capacity and resilience to climate change, and promote low carbon development for the sustainable development of Kenya.

## **3.2 Objectives**

The objectives of this Policy are to:

- (i) Establish and maintain an effective institutional framework to mainstream climate change responses into relevant sectors and into 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 capacity for disaster risk reduction.
- (iii) Catalyze Kenya's transition to cleaner, lower emission and less carbon intensive development.
- (iv) Incentivize private sector involvement in building climate change resilience and engaging in low carbon development opportunities.
- (v) Facilitate widespread public awareness, participation, ownership and oversight of Kenya's climate change response efforts and Action Plans.
- (vi) Provide a framework to mobilize resources for Kenya's climate change response and ensure effective and transparent utilization of the resources.
- (vii) Adopt intergenerational, special needs and gender mainstreaming approaches across all aspects of Kenya's climate change response.
- (viii) Provide the policy framework to facilitate effective implementation of regularly updated and scientifically based Climate Change Action Plans.
- (ix) Enhance research and use of science and technology in policy decisions and management of resources.

## **3.3 Guiding Principles**

The implementation of this Policy will be guided by the following principles:

- (i) **Common but differentiated responsibilities and respective capabilities:** given negligible historical responsibility for causing global climate change, and limited capability to mitigate climate change and adapt to its impacts in light of its stage of development, under the UNFCCC Kenya has common but differentiated obligations in the global effort to address climate change.
- (ii) **Right to a clean and healthy environment:** under the 2010 Constitution every person in Kenya has a right to a clean and healthy environment and a duty to safeguard and enhance the environment.
- (iii) **Right to sustainable development:** the right to development will be respected taking into account economic, social and environmental needs. Kenya seeks to achieve people-centred development that builds human capabilities, improves people's well being and enhances quality of life.

- (iv) **Partnership:** building partnerships, collaboration and synergies among various stakeholders from the public, government, non-governmental organisations, 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.
- (v) **Cooperative government:** embracing a system of consultation, negotiation and consensus building in government administration between the national and county governments.
- (vi) **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 intra-generational equity.
- (vii) **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 the physically challenged. Towards this end a gender mainstreaming approach will be adopted in implementation of this Policy.
- (viii) **Avoiding maladaptation:** 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.
- (ix) **Integrity and transparency:** the mobilization and utilization of financial resources shall be undertaken with integrity and transparency in order to eliminate corruption and achieve most optimal results in climate change responses.
- (x) **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.

## **4 LOW CARBON CLIMATE RESILIENT DEVELOPMENT**

### **4.1 Enhancing Climate Resilience and Adaptive Capacity**

4.1.1 The Kenyan social, economic and environmental architecture significantly relies on the environment and natural resources. Key economic sectors are particularly susceptible to climate change impacts that threaten to undermine Kenya's recent and impressive development gains. It is important for the country to build and enhance its climate resilience and adaptive capacity. Building climate resilience requires Kenyan governance systems, ecosystems and society to have capability to maintain competent function in the face of climate change and to return to some normal range of function even when faced with adverse impacts of climate change. The adaptive capacity of the country depends on its capability to enhance resilience of its systems.

- 4.1.2 Adaptive capacity is key to improving socio-economic characteristics of communities, households and industry as it includes adjustments in both behaviour and in resources and technologies. Adaptive capacity is a necessary condition for the design and implementation of effective adaptation strategies so as to reduce the likelihood and the magnitude of harmful outcomes resulting from climate change. The ability of Kenya to enhance adaptive capacity is therefore imperative to enable sectors and institutions to take advantage of opportunities or benefits from climate change. An enhanced understanding of the adaptive capacity of Kenya can be derived from vulnerability assessments. Reducing the vulnerability of people, ecosystems and the economy is a positive approach to enhancing adaptive capacity, but further research is required to identify specific parameters and indicators of enhanced capacity.
- 4.1.3 The main drivers of this vulnerability and degradation have been human economic activity, poor land use planning, and weak enforcement of the law. A drastic increase in climate-induced disasters such as droughts, famine and floods, has resulted in significant socio-economic damage and environmental degradation, and has the unrivalled potential to undermine realization of the country's sustainable development objectives. Enhancing climate resilience is therefore a key policy priority.
- 4.1.4 The prevalence of poverty is a major national challenge. The resilience and adaptive capacity of poor communities must be strengthened to protect against projected climate change impacts and vulnerability arising from increased food insecurity and escalating public health threats. The sustainable development of Kenya therefore significantly depends on the design and implementation of mechanisms that trigger and enhance climate change resilience and adaptive capacity.
- 4.1.5 Devolved governments present an opportunity to diversify and implement appropriate climate change responses to build resilience, as each level of government performs distinct functions while pursuing cooperation where necessary. Although devolved government presents challenges regarding fragmented policy responses that lack coherence, these will be mitigated through clear policy guidelines, sound coordination and effective oversight.

## **Policy Statements**

The Government will:

1. Put in place mechanisms for sustainable utilization of natural resources to enhance climate resilience and adaptive capacity to protect the natural capital of Kenya.
2. Mainstream climate resilience into national and county government development plans, processes and implementation.
3. Ensure integration of climate change risk and vulnerability assessment in Environment Impact Assessment and Strategic Environment Assessment.
4. Develop incentives to promote climate resilient actions of the public, private and other actors through appropriate policy reforms.

5. Identify and implement priority adaptation actions across key social, environmental and economic sectors under the framework of a National Adaptation Plan to attain a systemic and positive impact in the short to medium term.
6. Promote public and stakeholder consultation and participation including vulnerable groups to enhance adaptive capacity and climate resilience.
7. Develop mechanisms to build capacity to mainstream climate change into related disaster risk reduction and management.

## **4.2 Towards a Low Carbon Growth**

- 4.2.1 Kenya makes a low net contribution to global GHG emissions. However, a significant number of priority development initiatives outlined in Vision 2030 and regular Medium Term Plans (MTPs) will impact on Kenya's levels of GHG emissions.
- 4.2.2 The energy sector is a crucial driver of economic growth. However, fossil fuel based electricity generation and consumption, and increases in fossil fuel use in the transportation sector contribute significantly to GHG emissions. It is now important to address this as Kenya has recently discovered commercially viable deposits of oil and coal. Energy use in the form of fuel wood and charcoal by the majority of the Kenyan population increases emissions and contributes to ongoing deforestation and forest degradation. Kenya's hydroelectricity production is vulnerable to climate change with reduced rainfall impeding electricity generation, thereby requiring climate resilience to be factored into energy policy decision making.
- 4.2.3 The agricultural sector is the largest contributor of GHGs emissions in the country mainly from livestock methane emissions and land-use change. GHG emissions for the livestock subsector are expected to increase by 30 per cent up to 2030. The agricultural sector has the potential to reduce GHG emissions through efficient dairy production systems, improved manure management and limiting the use of fire in crop and range land management. In addition, carbon can be sequestered in trees and soils through agroforestry, pasture management and conservation tillage.
- 4.2.4 Forests in Kenya are important for economic development and for environmental services. They play a vital role in the conservation of biological diversity, regulation of water supplies, sequestration of carbon, and are a major habitat for wildlife. Forestry contributed about 30 per cent of total GHG emissions mainly through deforestation and forest degradation in search for fuel wood, charcoal production and creation of agricultural land.
- 4.2.5 The transport sector in Kenya is dominated by road transport for transportation of both people and freight. Public transport is dominated by minibuses (matatus), which have a low passenger capacity. Traffic congestion in the Nairobi, other cities and major towns, especially during peak hours, contributes to GHG emissions through the use of more fossil fuel. It further increases local air pollution and has serious health implications.

- 4.2.6 Industrial processing in Kenya, though a relatively small contributor to GHG emissions, offers mitigation potential. A main source of emissions in this sector is the release of carbon dioxide from the cement manufacturing process, and charcoal production. Solid and liquid wastes from domestic and commercial sources further contribute to emission of GHGs through the release of methane gas from landfills and sewerage treatment works. The mitigation potential of industry is important because the economic growth targets set by Vision 2030 and the MTPs aim to convert Kenya into a middle-income economy, with industry as major contributor.
- 4.2.7 Climate change affords opportunities as well as challenges. Actions to address climate change can help to catalyse Kenya's transition to a green economy and generate employment in new areas. A priority action will be the development of an enabling policy framework for green job creation, which identifies emerging green economy opportunities and promotes private sector investment and engagement to maximize employment creation.

## **Policy Statements**

The Government will:

1. Identify fiscal, taxation and other policy options in priority areas with high GHG emission abatement potential that enhance sustainable development.
2. Mainstream low carbon growth options into the planning processes and functions of the national and county governments.
3. Put in place mechanisms to establish a GHG inventory to achieve efficient and effective collection, recording and sharing of GHG emissions data.
4. In view of strategic national interests, consider participating in voluntary emissions reduction programmes when they support the country's sustainable development goals and achieve co-benefits.
5. Put in place mechanisms to develop and promote clean technologies in all sectors of economic development.
6. Promote the creation of green jobs by establishing an enabling policy framework for investment, and creating business friendly regulatory environments in key areas such as renewable energy, efficient transport, clean manufacturing and sustainable agriculture.

## **5 MAINSTREAMING CLIMATE CHANGE**

- 5.1.1 Climate change mainstreaming is necessary to equip various coordinating and sectoral agencies of the Kenyan national and 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.

- 5.1.2 Accordingly, climate change mainstreaming requires a new approach that explicitly links climate change action to core national planning processes, documents and programmes, thereby providing the framework to achieve coordinated action on climate change across government functions. Mainstreaming in this sense requires cross-sectoral policy integration that operates both horizontally by providing an overarching guide for all sectors; and vertically, by requiring all sectors and levels of government to implement climate change responses in their core functions.
- 5.1.3 Kenya recognizes that climate change mainstreaming represents the best strategic approach to ensure that action on climate change results in meeting the overall policy objective of attaining low carbon and climate resilient development. Given that climate change affects fundamental economic, social and environmental aspects of Kenya's development, and that effective climate change response must be cross-sectoral in nature, placing mainstreaming at the core of Kenya's climate change response efforts represents a key strategic priority.
- 5.1.4 The Medium Term Expenditure Framework (MTEF) for budget making is a critical process for converting policies and plans into expenditure and action. It encourages cooperation across government departments in planning for a longer term period, rather than fragmented, short-term and reactive budgeting. Vision 2030, the current development master plan for Kenya, and its MTP framework also present opportunities to mainstream climate change into national planning. 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. It is therefore imperative to have a mechanism facilitating linkages and exchange of climate change information and data with planning processes across all levels of government.
- 5.1.5 Climate change mainstreaming therefore provides an opportunity to reconfigure Kenya's national planning processes to effectively integrate climate resilience and low carbon development..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 Kenya's prosperity in the context of a changing climate by explicitly linking climate change response to sustainable development.

## **Policy Statements**

The Government will:

1. Mainstream climate change response into national and county planning processes, including economic planning, national development policies and plans, performance contracting, and the short to medium term budget making process.
2. Develop a framework and tools for mainstreaming climate change responses into county government planning and budget procedures.
3. Ensure that national planning processes and documents account for climate risk analyses

and vulnerability assessments, and identify opportunities to build climate resilient 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 national and county planning processes.

## **6 RESEARCH AND TECHNOLOGY**

- 6.1.1 The complex and dynamic nature of climate change and its impacts requires Kenya to develop and maintain infrastructure for targeted and continuous research and technology advancement. This is necessary in order to comprehend the causes, manifestations and effects of climate change. It will also aid in prediction of climate-related changes and identification of optimal and cost effective remedial measures. An effective national system for organizing, undertaking and utilizing research and technology is imperative to support evidence-based policy making.
- 6.1.2 Research and technology will play a key role in climate change adaptation and mitigation strategies and interventions. The development of a coordinated research system is needed to enhance existing research initiatives such that they promote the attainment of low carbon climate resilient development. Although considerable progress has been made on research and technology, further inputs are required to determine how climate change will impact various economic sectors, ecosystems and vulnerable groups. Empirical evidence can improve policy, legislative, scientific, technological and other interventions. Research results can be used to convert the challenges of climate change into opportunities for the sustainable development of Kenya.
- 6.1.3 Various stakeholders have distinct yet complementary roles in research and technology advancement. The government is a crucial facilitator, with ability to put in place policies and programmes that incentivize research. A systematic collaboration between government, universities (and other research institutions), the private sector and civil society organizations (CSOs) will optimize Kenya's ability to attain low carbon climate resilient development. A collaborative approach to research and technology advancement reinforces the need to have a national research mechanism on measures to address climate change challenges.
- 6.1.4 Universities and other tertiary education institutions provide the ideal context for scholarly research and inquiry which provides a link between the scientific and other disciplines investigating climate change, and development or innovation of technologies. University research requires distinct financial support that could be drawn from the public and private sectors, and aligned to support identified national climate change interventions beneficial to the public and private sectors.

- 6.1.5 CSOs occupy an important position because they are structured to provide a voice for advocacy on policy direction and implementation. CSOs should engage in research as a basis to support their advocacy mandate, such that their interventions are evidence-based, optimal and constructive.
- 6.1.6 The private sector is a critical cog in advancing research and technology for climate change intervention, and invests in Research and Development (R&D). Linkage between private sector R&D and the government's goal of attaining low carbon climate resilient development is important.
- 6.1.7 Public-private partnerships (PPPs) provide a functional mechanism through which research and technology collaborations on climate change interventions can be organized between government and private sector. The government recognizes the importance of this tool, and has put in place a legislative framework on PPPs through which research and technology development for climate change interventions can be undertaken.
- 6.1.8 Technological innovation, which involves expanding and adapting existing technologies to the national or local context, is an imperative component of Kenya's climate change interventions. It requires not only strong capability of various actors but a strategy to build, enhance and maintain the requisite human resource capacity. Support to technological innovation should ensure 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.
- 6.1.9 Endogenous technology development is a necessary element of achieving low carbon climate resilient development. Development of climate resilience and enhancement of adaptive capacity requires knowledge of appropriate choice of tools in order for society and institutions to maintain competent function under adverse conditions. Interventions are also necessary to introduce low carbon technologies that have utility to the socio-economic, environmental and political circumstances of Kenya. The deployment of technologies, whether new or through innovation steps, requires application of endogenous philosophies that ensure optimal utility to Kenya. The Government recognizes the urgent need to accelerate development and diffusion of endogenous, and locally adapted technologies and to that end will promote an enabling investment environment.
- 6.1.10 Indigenous, local and traditional knowledge are important resources for adapting to climate change. Communities that depend on natural resources have a long history of adapting to climate change and variability using such knowledge. However, these systems are increasingly being challenged by a changing climate. In addition, this knowledge has often been ignored in policy and research, although it possesses potential to increase the effectiveness of adaptation strategies.

## **Policy Statements**

The Government will:

1. Identify the research and technology needs and promote strategic, continuous and systematic climate change-related research, impact and vulnerability assessments, technology development and diffusion.
2. Put in place mechanisms to encourage and facilitate endogenous climate change technological development, including strategies to enhance and maintain human capacity.
3. Enhance the capacity of public, private and civil society sectors, and research institutions, to research, develop and support utilization of 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 adaptable technologies for effective climate change management.
5. Enhance linkages between government, academia, industry and global climate change innovation institutions.
6. Put in place mechanisms to facilitate the integration of indigenous, traditional and local knowledge into research.
7. Put in place mechanisms to enhance resource mobilization for climate change research.

## **7 EDUCATION AND PUBLIC AWARENESS**

- 7.1.1 Public participation is a core value and principle of national governance in Kenya. Raising and maintaining the awareness of the public on matters of climate change is one tool that can be deployed efficiently.
- 7.1.2 Increasing public awareness on climate change impacts and interventions can help to convert the public into a positive agent to reinforce climate change interventions. Kenya has various mechanisms for public awareness, especially through government and civil society. The Kenya National Integrated Civic Education Programme is one example of an initiative that disseminates information on governance to the population through civic education. Conventional public awareness mechanisms, such as extension services that are prevalent in natural resource management sectors, play an instrumental role in public awareness, albeit on a limited sectoral scale.
- 7.1.3 Public awareness on climate change should integrate knowledge on how to address certain critical and cross-cutting policy questions such as mainstreaming of gender, youth and special needs considerations. This approach is important because public awareness is central to the subsidiarity principle which requires an active role of the people in governance, 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, and can help transition people from

victims of, and contributors to climate change to positive agents working against climate change.

- 7.1.4 While public awareness normally takes the form of informal education, the formal education mechanisms are equally instrumental. Basic education is, as a constitutional rule, free and compulsory to every child in Kenya. The mainstreaming of relevant climate change knowledge into the basic education curriculum would provide knowledge and awareness to millions of Kenyan children. A similar approach at secondary, tertiary and adult literacy levels could increase awareness on climate change across the present generation. The government can play an important role here as it has the mandate to prepare or approve education curriculum at all levels in public and private education institutions respectively.
- 7.1.5 The extent to which adverse climate change impacts permeate society is most effectively disseminated by demonstrating how climate change affects sectoral areas of governance. This requires reviewing and refining the capacity of the various sectoral institutions to mainstream climate change issues into their core function. Public awareness strategies developed for the various sectors will thus incorporate knowledge regarding climate change. The formal education systems avails an effective mechanism for framing and disseminating knowledge on climate change to different generations of Kenyans.

## **Policy Statements**

The Government will:

1. Put in place a strategy for identifying, refining and disseminating climate change knowledge to the public and other stakeholders in user-friendly formats.
2. Develop and implement curricula that mainstream climate change knowledge in context of specific learning content or disciplines for basic, secondary and tertiary level education.
3. Incorporate climate change knowledge into government implemented public awareness initiatives including civic education and extension programmes.
4. Collaborate with, and support private sector and civic society in incorporating climate change knowledge into advocacy and public awareness raising programmes.
5. Strengthen the capacity and ensure sufficient resourcing of new and existing institutions engaged in climate change response to perform clearly defined roles and functions.

## **8 KNOWLEDGE MANAGEMENT AND ACCESS TO INFORMATION**

- 8.1.1 The ability of the country to respond appropriately and effectively depends, to a great extent, on the ability to understand and assess impacts and vulnerability, and use that knowledge to design responses. It is important to acquire or develop knowledge on the status of climate change, vulnerability and impacts, and the available response options in order for policy makers, the public and private sector to make informed decisions on appropriate steps for adaptation and mitigation.

- 8.1.2 In Kenya, knowledge can exist as undocumented (tacit) or documented (explicit). Indigenous knowledge, for instance, is both tacit and explicit. The process of knowledge management must be cognizant of this, and also that availability of knowledge may be restricted by intellectual or public safety protections. Knowledge management concerns process and substance. The nature of knowledge is diverse, and the stakeholders are extensive.
- 8.1.3 Traditional knowledge, although a key plank of strategies and technologies for building resilience and enhancing adaptive capacity, is not protected through intellectual property rights, and tends to exist more as tacit rather than explicit knowledge. The Constitution however obliges the Kenyan State to protect and enhance this knowledge.
- 8.1.4 Mainstreaming of gender considerations in knowledge management is important to assure the relevance and applicability of the outputs. This is because the impacts of climate change affect people in different ways and gender represents one division whereby women and men are impacted by climate change diversely, just as various women or men maybe impacted differently from other members of the same gender. It is important to mainstream gender analysis and put in place mechanisms for disaggregation of knowledge on how impacts and roles, even within the same gender, affect people based on their contexts and circumstances.
- 8.1.5 Generation of climate change knowledge and information, combined with effective communication strategies, can facilitate a better informed citizenry which can actively participate in programmes to address it. A major concern in Kenya is the lack of adequate and appropriate climate change information and knowledge and the lack of data available to researchers, planners, policy-makers and the general public. A climate change knowledge and communication needs assessment is required to develop appropriate systems and processes for climate related data collection, information gathering, information storage and effective communication.
- 8.1.6 Such climate change knowledge and information management systems must engender community ownership and participation, provide language, cultural and local relevance, and use appropriate technology to meet the real needs of the public.
- 8.1.7 The Government is keenly aware of the need to gather and organize already existing data and generate additional information, based on identified gaps, to ensure an adequate climate change knowledge and information base for social, economic and environmental decision-making by all stakeholders.
- 8.1.8 The utility and relevance of knowledge is dependent on the dissemination mechanisms and accessibility to various interested parties. Access to information is one tool through which persons can procure knowledge held by public or private parties and apply it for various purposes. As a basic right, access to information is grounded in the Constitution, and its entitlement is limited only to citizens of Kenya. This right has various elements that are key to its utility on dissemination of climate change knowledge. Information held by a private party can only be accessed if it is necessary in realization of a specific basic right, while information held by public agencies can be accessed. However, various procedural

limitations are likely to be imposed in order to safeguard integrity of certain knowledge, such as that subject to intellectual property rights, proprietary interest or of a confidential nature, or information classified for national security reasons.

- 8.1.9 The rules on access to information should be interpreted liberally to ensure the widest latitude is given to public access to information, bearing in mind the constitutional origins of the right. Procedural mechanisms on access to information require that an interested party should make a formal request, and likely make a reasonable payment to cover modest administrative costs. Minimization of these procedures, or their elimination with regard to climate change information will expand the scope of accessible knowledge and information. Since it is a constitutional requirement to publicize any important information affecting the nation, the government should classify climate change information as falling in this category and proactively provide refined information on climate change to the public.

## Policy Statements

The Government will:

1. Facilitate establishment and operation of a climate change information hub and clearinghouse at the climate change resource centre to generate, coordinate, collect, collate, store, retrieve and disseminate reliable, high quality and up-to-date data and information.
2. Facilitate setting up of climate change information hubs by county governments to collect primary information, and act as dissemination points for refined knowledge.
3. Strengthen mechanisms and systems for the generation of climate change data and information including ensuring improved accessibility of the information by key stakeholders.
4. 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.
5. Develop a comprehensive communication strategy to enhance dissemination of credible and reliable climate change information and research findings.
6. Put in place mechanisms to gather, document and promote application of traditional indigenous knowledge and practices on climate change.
7. Mainstream gender analysis into climate change knowledge and information management.
8. Implement mechanisms to facilitate and support access to climate change information.

## **9 CLIMATE CHANGE GOVERNANCE**

### **9.1 Enabling Regulatory Framework**

- 9.1.1 Appropriately designed legislative, policy and institutional frameworks provide a regulatory architecture comprising the vital components of climate change governance. This architecture is crucial to achieving effective policy and action plan implementation. Without clear and well-defined structures in place there will be significant obstacles in translating climate change response from concept to reality.
- 9.1.2 It is imperative that Kenya aims to attain sustainable development, which is framed by the Constitution as an important value of national governance. Climate change impacts will continue to place significant obstacles in the path of sustainable development mechanisms. The Constitution has set up a renewed structure of public administration, with one national government and 47 County governments. These two levels of government while distinct are interdependent and expected to function consultatively in a cooperative manner to discharge their respective and concurrent mandates. The national government is mandated to make policy on climate change. Various functions assigned to county governments are integral to fulfilment of actions required to address climate change. In certain instances, there maybe concurrent performance of climate change related functions by the two levels of government. This context requires clarity in the overall regulatory framework.
- 9.1.3 The effective implementation of climate change responses requires a review of the overall legislative and institutional arrangements that govern climate change actions. Laws and policies have to be reviewed and designed to: accord with powers and functions of a devolved system of government, and uphold distinctiveness, mutual cooperation and consultation across the national and county governments. The principles of cooperative government underpin performance of climate change mandates, respecting that functions can be concurrent and that the principle of subsidiarity may favour implementation through the lowest level of government, when doing so is the most effective approach.
- 9.1.4 Similarly, various sectoral laws and policies that will provide the legislative basis for specific actions will need to be analysed for potential amendments to enhance their capability to tackle the immense climate change challenges and exploit emerging opportunities. Legislative and regulatory review will be an ongoing iterative process to ensure that barriers to action are removed and enabling frameworks for implementation are in place based on evolving circumstances.
- 9.1.5 Climate change is a complex policy issue that impacts national development. The responses and actions to address climate change will require horizontal and vertical integration. The achievement of horizontal integration will require a legislative and institutional mechanism that provides high-level guidance. The legislative mechanism is necessary to provide overall content and direction on functions and mandates for various sectors across the national and county government levels. The institutional mechanism is critical to provide high level coordination and political authority to guide mainstream of climate change functions in

sectoral mandates at all levels of government. Vertical integration is instrumental in determining the roles of various sector institutions and devolved governments in performing climate change mandates. This integrated approach is, cumulatively, an important step to minimizing or eliminating instances of regulatory incoherence where no coordination or linkage exists between sectoral climate change mandates.

9.1.6 The effective discharge of Kenya's international climate change obligations significantly depends on the existence of an effective regulatory framework. This also bears upon the country's participation in international negotiations, since an effective regulatory framework provides a context to prepare for negotiations and develop a strategic national position on key issues.

## **Policy Statements**

The Government will:

1. Put in place overarching climate change legislation to provide the framework for coordinated implementation of climate change responses and action plan.
2. Put in place a Cabinet level climate change committee to coordinate the mainstreaming of linkages between climate change and national development.
3. Put in place an institutional coordination mechanism with high-level convening power to enhance an inter-sectoral response to climate change.
4. Put in place a technical institutional framework to guide policy and functional implementation of climate change legal obligations of the national and county governments.
5. Put in place, and regularly review subsidiary legislation as may be necessary to support implementation of various interventions through the national climate change legislation.
6. Regularly review and amend relevant sectoral laws and policies in order to integrate climate change policy considerations and implement priority actions in respective sectors.
7. Put in place mechanisms for public consultation and participation in climate change governance at all levels of government.
8. Strengthen coordination and capacity for international climate change negotiations.

## **9.2 Climate Finance and Other Resources**

9.2.1 Mobilizing adequate and predictable financial resources is a crucial component for achieving Kenya's ambitious climate change response objectives. Given the extent of projected climate change adaptation and mitigation needs in Kenya, it is important to ensure that all sources of finances can be mobilized – international, domestic, public and private – including through PPPs. Kenya therefore requires a suitable framework to attract and efficiently utilize climate finance.

9.2.2 A functional climate finance mechanism is helpful in diversifying financial reserves, helping to safeguard the interests of Kenyan citizens, and preserving wealth for future generations.

Financial resources are integral to the identification, design and implementation of interventions required to achieve climate resilience, adaptive capacity and low carbon growth. The resources mobilized through such a mechanism will therefore play an instrumental role in developing and maintaining required human capacity, support governance arrangements, and enhance collaborative links amongst the various actors.

- 9.2.3 Kenya continues to face tremendous climate change challenges that require mitigation and adaptation interventions respectively. Creating a balance in the allocation of mobilized resources is therefore imperative to ensure proportionate allocation based on the needs of the country. Criteria should be developed to identify a balance of climate resilience and low carbon priority interventions. The allocation of resources in a manner that proportionately responds to need is a step towards prudent management of resources.
- 9.2.4 PPPs have emerged as viable mechanisms for leveraging private sector financing to support public policy goals. An enabling regulatory framework has been put in place by the government to support PPPs. Investments that support low carbon climate resilient development can therefore be identified, prepared and implemented through the PPP framework.
- 9.2.5 In order to achieve the desired goal of improved climate change response and further, it is important to strengthen the capacity of actors to disburse, absorb and manage funds in a transparent and accountable manner. This will ensure that all mobilized finance achieves gains in securing climate resilience, building adaptive capacity and implementing low carbon development.
- 9.2.6 The government recognizes the urgency of strengthening transparency and accountability and will therefore take necessary steps to prevent corrupt practices in financial resource allocation towards building climate resilience and adaptive capacity, while catalysing low carbon growth.
- 9.2.7 The diversity in sources of climate finance introduces difficulties in monitoring and evaluating the application and impact of climate change interventions. In order to optimize the application of climate finance, it prudent to have mechanisms that identify the sources and track how the finance has been utilized. These mechanisms will assess the disbursement, absorption and management of funds in a transparent and accountable manner. A framework for tracking climate finance should incorporate finance sources derived from the broad spectrum of actors: including international and domestic, public, private and civil society.

### **Policy Statements:**

The Government will:

1. Adopt a climate finance strategy and establish an appropriate fund mechanism that enables implementation of current and future priority actions for climate resilience and adaptive capacity and low carbon growth.

2. Explore possible collaborations and avenues to attract internal and external climate finance through foreign direct investment, and other multilateral or bilateral funding.
3. Put in place a mechanism and criteria for balance in allocation of mobilized climate finance to adaptation and mitigation actions.
4. Develop policy and strategies to enhance Kenyan capacity to engage in carbon market activities, strengthen the viability of domestic carbon asset production and increase access to international carbon markets.
5. Promote private sector involvement in climate finance opportunities through the introduction of incentives, removal of investment barriers, promotion of a conducive investment climate and facilitation of access to finance.
6. Adopt and implement sector specific anti-corruption, transparency, accountability and integrity mechanisms to safeguard prudent management of climate finance.
7. Develop and implement PPPs for climate change response.
8. Put in place a framework for tracking sources, application and impacts of climate finance.

### **9.3 Mainstreaming Issues of Gender, Youth and Special Needs Groups in Climate Change Actions**

- 9.3.1 The constitutional foundations of governance in Kenya aim for an equal society, and clearly asserts that women and men are equal. This equality is the goal that Kenya aims to achieve in all aspects of society interaction, whether economic, social or environmental. Steps must be taken to ensure that existing disparities between men and women are addressed in order to reduce or eliminate vulnerability and poverty that are exacerbated by climate change. The Constitution provides for socio-economic rights, such as the right to water, food, housing, emergency medical services and sanitation. These rights are mechanisms for addressing vulnerability arising from gender inequity, but also for supporting the youth and persons with special needs in order to reinforce intra- and inter-generational equity.
- 9.3.2 Given gender disparities in social and economic roles, women and men experience the effects of climate change differently. Women suffer more because vulnerability arising from the gender division of labour and allocation of power at household, work and other levels. Climate change exacerbates these inequalities, and it is therefore necessary to understand the risks and impacts of climate change on women and men. This disaggregation should be applied not just across genders but also amongst the members of each gender, as the factors that exacerbate vulnerability to climate change vary. It is therefore imperative that policy and other interventions integrate this approach.
- 9.3.3 Women, because of their roles in society, can be active agents to address climate change challenges. Mechanisms are needed to enhance this role and improve coping capacity. Women's coping capacity is low, and is adversely affected by the gender division of labour and power at household, work and other levels.

- 9.3.4 Gender equality, as mandated by the 2010 Constitution, will be achieved in relation to climate change response by the adoption of a gender mainstreaming approach. This 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 levels to achieve gender equality.
- 9.3.5 The youth represent a cross over between the present and future generations, and therefore play a critical role in socio-economic development, including addressing climate change. It is necessary to carve out specific roles and opportunities for youth participation in decision making in climate change governance, and to pursue opportunities that arise through climate change actions.
- 9.3.6 The equitable basis of governance in Kenya, as set out by the Constitution, requires that social and economic justice be upheld, especially to extend protection and opportunities to persons with special needs who could be vulnerable. Equally, the governance system must integrate the participation of persons with special needs in decision making as well as mainstream specific considerations that ensure government policies are responsive and extend opportunities. The challenges posed by climate change represent an area of governance where this inclusive governance is very critical.
- 9.3.7 Initiatives to build climate resilience and adaptive capacity will therefore systematically and effectively be reinforced. This is important to enable the Kenyan government to mainstream climate change issues in a manner that is specific to gender, youth and persons with special needs.

## **Policy Statements**

The Government will:

1. Ensure that climate change response is equally beneficial to both women and men and enhances gender equality and equity.
2. Undertake systematic gender analysis of its climate change response, through the collection and utilization of gender-disaggregated data, including in relation to budgetary processes.
3. Ensure that marginalization and vulnerability arising from gender disparities are addressed at all stages of climate change response.
4. 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.
5. 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.
6. 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.

## **9.4 Climate Change Measurement, Reporting and Benefit Measurement**

- 9.4.1 All actions taken to reduce GHG emissions should be measured and reported to demonstrate that emission pathways are on the right track or that additional efforts are necessary. However, Measurement, Reporting and Verification (MRV) requirements as promoted under the UNFCCC must also reflect the nature of commitments and actions, and priority areas of individual countries, in light of common but differentiated responsibilities and respective capabilities. The role of the public in the MRV process should be identified, especially stakeholders in target groups, and their utility in tracking outcomes and measuring benefits.
- 9.4.2 Currently, Kenya has a weak mechanism for collecting information on climate change, with relevant indicators unconsolidated and scattered throughout different agencies and departments. This fragmented framework makes it difficult for key stakeholders to track progress, share results and access information.
- 9.4.3 In response to this challenge, the need for an integrated, holistic and adequately resourced monitoring, reporting and benefit measurement system has been identified. To achieve low carbon climate resilient development, it is therefore important to put into place an integrated MRV mechanism that tracks adaptation and mitigation actions, impacts and benefits. MRV for climate finance is also necessary due to the facilitative role of finance in supporting actions to enhance climate resilience, build adaptive capacity and reduce emissions. This integrated MRV+ approach proposed for Kenya goes beyond that mandated by the UNFCCC.
- 9.4.4 This integrated approach where MRV is applied to mitigation and, adaptation actions and climate finance will help to determine the impact of actions and implementation challenges, as well as facilitate evidence-based decision making. It further provides a vital governance tool to assess performance against set targets and to update action plans accordingly. By demonstrating Kenya's clear achievement of climate resilience and emission reduction results, the MRV+ approach will further contribute to attracting climate finance.

### **Policy Statements**

The Government will:

1. Establish an integrated MRV framework for performance, outcomes and benefits of mitigation, adaptation and climate finance actions.
2. Prioritize the use of existing MRV processes, data collection and information management systems to ensure efficiency in climate change related monitoring, reporting and benefit measurement.
3. Prioritize the integration of climate change parameters, data and information required for MRV into the national statistical management system.
4. Ensure that national MRV system is transparently linked with national sustainable development planning, budgeting and monitoring systems.

## **10 IMPLEMENTATION FRAMEWORK**

### **10.1 Implementation Framework and Costs**

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

10.1.2 This Policy will be implemented through specifically developed and fully costed Climate Change Action Plans commencing with the National Climate Change Action Plan 2013 - 2017 and through new and amended action plans developed in at least five-year intervals.

10.1.3 To facilitate climate change mainstreaming and realization 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.

### **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.
3. Facilitate continuous consultations and public awareness across all sectors, interest groups and the public.

### **10.2 Monitoring and Evaluation of Policy Implementation**

10.2.1 The government recognizes the importance of tracking implementation of this climate change Policy and evaluating related outcomes. This important task can signal potential weaknesses in design, identify implementation challenges and facilitate policy adjustments. In this context, it is crucial to prioritize rigorous and continuous monitoring and evaluation of this Policy.

10.2.2 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. Monitoring and evaluation (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 process will be adopted to facilitate periodic reviews of this Policy and its contribution to the national economy.

10.2.3 M&E will be implemented by tracking inputs of the Policy implementation through mainstreaming of climate change by national and county government entities. Performance

contracts provide a useful tool through which targets, inputs and the resultant outputs can be predetermined and evaluated.

10.2.4 An M&E task force will ensure M&E provides reliable and timely data for planning purposes. This task force will coordinate overall management of the inputs from different data sources, and also for the analysis of data and elaboration of respective reports from national and county levels. A partnership with sector ministries, agencies, county governments, research institutions, private sector and civil society will be necessary. Adequate funds will be provided achieve sustainability of the M&E system.

10.2.5 The government, in collaboration with other stakeholders, will build capacity to formulate and implement an appropriate M&E system in all the development, management and research programmes for climate change interventions.

10.2.6 Adopting a participatory approach that facilitates active engagement of stakeholders, M&E of this Policy will further be synchronized to the five year MTPs of Vision 2030.

## **Policy Statements**

The Government will:

1. Establish mechanisms for the review and evaluation of the implementation of this Policy.
2. Put in place mechanisms to utilize performance contracting as a tool for review and evaluation of inputs and outputs under this Policy.
3. Collaborate with County governments in setting up M&E procedures of climate change policy at county level.
4. Set up a task force within the State Department responsible for Climate Change Affairs to undertake M&E of this Policy over five year intervals in line with the Climate Change Action Plans and the Medium Term Plans of Vision 2030.
5. Disseminate the outcome of the review and evaluation for public and stakeholder discussion, and for parliamentary and county assembly debate and oversight.
6. Put in place procedures to facilitate feedback and learning from public and stakeholder contributions, learning from the M&E outcomes, and for effecting appropriate changes to behaviour.

## **10.3 Resource Mobilization**

10.3.1 Funding required for financing climate change responses under this policy will be mobilized from both internal and external sources. In this context, resource mobilization will be closely linked to Kenya's climate finance strategy, particularly in order to facilitate external financing.

10.3.2 Government at all levels will be required to integrate climate change response actions into budgetary processes of government. 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 prioritized to ensure that the necessary human, technical and financial resources are available.

10.3.3 This Policy underscores the government's commitment to increase the PPP initiative to strengthen sustainability of actions undertaken to achieve low carbon climate resilience development.

### **Policy Statements**

The Government will:

1. Allocate resources for climate change actions in national and county budgetary processes.
2. Mobilize substantial levels of climate finance to fund implementation of this Policy and the associated Climate Change Action Plans.
3. Put in place mechanisms to attract and leverage PPPs as a vehicle for resource mobilization and enhancing private sector participation in low carbon climate resilient development activities.

### **10.4 Collaboration and stakeholders participation**

10.4.1 Public participation has been identified by article 10 of the Constitution as a binding national value during the implementation of any public policy or decision; or in the making or implementation of any law. The Government therefore recognizes the importance of building and sustaining partnerships with the Kenyan public, at all levels of society, to ensure a collective national ownership of all climate change responses.

10.4.2 The Government will continue to play the lead role in the strategic planning and management of climate change responses. The national government will also play a key role in fostering participatory partnerships between itself and county governments, other public entities, the private sector, civil society organizations, development partners, media and other 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 Government will:

1. Put in place and operationalize 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 the sectoral departments.

**Annex I – Acronyms**

ASALs	Arid and semi-arid lands
CSO	Civil Society Organization
EAC	East African Community
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoK	Government of Kenya
IDSR	Integrated Disease surveillance and Response Strategy
IPCC	Intergovernmental Panel on Climate Change
M&E	Monitoring and Evaluation
MEWNR	Ministry of Environment, Water and Natural Resources
MRV	Measurement, Reporting and Verification
MTEF	Medium Term Expenditure Framework
MTP	Medium Term Plan
MW	Megawatt
NCCAP	National Climate Change Action Plan
NCCRS	National Climate Change Response Strategy
NGO	Non-Governmental Organization
PPP	Public Private Partnership
R&D	Research and Development
TOE	Tons of Oil Equivalent
UNFCCC	United Nations Framework Convention on Climate Change

## **Annex II – 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.

### **Capacity building**

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

### **Carbon market**

A trading system through which countries or other entities may buy or sell units of greenhouse gas emissions in an effort to meet their national limits on emissions, either under the Kyoto Protocol or under other agreements, such as that among member states of the European Union. The term comes from the fact that carbon dioxide is the predominant greenhouse gas, and other gases are measured in units called "carbon-dioxide equivalents."

### **Carbon sequestration**

The process of removing carbon from the atmosphere and depositing it in a reservoir, such as soil or trees.

### **Conference of the Parties**

The supreme body of the UNFCCC. It 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**

Conversion of forest to non-forest.

### **Greenhouse gases**

The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). Less prevalent --but very powerful -- greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>).

### **Intergovernmental Panel on Climate Change**

Established in 1988 by the World Meteorological Organization and the UN Environment Programme, the IPCC surveys world-wide 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 greenhouse-gas 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.

**National Adaptation Plans**

Documents prepared by least developed and other countries identifying urgent and immediate needs for adapting to climate change.

**Non-governmental organizations**

Organizations that are not part of a governmental structure. They include environmental groups, research institutions, business groups, and associations of urban and local governments. Many NGOs attend climate talks as observers.

**Protocol**

An international agreement linked to an existing convention, but as a separate and additional agreement that must be signed and ratified by the Parties to the convention concerned. Protocols typically strengthen a convention by adding new, more detailed commitments.

**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

**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.

**UN**

United Nations

**UNFCCC**

United Nations Framework Convention on Climate Change

**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.