



COUNTY GOVERNMENT OF MOMBASA

**DEPARTMENT OF ENVIRONMENT, WASTE
MANAGEMENT & ENERGY**

**MOMBASA COUNTY CLIMATE CHANGE
ACTION PLAN**

2020-2023

Introduction

The Mombasa County Climate Change Action Plan has been developed to guide the county in mitigation and adaptation of climate change impact. The development of the action plan is in line with the Climate Change Act 2016 which requires the government to develop action plans to guide the incorporation of climate change in the sectoral projects. The action plan covers a period of three years as from the financial year 2020/2021 to 2022/2023. The development of the action plan has been participatorily by actively engaging with relevant stakeholders in prioritizing the activities.

Observations show that global average temperatures have now increased by more than 1°C since pre-industrial times. The atmosphere and oceans have warmed, the amount of snow and ice has reduced, and sea levels have risen as the concentrations of greenhouse gases have increased. The projections of future global and regional climate change indicate that continued emissions of greenhouse gases will cause further warming and changes to our climate.

Kenya has experienced the impacts from climate change from rising temperature, extreme storms and rainfall, decline in the amount of rainfall, prolonged dry periods, pest and disease outbreaks increase in **diseases prevalence** and strong winds. The extreme weather conditions have resulted to food and nutrition insecurity, damage on infrastructure and homesteads, loss of lives, loss of livelihoods. This has consequently affected the country's development and economy as funds that will otherwise be used in development is used in disaster management due to climate change. Subsequently this has affected the achievement of the country's goals as envisioned in Kenya Vision 2030, the Big Four Agenda and Sustainable Development Goals.

Mombasa County being an island is one of the most impacted ecosystems by climate change thus the need to have an action plan to guide the mitigation and adaptation to the impacts. These changes in climate have caused and will cause extensive direct and indirect harm to the county's ecosystem and its people which include:

- Rising sea-levels threatening habitable land and particularly coastal infrastructure
- Extreme weather, including more intense rainfall affecting the land, coastline and sea
- Further pressure on the scarce water resources and food production systems with associated impacts on coastal ecosystems
- Increased chance and scale of coastal flooding
- Heightened risk of the arrival of new pests and diseases

- Poorer water quality
- Increased disease prevalence

The development of Mombasa County Climate Change Action Plan is anchored on article 10 of The Constitution which outlines national values and principles of governance, such as sustainable development, devolution of government, and public participation, that are mandatory when making or implementing any law or public policy decisions, including climate change. Article 42 that provides for the right to a clean and healthy environment for every Kenyan, which includes the right to have the environment protected for the benefit of present and future generations. It is also anchored on Climate Change Act (2016) which is the main legislation guiding Kenya's climate change response through mainstreaming climate change into sector functions, and it is the legal foundation of the action plan. The plan is also in line with National Climate Change Action Plan 2018-2022), Kenya Climate Smart Agriculture Strategy (2017-2026), Climate Risk Management Framework (2017), National Climate Change Policy (2018), and National Climate Finance Policy (2018), among other sector plans and policies that address aspects of climate change.

General Objective

To enhance the county government's and local communities' capacity to mitigate and adapt to the impact of climate change by creating a resilient and thriving environment and economy using a participatory approach.

Specific Objectives

1. To enhance the institutional capacity of the county in climate change adaptation and mitigation
2. To reduce climate change risk to the local community and infrastructure
3. To enhance the capacity of the local community in food and nutrition security
4. To increase the county's forest cover
5. To promote the adoption of green energy at the county
6. To reduce the level of pollution at the county
7. To mainstream climate change in sectoral development

CLIMATE CHANGE ACTION PLAN MATRIX

Objective	Project	Activity	Sub-activity	Outcome	Key performance indicator	Time frame	Key actors
To enhance the institutional capacity of the county in climate change adaptation and mitigation	Enhancement of institutional capacity of the county in climate change adaptation and mitigation	Development of climate change legislations	Develop climate change policy	Well regulated and authorized climate change activities	No. of policies developed	July 2020-February 2021	Dept of Environment, Waste Management and Energy All County Departments Ministry of Environment& Forestry Community NGO IFAs
			Develop climate change finance policy	Authorized provision of climate change funds	No. of policies developed	July 2020-February 2021	Dept of Environment, Waste Management and Energy All County Departments Ministry of Environment& Forestry Community NGO IFAs
			Develop climate change associated bills	Well regulated and authorized climate change activities	No. of bills developed	July 2020-February 2021	Dept of Environment, Waste Management and Energy All County Departments Ministry of Environment& Forestry Community NGO IFAs
		Enhancing the climate change directorate in implementing climate change functions	Recruiting staff	Proper implementation of climate change functions	Number of staff requited	July 2020-June 2021	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning County Public Service Board
			Training staff in climate change	Enhanced technical capacity in the implementation of climate change	Number of staff trained Number of trainings attended	July 2020-June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning IFAs NGOs
			Establish an office and refurbish it for climate change staff	Conducive work environment for the staff	Number of offices established and refurbished	July 2020-June 2021	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning IFAs

		Enhance the county's capacity in monitoring the impact of climate change	Train staff in monitoring the impact of climate change	Enhanced technical capacity in monitoring of climate change impacts	Number of staff trained Number of trainings attended	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning IFAs Research Institute
			Development of assessment tools	Accurate monitoring of climate change impacts	Number of tools developed	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning IFAs Research institute
			Undertake climate change surveys	Well monitored climate change impacts	Number of surveys undertaken	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning IFAs Research institute
			Establish a repository for climate change data and information	Availability of reliable climate change data and information in one point	Number of repository established	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning IFAs Research institute
To reduce climate change risk to the local community and infrastructure	Disaster risk management	Improve the local community's resilience to climate change	To create awareness of the local community on the impact of climate change, mitigation and adaptation measures	Well sensitized community on the impact of climate change, mitigation and adaptation measures	Number of community members sensitized Number of sensitization undertaken	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning Department of devolution and public administration Community IFAs
			Improve the ability of the local community to cope with drought	Enhanced community ability to cope with drought	Number of capacity enhancement undertaken	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning Department of devolution and public administration Community IFAs

			Improve the ability of the local community to cope with floods	Enhanced community ability to cope with flood	Number of capacity enhancement undertaken	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning Department of devolution and public administration Community IFAs
			Improve the delivery of disaster risk management services	To increase the number of community receiving climate change adaptation services	Well adapted community to the impacts of climate change	Number of community members receiving climate change adaptation services	July 2020- June 2023 Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning Department of devolution and public administration Community IFAs
			Increase the resilience of county infrastructure to climate change	To increase the resilience of infrastructure to floods	Reduced destruction of infrastructure as a results of floods	Number of resilient infrastructure established	July 2020- June 2023 Dept of Environment, Waste Management and Energy Dept of Finance and Economic planning Department of devolution and public administration IFAs
To enhance the capacity of the local community in food and nutrition security	Food and nutrition security enhancement	Improve food and nutrition security	Adoption of climate smart agriculture	Increased food and nutrition security	Number of community members that have adopted climate smart agriculture	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Agriculture, Livestock and Fisheries Dept of Finance and Economic planning Community IFAs
			Advocating for diversity in crop production	Increased food and nutrition security	Number of community members that have diversified crop production	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Agriculture, Livestock and Fisheries Dept of Finance and Economic planning Community IFAs
			Increase productivity in livestock and fisheries by	Increased food and nutrition security	Number of community members that have adopted	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Agriculture, Livestock and Fisheries

			adoption of climate smart action		climate smart actions		Dept of Finance and Economic planning Community IFAs	
	Enhance the buying capacity of the local community to purchase food	Adoption of alternative livelihood sources	Enhance the capacity of the local community in the adoption of alternative livelihoods	Increased and reliable income sources	Number of community members that have alternative livelihood sources	July 2020- June 2023	Dept of Environment, Waste Management and Energy Dept of Agriculture, Livestock and Fisheries Dept of Youth, Gender and Sport Dept of Finance and Economic planning Community IFAs	
To increase the county's forest cover	Rehabilitation of degraded ecosystems	Rehabilitation of degraded marine ecosystems	Rehabilitation of mangrove ecosystems	Restored ecosystem integrity of mangroves	Number of mangrove ecosystems rehabilitated	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community NGO IFAs	
			Rehabilitation of coral reefs	Restored ecosystem integrity of corals	Number of coral ecosystems rehabilitated	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community NGO IFAs	
			Rehabilitation of degraded terrestrial ecosystems	Rehabilitation of abandoned quarries	Restored ecosystem integrity of	Number of abandoned quarries rehabilitated	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community NGO IFAs
				Rehabilitation of degraded community forests	Restored ecosystem integrity of community forests	Number of degraded community forests rehabilitated	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community NGO IFAs
				Rehabilitation of rivers and wetlands	Restored ecosystem integrity of rivers and wetlands	Number of rivers and wetlands rehabilitated	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community NGO IFAs

Establishment of green zones	Urban forestry	Establishment of 1 eco-park in the terrestrial ecosystem	Increased county carbon sequestration capacity	Number of terrestrial eco parks established	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
		Establishment of 1 eco-park in a marine ecosystem	Increased county carbon sequestration capacity	Number of marine eco parks established	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO Private sector IFAs
		Tree planting along roads	Increased county carbon sequestration capacity	Number of roads planted with trees	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
		Greening of roundabouts	Increased county carbon sequestration capacity	Number of roundabouts greened	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
	Afforestation	Adoption of agroforestry on farms	Increased county carbon sequestration capacity	Number of trees planted onfarm	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community NGO IFAs
		Tree planting in institutions	Increased county carbon sequestration capacity	Number of trees planted in institutions	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Education Private sector NGO IFAs

To promote the adoption of clean energy	To promote the adoption of clean energy	Enhance the local community's capacity to adopt clean energy	Train staff on clean energy	Enhanced technical capacity of staff on clean energy	Number of staff trained on clean energy	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
			Sensitize the community on the importance of climate change officer	Well sensitized community on clean energy	Number of community members sensitized on clean energy Number of sensitization forums undertaken	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
			Train community groups in the production of clean energy	Reduced carbon emission at the county	Number of groups trained on production of clean energy	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
			Facilitate the community with the required equipment and machine to produce clean energy	Reduced carbon emission at the county	Number of community groups facilitated	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
			Installation of solar panels in county infrastructure	Reduced carbon emission at the county	Number of infrastructure installed with solar panels	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Community Private sector NGO IFAs
			Incentivize the production and sell of solar panels	Reduced carbon emission at the county	Number of manufacturers and traders engaged in solar panels	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Finance Community

							Private sector NGO IFAs
To reduce the level of pollution at the county	Enhance the level of waste management at the county	Establish a sustainable waste management system	Sensitize the community on sustainable waste management	Sustainable waste management at the county	Number of sensitization activities undertaken Number of community members sensitized	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Finance Community Private sector NGO IFAs
			Develop a sustainable waste management system	Sustainable waste management at the county	Number of sustainable waste management systems	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Finance Community Private sector NGO IFAs
			Enhance the county's capacity to implement the sustainable management system	Sustainable waste management at the county	Number of capacity enhancement the county has received	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Finance Community Private sector NGO IFAs
	Control of air pollution	Enhance the capacity of the county to control air pollution	Develop an air pollution act	Well regulated and authorized air pollution control	Number of acts developed	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Finance Community Private sector NGO IFAs
			Train staff on monitoring of air pollution	Reduced air pollution	Number of staff trained	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Finance Community NGO IFAs

			Sensitize the community on air pollution	Reduced air pollution	Number of sensitization activities undertaken Number of community members sensitized	July 2020- June 2023	Dept of Environment, Waste Management and Energy Ministry of Environment& Forestry Dept of Finance Community NGO IFAs
To mainstream climate change in sectoral development	Mainstreaming climate change	Mainstreaming climate change	Incorporate climate change activities in all the sectors at the county	Climate change mainstreamed in sectoral development	County planning documents	July 2020- June 2023	Department of Environment, Waste and energy Management and Energy Ministry of Environment& Forestry Dept of Finance Community NGO IFAs

