



REPUBLIC OF KENYA

DDC  
22/4/24

**MINISTRY OF ENVIRONMENT, CLIMATE CHANGE & FORESTRY**  
**State Department for Environment & Climate Change**  
**Office of the Principal Secretary**

Telegrams: "NATURE", Nairobi  
Telephone: 254-20- 2730808/9  
Fax: 254-20- 2734722  
Email : [psoffice@environment.go.ke](mailto:psoffice@environment.go.ke)

N.H.I.F BUILDING  
RAGATI ROAD  
P. O. BOX 30126-00100  
NAIROBI

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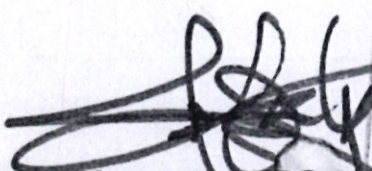
**The Clerk of the National Assembly**  
Parliament Buildings  
**NAIROBI**

*Hellen Ekadeli  
to facilitate  
ca 21/4  
23/4/24*

**RE: REQUEST FOR RESPONSE TO A STATEMENT REGARDING STATUS OF PREPAREDNESS OF THE NORTHERN KENYA PASTORALISTS IN CURBING THE IMPACT OF CLIMATE CHANGE BEFORE THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT, FORESTRY AND MINING**

The National Assembly Departmental Committee on Environment, Forestry and Mining through letter ref. NA/DCC/EF&M/2024/011 dated 15<sup>th</sup> March, 2024 by the Clerk of the National Assembly requested the Cabinet Secretary, Ministry of Environment, Climate Change and Forestry to respond on a statement regarding the status of preparedness of the Northern Kenya Pastoralists in curbing the impact of climate change as requested by Hon. Joseph Lekuton, MP, through the Chairperson of the Departmental Committee on Environment, Forestry and Mining.

This is therefore to forward the enclosed signed copy of the requested matter for the attention of the Committee Chairperson.

  
**John Elungata, EBS**  
**FOR: PRINCIPAL SECRETARY**

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P. O. Box 41842-00100  
Nairobi, Kenya  
Main Parliament Buildings

Telephone: +254202848000 ext. 3300  
Email: [ena@parliament.go.ke](mailto:ena@parliament.go.ke)  
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REF: NA/DDC/EF&M/2024/011

25<sup>th</sup> March, 2024

Eng. Festus Kipkoech Ngéno  
Principal Secretary  
State Department for Environment and Climate Change  
NHIF Building, Ragati Road, Upperhill  
P.O. Box 30126-00100  
**NAIROBI**

Dear **Eng Ngéno**

**RE: REQUEST FOR RESPONSE TO A STATEMENT REGARDING STATUS OF  
PREPAREDNESS OF THE NORTHERN KENYA PASTROLIST IN CURBING THE  
IMPACT OF CLIMATE CHANGE BEFORE THE DEPARTMENTAL COMMITTEE  
ON ENVIRONMENT, FORESTRY AND MINING**

The Departmental Committee on Environment, Forestry and Mining is established under Standing Order 216 of the National Assembly Standing Orders, and is mandated to *inter alia*; investigate, inquire into, and report on all matters relating to the mandate, management activities, administration, operations and estimates of the assigned Ministries and Departments.

Pursuant to Standing Order 44(2)(c), Hon. Joseph Lekuton, MP, requested the Chairperson of the Departmental Committee on Environment, Forestry and Mining to provide a Response to a Statement regarding the Status of preparedness of the Government in curbing the impact of climate change (copy attached).

The purpose of this letter therefore, is to request you to respond to the issues raised in the Statement. The Response should be received by the Committee on or before Tuesday, 9<sup>th</sup> April, 2024.

The officers responsible for coordination of this matter are Ms. Hellen Ekadeli; tel. no. 0733132322 or email: [hellen.ekadeli@parliament.go.ke](mailto:hellen.ekadeli@parliament.go.ke) and Mr. Hamdi Mohamed tel. no. 0724742973 or email: [hamdi.mohamed@parliament.go.ke](mailto:hamdi.mohamed@parliament.go.ke).

Yours

JEREMIAH W. NDOMBI, MBS  
For: CLERK OF THE NATIONAL ASSEMBLY



**Copy to:** **Hon. Roselinda Soipan Tuya, CBS**  
Cabinet Secretary  
Ministry of Environment and Forestry  
NHIF Building, Ragati Road, Upperhill  
P.O. Box 30126-00100  
**NAIROBI**



*G. Kimani Gachara,  
Member of Parliament  
19/3/24*



THE NATIONAL ASSEMBLY  
THIRTEENTH PARLIAMENT - (THIRD SESSION)

*Approved  
SNA  
19/3/24*

REQUEST FOR A STATEMENT REGARDING THE STATUS OF  
PREPAREDNESS OF NORTHERN KENYA PASTORALISTS IN  
CURBING THE IMPACTS OF CLIMATE CHANGE

Honourable Speaker, pursuant to the provisions of Standing Order 44(2)(c), I wish to request for a Statement from the Chairperson of the Departmental Committee on Environment, Forestry and Mining regarding the status of preparedness of Northern Kenya Pastoralists to cope with the impacts of Climate change.

Honourable Speaker, climate change poses significant challenges to Northern Kenya's pastoralists, especially with livestock losses and diminishing crop production in semi-arid areas. It is regrettable that the government is yet to put elaborate strategies and initiatives to promote resilient livelihoods among pastoral communities in the face of these environmental adversities. As the region suffers an alarming livestock depletion of nearly 70% and the increasing impossibility of crop production in Northern Kenya counties, there seem to be no sustainable development practices and alternative livelihood opportunities to enhance the adaptive capacity and economic stability of pastoralists in the Northern region and ensure long-term resilience following the impacts of climate change.

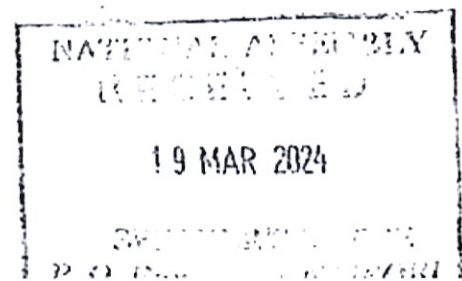
Honourable Speaker, additionally, climate change has induced shocks such as limited pasture availability and increased water scarcity, which calls for comprehensive policy measures, capacity-building programs, and investment strategies that will help empower pastoral communities, protect their livelihoods, and ensure their sustainable socio-economic development in the foreseeable future.

Honourable Speaker, it is against this background that I request for a Statement from the Chairperson of the Departmental Committee on Environment, Forestry and Mining to provide a report on the status of government preparedness and programs put in place to assist pastoralists in the Northern Kenya region and other arid parts of Kenya to curb or cope with the effects of climate change.

I thank you, Honourable Speaker.

THE HON. JOSEPH LEKUTON, CBS, MP  
MEMBER FOR LAISAMIS CONSTITUENCY

Date... 19/3/2024 .....







## MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY

### MINISTERIAL STATEMENT BY THE CABINET SECRETARY REGARDING STATUS OF PREPAREDNESS OF NORTHERN KENYA PASTORALISTS IN CURBING THE IMPACTS OF CLIMATE CHANGE THE GOVERNMENT INTERVENTION FOR PASTORALISTS DUE TO CLIMATE CHANGE

The National Assembly Departmental Committee on Environment, Forestry and Mining through letter Ref. No. NA/DCC/EF&M/2024/011 dated 15<sup>th</sup> March, 2024 by the Clerk of the National Assembly requested the Cabinet Secretary, Ministry of Environment, Climate Change and Forestry to respond on a statement regarding the status of preparedness of the Northern Kenya Pastoralist in curbing the impact of climate change.

**Hon. Chair and Hon. Members,**

I wish to state as follows: -

1. Globally, more than 70 percent of disasters from natural hazards are attributable to extreme climatic events. The science has spoken and loudly so, climate change is here with us and impacts are poised to worsen. According to the WMO's State of the Global Climate Report 2023, 'All records were again broken and, in some cases, smashed, for greenhouse gas levels, surface temperatures, ocean heat and acidification, sea level rise, Antarctic Sea ice cover and glacier retreat.

Sirens are blaring across all major indicators, some aren't just chart-tipping, they are chart-busting”.

2. Notably, 2023 was declared the warmest year on record, surpassing all previous records. These concerning patterns persist, as evidenced by February 2024 being the hottest month ever recorded. These findings align with the IPCC 6th Assessment Report released in 2023, which emphasized the escalating concentrations of greenhouse gases and projected further increases in global average temperatures, particularly impacting the most vulnerable communities.
3. The IPCC identifies Africa, as one of the most vulnerable continents. The magnitude of Africa's climate change vulnerability is underpinned by the significant impact that climate change is having on the continent. This is due to projected increase in the frequency and intensity of extreme weather events and African economies' pre-existing vulnerabilities, including exposure to climate-sensitive sectors, high levels of poverty and significant ongoing fiscal challenges.
4. For example, UNCTAD (2022) estimates that almost half of low-income countries are at high risk of both debt and climate crises. African countries are, therefore, caught in a spiral of vulnerability, where increased borrowing due to climate change (for disaster management and/or for adaptation measures) leads to a continuous erosion of economic resilience and exacerbation of climate change sensitivity, as both available resources and the ability to raise additional ones are



depleted.

5. Kenya is highly vulnerable to climate change, climate change poses a particularly large threat to the Kenyan economy due to: (i) its dependence on natural resources, such as water for energy and food; and (ii) the country's exposure to climate-sensitive sectors, including agriculture, tourism, wildlife among others. In Kenya, the repeating patterns of floods and droughts in the country have had devastating socioeconomic impacts and high economic costs.
6. In 2017 a drought, followed by a flood in 2018, displaced more than 300,000 people (UNOCHA 2018). More recently, torrential rains in the long rain season in 2020 resulted in flooding that affected more than 800,000 Kenyans, including 300 deaths and 100,000 people being displaced.
7. The heavy rains in 2019 and 2020 also created conditions that led to severe desert locust outbreaks, which further damaged agricultural production, adversely impacted human health, and triggered conflicts between affected communities (Kenya, Ministry of Environment and Forestry 2021). These rains were followed by a drought (2020–2022) reported as the worst in four decades to take place in the Horn of Africa, surpassing previous droughts in terms of duration and severity and affecting over 5 million in Kenya.

8. Arid and semi-arid areas are particularly exposed to periods of drought, while floods usually take place in the west and southeast of Kenya, near major rivers, such as the lower Tana River, the lower Nzoia River at Budalang'i Plains, and the lower Nyando River at Kano Plains (World Bank 2018a; Opere 2013). However, the recent floods in 2023 most severely affected the north, including the counties of Mandera, Wajir, Marsabit, and Isiolo, which are classified as arid and semi-arid areas and are not historically flood-prone (IFRC 2023).
9. The government cognizant of the increasing impacts of climate change to the lives, livelihoods and general economy, has taken several steps to address this existential threat.
10. Addressing climate change is not a prerogative of any one institution. This is why the Ministry has adopted a whole of society and all of government approach that taps into the efforts of as many stakeholders as possible to this colossal fight for survival. For sure, no one entity can effectively address this challenge. In line with this, several Government entities are undertaking climate actions.
11. The MECC&F as the government lead on climate change has taken steps to develop policy and legal environment. This is a primary mandate of the Ministry. These policies, strategies, plan and legal instruments are paramount in perpetuating good governance, keep country focused and rally's all towards achieving the country's goal of adopting low



carbon climate resilience development.

12. This is key since as it creates an enabling environment that permits all the diverse stakeholders in climate change space to play their respective roles as the country endeavors to address climate change. Climate change affects all sectors and hence the need for all to take necessary climate actions.

13. For effective coordination of climate change in the country and in line with the Climate Change Act, 2016, the Ministry has established and strengthened climate change units at both National and County level. These units help to mainstream climate change in their respective agencies for ease of planning, implementation and reporting of climate change.

14. The MECC&F has coordinated and supported development of various policies, legislations, strategies, and plans at both national and sectoral levels in relation to climate change. (See the table below).

Document	Brief Description
National Climate Change Response Strategy, 2010	The NCCRS formally recognized the need for coordinated efforts in addressing climate change issues in Kenya. It recommended the development of a climate change policy and legislation on which adaptation and mitigation activities were to be anchored. Consequently, a stand-alone climate change act and related governance structures and plans (e.g., NCCAP and NAP) were developed and supported coordinated adaptation and mitigation action. Some

	<p>of the priority adaptation actions highlighted in the climate change response strategy included: promoting orphan crops; agricultural produce post-harvest processing, storage, and value addition; breeding of animals from various agro-ecological zones that adapt well to climatic variances; providing special livestock insurance; establishing a national climate awareness campaign; and incorporating climate change in the school curriculum within Information and awareness building.</p>
<p>National Policy for the Sustainable Development of Northern Kenya and other Arid Lands, 2012</p>	<p>Over 80 percent of Kenya is comprised of arid and semi-arid lands (ASALs) that are characterised by high dependence on pastoralism, mobility, and high levels of poverty. Popularly known as the ASAL policy, it was adopted to facilitate and fast-track sustainable development in ASALs by increasing investments in the region and ensuring that the use of resources is fully reconciled with the reality of people’s lives. It aimed at strengthening the resilience of ASAL communities to drought and other climate- related impacts through development and climate proofing of infrastructure, sustainable use of natural resources, livelihood diversification, and improved linkages to markets, among others.</p>
<p>National Climate Change Action Plans, 2013-2017, 2018-2022 and 2023-2027</p>	<p>A five-year iterative tool for mainstreaming climate actions across all sectors of the economy and the two levels of government. Mechanisms for mainstreaming climate change in priority sectors include the policies and strategies, coordination structures, planning cycles (guidelines and templates), investments, and financing. It is used for implementing both the NDC and NAP and most of the actions are adaptation. The NCCAP will be updated in 2023. Updating and/or revision of the NCCAP is an inclusive process involving both levels of governments, private sector, research and academia, communities, CSOs, media, and other actors in climate adaptation.</p>



National Adaptation Plan 2015-2030	Aims at consolidating the country's vision on adaptation by supporting macro-level adaptation actions that are aligned with the economic sectors and addressing county-level vulnerabilities to enhance long-term resilience and adaptive capacity. It is implemented through the five-year NCCAPs. The NAP highlights climate vulnerabilities and priority areas for building climate resilience. It presents adaptation actions that cover the time frame 2015-2030 and builds on the foundation laid by the NCCRS and the NCCAP 2013-2017. Furthermore, it is the basis for the adaptation component of Kenya's NDC.
Second National Communication to the UNFCCC, 2015	The chapter on assessment of vulnerability and adaptation sets out climate scenarios and assesses impacts and vulnerabilities in key sectors. It proposes priority adaptation actions that are aligned with what is captured in the NAP and NCCAP 2013-2017 and 2018-2022.
Climate Change Act, 2016	The Climate Change Act is the first comprehensive legal framework for climate change governance in Kenya with the objective of enhancing climate resilient development through among others promoting the uptake of technologies that support low carbon and climate resilient development; facilitating capacity development for public participation in climate change responses through awareness creation, consultation, representation and access to information; and providing incentives and obligations for private sector contributions towards climate resilient development. Additionally, the Act provides for and supports mainstreaming of climate adaptation actions into development planning, decision-making, and implementation. It sets out principles for climate change planning and implementation of measures, and recognizes the complementary role of national and county governments. The latter is critical considering the local nature of adaptation.

The National Drought Management Authority Act, 2016	Creates the National Drought Management Authority (NDMA) as a permanent institution with a specific mandate of managing drought in a more pro-active and sustainable manner. It recognizes drought as the most important climate-related hazard for Kenya and the need to sustainably invest in building resilience to drought in a coordinated manner. The Act also establishes the National Drought Emergency Fund to finance timely responses to drought and to support capacity strengthening in drought management.
Climate Risk Management Framework, 2017	The framework bridges climate change adaptation, disaster risk management, and sustainable development at national and county levels. The framework ensures that the three distinct entities are pursued as mutually supportive rather than stand-alone goals and that an integrated approach to climate risk management becomes a key component of policy and strategy for resilience building. The adaptation actions under this framework include analyzing exposure and vulnerability to disasters, and capacity to respond; mobilizing financial resources for climate risk management; designing and implementing pilot projects for climate risk management at county and national levels; enhancing research and dissemination of information about climate risk management; and building capacity at national and county levels for integrated climate risk management.
Kenya Climate-Smart Agriculture Strategy, 2017-2026	Aims to improve productivity and build the resilience of agricultural systems while minimizing greenhouse gas emissions. Recognizes the high vulnerability of the agriculture sector and identifies priority interventions for building resilience of the sector through the implementation of Climate Smart Agriculture (CSA) practices in the crop, livestock, and fisheries sectors in support of food and nutrition security and poverty reduction.
Kenya Climate-Smart Agriculture	Provides guidelines for the implementation of the CSA strategy at national and county levels in support of



Implementation Framework Programme, 2018-2027	food security and economic development. The national government is largely expected to lead on policy development and support capacity building, while county governments lead on implementation since agriculture is a devolved function.
National Climate Change Framework Policy, 2018	Formulated to ensure the integration of climate change considerations into planning, budgeting, implementation, and decision-making at the national and county levels, and across all sectors. The goal is to promote climate resilient development through pursuing several objectives including providing an effective and efficient institutional framework for mainstreaming climate change; reducing vulnerability and catalyzing the transition to climate-resilient development; incentivizing private sector involvement; and providing a framework for resource mobilization in support of adaptation.
National Climate Finance Policy, 2018	Establishes the legal, institutional, and reporting frameworks to access and manage climate finance, consistent with the institutional structures and framework set out in the Climate Change Act, 2016. Interventions with respect to this policy include establishing a national Climate Change Fund, identifying climate financing sources, and creating a national system for tracking climate finance. Its operationalization is meant to address the issue of inadequate finance for adaptation interventions.
National Biodiversity Strategy and Action Plan, 2019-2030	Guides strategies aimed at addressing declining biodiversity and related challenges. It aims to reduce the loss of biodiversity, promote the value of biodiversity, and improve community livelihoods. Highlighted adaptation interventions include conservation of agricultural biodiversity through increased support to local communities in the production and sustainable utilization of indigenous and/or traditional species for food and other uses; strengthening institutional and community capacity and linkages; promotion of gender equity in

	biodiversity management; and supporting and promoting the utilization of indigenous knowledge, innovations, and practices among others.
Nationally Determined Contribution, 2020	The vehicle document for Kenya's first Adaptation Communication, (AdCom) the updated NDC communicated the country's adaptation priorities and needs to the international community. The NDC prioritizes adaptation and sets out adaptation actions and approaches that are aligned with Kenya's NAP and NCCAP. The adaptation goal is a climate resilient society that is to be achieved through mainstreaming climate adaptation in Medium Term Plans (MTPs) and Country Integrated Development Plans (CIDPs). The NDC has a mitigation target of reducing emissions by 32% by 2030 based on a business-as-usual scenario of 143 MtCO <sub>2</sub> eq.
Guidance on Climate-related Risk Management, 2021	This guidance, issued by the Central Bank of Kenya, aims to guide institutions licensed under the Banking Act on climate-related risk management. The guidance sets out basic requirements for financial institutions in regard to the identification, management, and reporting of climate-related risks, including physical risks that result from the impacts of climate- and weather-related events.

15. The Ministry through engagement with development partners is implementing several projects and programs that target building resilience to the communities and the ecosystem as well as abate and reduce GHG emissions. Some of these projects and programs include; The Ecosystem Restoration Towards 15 Billion Tree Growing Program of growing 15 Billion trees, this program will help the country to sequester carbon dioxide as well as enhance ecosystems that are critical for community resilience; Financing Locally Led Climate Action which is



building resilience of the local communities in 45 counties; Strengthening Drought Resilience among Small holder farmers and Pastoralists in the IGAD region which is supporting resilience building in Samburu and Kitui Counties as a pilot program among others.

16. In collaborations with MDAs, the Ministry has been supporting all sector to mainstream climate actions in sector plans. The efforts to mainstream the climate actions has led to several climate projects and Programs being implemented by various sector.

17. The attached is the annex that provides the details of the projects and programs from other Ministries and proposed climate actions from other MDAs up to 2027.

Thank you, Hon. Chair and Hon. Members,



Soipan Tuya, EGH  
Cabinet Secretary  
Ministry of Environment, Climate Change and Forestry

Date ..... 19th April 2024 .....

## Annex 1

### A: Projects under State Department for Livestock

The following are Climate projects under the State Department for livestock

1. The De-Risking, Inclusion and Value Enhancement (DRIVE) for Pastoral Economies Project
2. TWENDE: Towards Ending Drought Emergencies: Ecosystem Based Adaptation in Kenya's Arid and Semi-Arid Rangelands
3. Regional Pastoral Livelihoods Resilience Project (RPLRP-Kenya)

They undertook the following actions;

- The Government of Kenya has put in place policy instruments geared towards enhancing productivity of pastoralism and rangeland resources;
- Over the years, the government implemented several policy interventions that would help reduce pastoral poverty and maintain the ecosystem integrity of the rangelands
- From 1900-1964, the colonial government initiated grazing control, establishment of disease quarantines and livestock destocking programmes, but all these interventions were unpopular with the pastoralists;
- During the years of 1964-1980, the government pursued an economic integration strategy, which aimed at transforming nomadic pastoralism to commercial ranches for supplying meat for export outside the pastoral zones. During this phase, there was investment in water development, stock route development and stratification of the production system strategy, whereby young stock from more arid zones were sold to commercial and group ranches for fattening before slaughter;
- In the years of 1980-1992, the focus was on development of human resources; exploitation of the productive potential of ASALs; natural resource conservation; and integration of ASALs in the national economy;
- From the 1992-2002, policies addressed socio-economic vulnerabilities, the environmental degradation, integration of environment and development approaches; water resources development; social and community development;



- The policy initiatives from 2004-2012 supported interventions to improve access to markets and market opportunities for the poor, enable economic growth and reduce the poverty and vulnerability of marginal groups in ASALs;
- Since 2012, the government is fast-tracking the sustainable development of ASALs by increasing investment in the region and ensuring the use of these resources is fully reconciled with the realities of people's lives. These include expansion of social protection interventions, development of financial services that include both human and livestock insurance and support to alternative livelihood strategies;
- Due to the added burden from climate change, the Government of Kenya has had to realign its interventions in the pastoral areas to reduce vulnerability of pastoral populations that would lead to entrenching of poverty. In this regard, the existing policy framework has identified the need for interventions that would create resilience of pastoralists through enhanced adaptive capacity of rangelands to the emerging burden of climate change;
- Subsequently, the State Department for Livestock Development, through Session Paper No. 3 on National Livestock Policy of 2020 and the Range Management and Pastoralism Strategy (2021 – 2031), has identified and prioritizes the need to address Climate Change impacts in the fragile ecosystems occupied by the pastoralists;
- This is based on the fact that the pastoralist occupied rangelands in the ASAL areas occupy over 85% of Kenya's land mass, supports the socio-economy of an estimated 30% of the national population and are a home to over 70 % of Kenya's ruminant Livestock Units (LUs);
- Additionally, climate change is seen as a threat due to the increasing frequency and severity of climate hazards and notably the extreme weather events such as droughts and flooding and increasing temperatures that affect humans and livestock directly leading to increasing vulnerabilities and decline in socio-economic outcomes;
- Among the identified interventions identified in the strategy that seek to reduce the impacts from climate related hazards and to reduce the vulnerability of pastoralist communities, priority is climate risk management through the index-based livestock insurance (IBLI); support to development of livestock marketing infrastructure; rangeland development by rehabilitation of degraded (from both soil and water erosion and invasive species) grassland including reseeded programmes; development of livestock water infrastructure; support

to pastoral economies through financial inclusion programmes; and support to community led grazing plans and management systems; among other interventions;

- These measures are being implemented through government supported development projects and currently the State Department for Livestock Development (SDLD) is the lead agency in execution of project one project supporting the ASAL region in addressing both the development and climate change challenges.

### **The De-Risking, Inclusion and Value Enhancement (DRIVE) for Pastoral Economies**

#### **Project**

DRIVE Project is a 5-year regional programme covering 4 countries (Djibouti; Ethiopia; Kenya and Somalia) being jointly funded by participating Countries and the World Bank Group;

- The Kenya part of the DRIVE Project became effective in July 2022 and is being implemented in 23 ASAL Counties and it has 2 components to address the climate related challenges among the pastoralist communities;
- Component 1 of the Project has a package of financial services for climate resilience with an allocation of USD 84 Million. This funding is supporting a package of financial services, including drought insurance, savings, digital accounts, financial literacy. Out of this amount, 60% of the funds are for the Index Based Livestock Insurance (IBLI) product. This will directly support 375,000 pastoralist households in the 23 Counties through a subsidized insurance scheme covering about 1.5 million Tropical Livestock Units (TLUs);
- In its 2 seasons (OND 2022 and MAM 2023) of operation, the project reached about over 95,000 households and insured total 400,000 TLUs with the pastoralists paying Kshs. 200 million and GOK Kshs. 810 million. During the period the insurance payout was Kshs. 385 million and a further Kshs. 418 million for the enrolment bonus and saving incentive;
- This component is implemented by ZEP RE (formerly PTA under COMESA) with the partnership of (Re) /Insurers, deposit taking institutions e.g., banks, MFIs, SACCOs etc., aggregators e.g., development partners with pastoral activities;
- The expected impact is that a total of 800,000 Pastoralists and dependents having access to financial services and capacity building and \$290 Million Private capital enabled from (re)/insurers and through the facility to de-risk private investment;



- Component 2 of the DRIVE project will support Livestock Value Chains (LVCs) and trade facilitation and is allocated USD 65 Million. These funds will support implementation of the Livestock Master Plan (LMP) and Livestock Traceability System (LITS); Feasibility studies to improve bankability of private sector investments in LVC; Financial and technical support to PPP in feed production and pastoral livestock finishing and fattening through feedlots;
- It is anticipated that a total of 1,200 pastoralist groups will be supported and connected to markets and an estimated USD 115 Million Livestock and livestock products traded by pastoralists and thus enhance their adaptive capacity and resilience to impacts of climate change.

### **TWENDE: Towards Ending Drought Emergencies: Ecosystem Based Adaptation in Kenya's Arid and Semi-Arid Rangelands**

This is 5-year Green Climate Fund (GCF) funded project that started in 2019. The Project is implemented by the Government of Kenya (GoK), through the Ministry of Agriculture and Livestock Development (State Department for Livestock Development); National Drought Management Authority (NDMA), and Conservation International (CI). The main beneficiaries are pastoralists in eleven (11) of Kenya's Arid and Semi-Arid (ASAL) counties: Garissa, Tana River, Isiolo, Marsabit, Samburu, Kajiado, Kitui, Makueni, Tharaka-Nithi, Meru and Taita Taveta. The total project cost is USD 34.5 Million of which

- The objective of this project is to reduce the cost of climate change induced drought on Kenya's national economy by increasing resilience of the livestock and other land use sectors in restored and effectively governed rangeland ecosystems;
- The project will contribute to improved adaptation to climate change of Kenya's national policy of "Ending Drought Emergencies", as outlined in "Kenya Vision 2030". The project will strengthen climate change adaptation in Kenya's arid and semi-arid lands (ASALs);
- The project is being implemented in 2 landscapes (Chyulu Hills, Kitui and Sabarwawa, Tana River) that are dry season grazing areas encompassing 11 counties;
- The project is expected to benefit 620,000 people in 104,000 households and will protect or restore 500,000 hectares of rangelands in a landscape of 2.5 million hectares;

- The target landscapes are dry season grazing areas: critical resource zones that provide refuge during periods of drought. Their existence depends on availability of permanent water, which makes them hotspots for resource competition and land use change. They are used seasonally by large numbers of livestock keepers, often from multiple ethnic groups, following customary governance practices. Customary institutions have become weakened, leading to break down in natural resource governance, degradation of resources, and escalating conflict;
- The Project is supporting implementation of priority community-based rangeland restoration; actions for integrated land/water management in catchments; installation of community-validated strategic water sources for sustainable rangeland utilization; and building capacity of local institutions to implement climate-sensitive landscape management.
- To date the Project has managed to protect and restore about 205,000 Hectares (Ha) of degraded land through range improvement activities including soil and water conservation practices; rehabilitation of land previously invaded by invasive species which have reduced grassland productivity; reseeded of degraded range and application of community led grazing plans and management.
- The project is also promoting diversification of livelihoods through grants to community-based and climate change adaptation and restoration enterprises that create opportunities for investments in grass, gums, resins, livestock and other value chains. Indicative grants include: physical market infrastructure; equipment; cooling, processing, packaging; quality control equipment/ laboratory.

#### **Regional Pastoral Livelihoods Resilience Project (RPLRP-Kenya)**

- The Government of Kenya through the Ministry of Agriculture, Livestock & Fisheries, is spearheading the World Bank aided Regional Pastoral Livelihoods Resilience Project (RPLRP-Kenya), with the objective to enhance livelihoods resilience of pastoral and agro pastoral communities in cross border drought prone areas of Selected Countries and improve the capacity of the selected Countries governments to respond promptly and effectively to an Eligible Crisis or Emergency.



- RPLRP (Kenya) will build and strengthen linkages between regional institutions, such as IGAD and AU, and the Ethiopian and Ugandan Governments to better tackle issues that affect communities in the ASALs, with a specific focus on sub-regional issues, including those related to Natural Resources Management, Market Access and Trade, Livelihoods Support, Pastoral Risk Management and Project Management and Institutional Support
- In line with the demands of the Constitution of Kenya 2010 which ushered in devolved governments, most Agriculture related functions were transferred to the county units. The project adopted a two- tier implementation approach that led to creation of 14 County Project Implementation Units, co-ordinated by the National Project Implementation Unit at the Headquarters, Nairobi.
- Project Preparation involved a wide scale consultative process that included, but not limited to: (i) meetings with the technical and administrative staff at the county level; (ii) a wide range of stakeholder consultations in the proposed RPLRP project counties; (iii) joint planning workshops and field visits to the project communities. The outcome of the consultations was a validated project document and inputs in the various plans adopted by the project in line with The World Bank policies.
- Through this project, The GoK is committed to support pastoral and agro-pastoral communities in their efforts to reduce vulnerability to drought related shocks through participatory approaches, based on democratic governance principles. These communities are essential to the success of RPLRP (KENYA) because they have often faced severe droughts that strike with increasing severity each drought cycle. Mechanisms for equitable and effective participation of vulnerable and marginalized groups such as women and youth in Natural Resource Management, Market Access and Trade, and Livelihoods will be enhanced in order to boost the delivery of tangible benefits and the long-term sustainability of RPLRP (KENYA).

## **B: Projects under National Drought Management Authority (NDMA)**

### **The Status of Preparedness of Northern Kenya Pastoralists in Curbing The Impacts of Climate Change**

To address the worsening environmental challenges to food and livelihoods security in the Arid and Semi-Arid Lands (ASALs) of Kenya, Government is implementing diverse strategies and initiatives. These are designed to deliver ecosystem-based adaptation to climate change in Kenya's arid and semi-arid rangelands. These initiatives are packaged as partnership projects involving government and development partners. The projects are implemented as multistakeholder initiatives transcending multiple counties. Key project activities address landscape degradation, and which translate to challenged livelihood productivity due to poor access to water and vegetation resources.

One of the ongoing projects is the Towards Ending Drought Emergencies (TWEENDE) with funding from Government and the Global Climate Fund (GCF) facility through the International Union for Conservation of Nature (IUCN). The project has funding amounting to USD 35.5 Million. The implementation period of this project is 5 years from November 2020 until November 2025. Implementation involves multiples stakeholders with different complementary roles, including ICRAF, CI and National Drought Management Authority (NDMA), Water Resources Authority (WRA), Kenya Water Towers Authority (KWTA), Ministry of Agriculture, Livestock, Fisheries and Cooperatives (State Department of Livestock), and IUCN. Implementation is underway in eleven (11) target ASAL Counties namely; Garissa, Tana River, Isiolo, Marsabit, Samburu, Kajiado, Kitui, Makueni, Tharaka-Nithi, Meru and Taita Taveta. The expected project outcome is ecosystem conservation and restoration in three priority landscapes namely Sabarawa, mid-Tana, and Chyulu. Community involvement was mobilized through ward-level/community-level participatory climate risk and vulnerability assessments and resultant participatory rangeland management plans.

While the TWEENDE Project leaves out a number of other equally deserving norther pastoralist dominated ASAL counties such Mandera, Turkana, Baringo West Pokot and Laikipia, they are covered by the Dryland Climate Action for Community Drought Resilience (DCADR) Project implemented by NDMA, which is funded by government and the European Union. The project support community-prioritized adaptation and resilience projects across Kenya's drought-prone counties. Key areas of focus include rangeland improvement through projects to improve water access, resilient livestock species (shift from cattle and sheep towards camels), rangeland restoration and public-private-partnerships (PPP) in drought risk management. DCADR is a four-year project implemented since January 2023. A number of resilience/adaptation projects have



been prioritized in Isiolo, Marsabit, Samburu, Garissa, Kitui, Tana River, Mandera, Wajir, Kajiado, Baringo, Lamu, Kwale and Kilifi which are at different stages of processing for funding, and implementations.

The National Drought Emergency Fund (NDEF) has been set up and operationalized as a government instrument for financing drought risk management. While NDEF operationalizing regulations indicate an initial capitalization of KSh 2 billion, funding by government so far is KSh 555 million, including KSh 200 million in FY 2021/2022, followed by KSh 325 million in FY 2022/2023, and KSh 20 million during FY 2023/2024. The Fund is managed by NDMA and it is divided into components as follows. The drought preparedness and resilience component is assigned 50% of the Fund's resources, 40% is assigned to drought response activities including cash transfer scaleups, 5% is for drought recovery, while 3% is assigned to administrative costs. While drought response activities during 2022 and 2024 absorbed majority of the response and recovery component of the FUND, the preparedness and response component is due for absorption to finance priority resilience/preparedness project in the Northern pastoral counties.

In conclusion, the worsening climate risk situation continues to exert pressure on the livelihoods across the ASALs. To effectively manage this risk, there is need for accelerated enhanced investment to support climate mitigation and adaptation with a view to slowing of climate change, and to contribute to enhanced preparedness and resilience. The 2021-2023 drought resulted in high losses including the documented 2.6 million assorted livestock. Such loss of livelihood assets for pastoralists exacerbates household desperation. Such negative climate shock impacts can only be mitigated through deliberate government actions, hence the need for enhanced resourcing of drought/climate risk management by government and non-state actors. Recognizing that the Ending Drought Emergencies Common Programming Framework (EDE CPF 2013-2022) did not fully realize its objective, Government is developing the second Ending Drought Emergencies Common Programming Framework (EDE CPF II 2023-2032) to guide on the priority action areas that should be the focus for accelerated national efforts for preparedness and resilience investments in drought and climate risk management.

### **C: Projects under State Department for Water**

By 2027, Kenya proposes to construct 200 Small dams and 3000 water pans for domestic use in ASALs. The Government has done great milestone on the implementation of water sources;



### Water projects in the ASALs Region

Chemususu Dam Water Supply Project (Including Additional Works)	Baringo	98.7% Progress for Nakuru works is 72.5%	works	water supply to Rongai Sub County in Nakuru County to improve the living standards and ensure inclusive growth.
Yamo Dam and Water Supply System		100% Dam & Water Supply	0%	To Improve water supply in Maralal town to bring down the cost of living, eradicating hunger, and inclusive growth
Kenya Groundwater Mapping Program		20%		Scientific identification of groundwater sources, assessment of groundwater potential; mapping of groundwater aquifers & groundwater potential
Water Harvesting Program (LVSWB)		55%		To provide water security and to the vulnerable rural population and their livestock against drought and weather shocks.
Project on Sustainable development Lake Turkana and its River Basin		55%		To ensures sustainable Management and Development of Lake Turkana ecosystem and its River Basins

The following are some of few boreholes that have been drilled within ASALs area;

Boreholes		
Drilling, Equipping and Last Mile Connectivity of Kwirindochei Pry Borehole	Drilling, Equipping and Last Mile Connectivit	Baringo
Drilling, Equipping and Last Mile Connectivity of Kipchobet Borehole	Drilling, Equipping and Last Mile Connectivit	Baringo
Drilling, Equipping and Last Mile Connectivity Kapsigot Borehole	Drilling, Equipping and Last Mile Connectivit	Baringo



Drilling, Equipping and Last Mile Connectivity of KMTC-Transmara Borehole	Drilling, Equipping and Last Mile Connectivity	Narok
Drilling, Equipping and Last Mile Connectivity of Naisudori Primary Borehole	Drilling, Equipping and Last Mile Connectivity	Narok

**D: State department for social protection and citizen affairs**

**FEBRUARY 2024 PAYROLL COUNTY SUMMARY**

COUNTY	HH	CTOVC		OPCT		PWSA		TOTAL
		AMOUNT	HH	AMOUNT	HH	AMOUNT	HH	AMOUNT
TURKANA	15,157	31,999,000	11,583	24,071,000	1,097	2,249,000	27,837	58,319,000
WAJIR	6,803	13,606,000	5,458	10,916,000	1,044	2,088,000	13,305	26,610,000
SAMBURU	5,942	11,884,000	5,592	11,184,000	703	1,406,000	12,237	24,474,000
WEST POKOT	5,033	10,869,500	8,901	19,033,500	836	1,798,000	14,770	31,701,000
MANDERA	12,046	24,092,000	6,682	13,364,000	3,183	6,366,000	21,911	43,822,000
MARSABIT	3,852	7,987,500	6,916	14,184,000	715	1,457,000	11,483	23,628,500
GARISSA	4,076	8,152,000	4,918	9,836,000	462	924,000	9,456	18,912,000
BARINGO	5,983	11,966,000	12,469	24,938,000	1,024	2,048,000	19,476	38,952,000
TANA RIVER	2,457	4,914,000	4,652	9,304,000	386	772,000	7,495	14,990,000
ISIOLO	2,553	5,106,000	3,387	6,774,000	214	428,000	6,154	12,308,000
KAJIADO	3,086	6,172,000	6,901	13,802,000	466	932,000	10,453	20,906,000
KILIFI	8,114	16,870,000	21,443	44,221,000	1,009	2,057,500	30,566	63,148,500
NAROK	5,781	11,562,000	9,450	18,900,000	521	1,042,000	15,752	31,504,000
KWALE	4,331	8,662,000	13,595	27,190,000	1,154	2,308,000	19,080	38,160,000
LAIKIPIA	2,272	4,544,000	10,478	20,956,000	666	1,332,000	13,416	26,832,000

<b>Grand Total</b>	<b>87,486</b>	<b>178,386,000</b>	<b>132,425</b>	<b>268,673,500</b>	<b>13,480</b>	<b>27,207,500</b>	<b>233,391</b>	<b>474,267,000</b>
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## **PRIORITY CLIMATE CHANGE ACTIONS FOR 2023-2027**

This *National Climate Change Action Plan (NCCAP) 2023-2027* is a five- year plan to guide Kenya's climate change actions, with the aim of reducing greenhouse gas emissions and lessening vulnerability to climate impacts. The *NCCAP* is a requirement of the *Climate Change Act, 2016*, which seeks to further Kenya's development goals by providing mechanisms and measures to achieve low carbon climate resilient development, in a manner that prioritises adaptation. The *NCCAP 2023-2027* is the third iteration of Kenya's national action planning process, as required by the *Climate Change Act*. It therefore builds on the *NCCAP 2013-2017* and *NCCAP 2018-2022*. The MECC&F coordinated the development of the priority actions for all sectors to be implemented in all 47 Counties. The following are proposed priorities interventions to be implemented in the next 5 years to 2027;

*NCCAP 2023-2027* takes cognisance of the impacts of climate change on Kenya's socio-economic sectors. It identifies strategic areas where climate change action over the next five years will be linked to the BETA Agenda recognising that climate change could limit the achievement of the agenda.

Adaptation actions are prioritised in *NCCAP 2023-2027* because of the devastating impacts of droughts, floods and extreme weather events in Kenya, and the negative effects of climate change on vulnerable groups, including children, youth, women, older members of society, persons with disabilities, members of minority and marginalised communities, displaced persons, and migrants. Emphasis is on actions that help to scale up preparedness and response efforts to help people adapt, reduce vulnerability to future risks, and minimize and address losses and damages. The adaptation actions will be undertaken, where possible, in a way that limits GHG emissions, so as to ensure that the country achieves its NDC under the Paris Agreement of reducing GHG emissions by 32% by 2030, relative to the BAU scenario of 143 MtCO<sub>2e</sub>.

The priority climate change actions in *NCCAP 2023-2027* contribute to achieving sustainable development benefits. They reflect inputs received from the National and County Governments; vulnerable groups, including women, youth and children, persons with disabilities, members of



marginalised and minority communities, internally displaced persons and migrants, the private sector, civil society, and sector experts. The actions are mainstreamed in the MTP IV in all sectors and in County Integrated Development Plans (CIDPs) to ensure they are taken up across the country and in all relevant sectors. They will benefit vulnerable groups directly and indirectly through, for example, increased agricultural productivity and improved access to water. They also provide benefits for women through access to clean cooking, and forest restoration and agroforestry actions that assure increased access to affordable cooking energy and water.

### **Disaster Risk Management**

Kenya was the 25th most affected country globally by extreme weather events in 2019 according to the Global Climate Risk Index 2021 report. The country has frequently experienced disasters from three types of hazards between 1990 and 2020: droughts, floods, and landslides. These disasters caused death, displacement of communities, and economic losses. The situation in 2023 illustrates how the country can experience the impacts of drought, while responding to floods and disease outbreaks. The recent drought contributed to by five consecutive poor or failed rainy seasons from 2020 to 2022 – hindered household access to water, food, and income during the 2023 January to March dry season, with people trekking up to 30 kilometres to access water because 90% of semi-permanent open water sources had dried up in the ASALs. The 2023 MAM rains went to the other extreme, bringing flash floods that resulted in 36 deaths, 7,568 livestock deaths, 15,000 acres of land destroyed, and an increase in cholera cases from 4,831 in February 2023 to 11,694 cases by the end of June 2023.

The expected outcomes of the climate change actions are:

- Adaptation – reduced vulnerability to climate change among households that benefit from social protection systems and CCCFs; and improved ability to cope with climate hazards (droughts and floods) through early warning systems, water harvesting and storage, and flood control.

**Strategic Objective 1: Reduce risks to communities and infrastructure resulting from climate-related disasters and enhance institutional preparedness and response.**

<ul style="list-style-type: none"> <li>• Issue/Problem</li> </ul>	<ul style="list-style-type: none"> <li>• Responses to climate-related disasters are often reactive rather than proactive and impeded by inadequate early warning systems, inadequate disaster management coordination, limited institutional resilience to prepare and respond to climate disasters, and poor planning. This is exacerbated by limited investments, and inadequate budgetary allocations.</li> </ul>
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**BETA Pillars Impacted by Action in this Climate Priority**

- Agricultural Transformation and Inclusive Growth
- Housing and Settlement

<p>National level indicators</p> <ul style="list-style-type: none"> <li>▪ Number of early warning systems that are established.</li> <li>▪ Number of deaths, displaced persons and directly affected persons attributed to disasters.</li> <li>▪ Number of vulnerable members of society supported through cash transfers to reduce shocks and impacts resulting from the effects of climate change.</li> <li>▪ Proportion of county governments that adopt and implement local disaster risk reduction strategies in line with national strategies.</li> <li>▪ The economic cost of climate change impacts.</li> </ul>
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<ul style="list-style-type: none"> <li>▪ Action</li> </ul>	<ul style="list-style-type: none"> <li>▪ Expected Results by 30 June 2028</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adaptation</li> <li>▪ Mitigation</li> </ul>
<ul style="list-style-type: none"> <li>▪ Increase the number of households and entities benefiting from</li> </ul>	<ul style="list-style-type: none"> <li>▪ Beneficiaries of social protection mechanisms, and other safeguards under the Hunger Safety Net Programme increased from 101,800 to 132,000 (of which at least 30% should be women) in 8 ASAL counties for regular beneficiaries.</li> <li>▪ An additional 200,000 households (of which at least 30% should be women-led) through drought-shock responsive scalability</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adaptation</li> </ul>



▪ Action	▪ Expected Results by 30 June 2028	▪ Adaptation ▪ Mitigation
devolved adaptive services	<p>targeting those who may slide to the very poorest households as a result of loss of limited livelihood assets.</p> <ul style="list-style-type: none"> <li>▪ A national assessment to determine the scope of disasters and required social protection interventions.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>▪ Beneficiaries under the National Safety Net Programme increased from 1,082,000 in 2022 to 1,972,000 (of which at least 30% should be women) by 2027.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Strengthen the ability of people in Kenya to better cope with disasters.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Establish Disaster Risk Management (DRM) Institutions and Centres of Excellence</li> <li>▪ Establish and promote DRM peer learning Centres of Excellence through creation of models in communities and learning institutions.</li> <li>▪ Establish community-level resource centres for documentation and dissemination of DRM information.</li> <li>▪ Develop dedicated capacities to enhance access to health services during emergency response, including prepositioning of requisite medical and non-medical supplies.</li> <li>▪ Develop contingency and resilient development plans for displacement of populations and organize simulation exercises.</li> <li>▪ Develop community and planned relocation guidelines and assessment tools while building capacities for the relocation of communities as an adaptation strategy.</li> <li>▪ Develop and implement a legal and policy framework for Emergency Medical Care during disasters.</li> <li>▪ Develop early warning and anticipatory action capacities for climate related hazards tapping into relevant technologies and innovations.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adaptation</li> </ul>

<ul style="list-style-type: none"> <li>▪ Action</li> </ul>	<ul style="list-style-type: none"> <li>▪ Expected Results by 30 June 2028</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adaptation</li> <li>▪ Mitigation</li> </ul>
<ul style="list-style-type: none"> <li>▪ Improve the coordination and delivery of disaster risk management.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The coordination of disaster management is centralised and improved by the following actions:</li> <li>▪ Enact the Disaster Risk Management Bill into law and operationalize.</li> <li>▪ Establish the National Disaster Risk Management Authority.</li> <li>▪ Establish and maintain a database of all DRM activities within the country including preparedness, response, impacts, and recovery measures.</li> <li>▪ Establish and maintain collaboration and linkages between the National DRM Authority Headquarters with global, regional, and sub-regional DRM bodies.</li> <li>▪ Strengthen and monitor gender responsive humanitarian hubs, displacement centres, transition centres, and evacuation centres for utilisation during emergencies and disasters.</li> <li>▪ Mainstream DRM into development plans, policies, strategies, and sectors plans at all levels of government.</li> <li>▪ Integrate mobility and displacement into climate action strategies.</li> <li>▪ Develop and strengthen coordination frameworks and mechanisms for mainstreaming disaster risk management at national and county levels as well as community managed DRR.</li> <li>▪ Undertake high-level advocacy and capacity building for County Executive Committees, and County Assembly Disaster Committees to increase political goodwill and enhance allocation of county government resources to emergency responses.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adaptation</li> </ul>



▪ Action	▪ Expected Results by 30 June 2028	▪ Adaptation ▪ Mitigation
1. Improve the ability of people to cope with disasters caused by climate hazards	<ul style="list-style-type: none"> <li>▪ Apply and integrate gender and human rights-based approaches in the design and implementation of policies relating to the climate change-migration nexus.</li> <li>▪ Establish and operationalise an Integrated Multi-hazard Early Warning, Information and Knowledge Management System at the national and county levels.</li> <li>▪ Operationalise the Kenya Anticipatory Action Strategy.</li> <li>▪ Establish DRM Emergency Operation Centres and linkages with the National DRM Authority, National Disaster Operations Centre (NDOC), and other key state and non-state agencies.</li> <li>▪ Enhance water harvesting and storage in 23 ASAL counties. <i>(See expected results under Climate Action 3: Water, Fisheries, and the Blue Economy).</i></li> <li>▪ Enhance flood control measures through development and maintenance of flood control infrastructure: <ul style="list-style-type: none"> <li>• Construction of 70 kms of additional dykes.</li> <li>• Maintenance of 100 kms of existing dykes.</li> <li>• Construction of 20 check dams</li> </ul> </li> </ul>	Adaptation
2. Improve management of climate change-driven mobility and displacement	<ul style="list-style-type: none"> <li>▪ Establish / strengthen national weather and climate institutions and systems to generate accurate, timely gender disaggregated data and information on climate change impacts on human mobility; and increase collaboration between/among IGAD Member States and with the IGAD Climate Prediction and Applications Centre.</li> <li>▪ Fast-track and allocate resources for registration of pending community lands in all counties.</li> <li>▪ Secure access to watering points and livestock movement, and wildlife migratory corridors</li> </ul>	Adaptation

▪ Action	▪ Expected Results by 30 June 2028	▪ Adaptation ▪ Mitigation
	<ul style="list-style-type: none"> <li>▪ Sustainable land, pasture and water management practices implemented for farmers and pastoralists in ASAL counties to promote food security, and reduce climate-driven conflicts (See Climate Priority 2: Food and Nutrition Security).</li> <li>▪ Develop and implement locally-led strategies in ASAL counties for managing mobility and displacement, including receiving displaced people and livestock into host communities, and strengthening alternative resilient livelihood options.</li> <li>▪ Forecasting and analysis undertaken to identify potential climate mobility hotspots and anticipatory actions for risk and conflict mitigation.</li> <li>▪ Early consultations with local populations on appropriate anticipatory actions for risk mitigation, including contingency planning for emergency evacuations and humanitarian assistance and livestock offtake.</li> </ul>	
3. Improve processes to manage climate-related security risks	<ul style="list-style-type: none"> <li>▪ Expand, consolidate, and share knowledge on climate-related security risks.</li> <li>▪ Enhance climate security into early warning systems through the use of decision support tools, such as the Climate Security Observatory, to strengthen climate resilience of local communities.</li> <li>▪ Strengthen interstate and intrastate collaboration on trans-boundary climate security.</li> <li>▪ Facilitate inter-ethnic engagement and dependence through collaboration for natural resource management.</li> </ul>	Adaptation
4. Enhance protection and role of children	<ul style="list-style-type: none"> <li>▪ Establish 47 gender and socially inclusive Youth County Disaster Response Teams with a representative in the County DRM Coordination unit.</li> </ul>	Adaptation



▪ Action	▪ Expected Results by 30 June 2028	▪ Adaptation ▪ Mitigation
and youth in DRM	<ul style="list-style-type: none"> <li>▪ Develop a platform for climate-related knowledge and disaster risk information tailored for Children and the Youth.</li> </ul>	
5. Enabling (finance)	<ul style="list-style-type: none"> <li>▪ Enhance allocations to the Contingency Fund to address urgent climate disaster preparedness and response.</li> </ul>	Enabling
6. Enabling (policy)	<ul style="list-style-type: none"> <li>▪ Expand the scope and mandate of the Drought Contingency Fund to cover all climate-related disasters.</li> <li>▪ Ensure coherence between the National Development Plan and the Peacebuilding and Conflict Management Policy on climate security, in recognition of the wider impact of climate change on food, livelihoods, and water security, incorporating indigenous knowledge and existing arrangements.</li> <li>▪ Develop and implement policies that prevent forced movements but support safe, orderly, and regular migration that further contributes to sustainable development such as the commitments articulated in the Kampala Ministerial Declaration on Migration, Environment and Climate Change.</li> <li>▪ Strengthen national and sub-national capacities to integrate human mobility in development planning processes.</li> <li>▪ Develop and implement the early action protocols required to implement forecast-based financing.</li> </ul>	Enabling

### **Food and Nutrition Security**

Climate change has the potential to prevent the achievement of national goals by negatively impacting agricultural production and nutrition security. Poor weather conditions, along with transport and input costs, were a major factor constraining agricultural production in 2022. The agriculture sector is highly susceptible to the vagaries of weather including temperature increases,

changes in precipitation, and extreme weather events. The sector is vulnerable to climate impacts because of a high reliance on small-scale, rain-fed agriculture, and pastoralism.

NCCAP 2023-2027 sets out a range of actions that build on the successes of implementation of the two previous action plans. The main actions will enhance the uptake of Climate Smart Agriculture (CSA) techniques and technologies, support sustainable land management of crop land and grazing land, increase irrigation, and diversify livelihoods. Gender-aware agricultural services will be critical for success, as women account for approximately 75% of the agricultural labour force in small-scale agriculture, compared to 51% of men. Climate information services, farmer field schools, and outreach programmes are important for reaching vulnerable groups, including women, youth and children, the elderly, persons with disability, and pastoralist communities.

The expected outcomes of the climate change actions are:

- Adaptation – maintained production and enhanced climate resilience of the agricultural sector through livelihood, crop and livestock diversification, increased water harvesting and storage, increased irrigation, sustainable land management, rehabilitation of rangelands, improved livestock management, and uptake of agricultural insurance.
- Mitigation – The priority mitigation actions for the agriculture sector would result in GHG emissions of 54 MtCO<sub>2</sub>eq (a 7 MtCO<sub>2</sub>eq emission reduction) compared to the 61 MtCO<sub>2</sub>eq which would have resulted in a Business as Usual (do-nothing) scenario, calculated using the AR6 revised GWP values for methane.

**Strategic Objective 2: Increase food and nutrition security by enhancing productivity and resilience of the agricultural sector taking a low carbon development pathway.**

<b>Issue/Problem</b>	Climate change is negatively impacting agricultural productivity and the resilience of value chain actors, including households. An increase in the severity and frequency of climate change-related disasters, such as droughts, floods, pests (e.g., desert locusts or fall armyworm) and diseases pose threats to food security and negatively impacts small-scale farmers, pastoralists, and fisher communities.
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### BETA Pillars Impacted by Action in this Climate Priority

- Agricultural Transformation and Inclusive Growth
- Transforming the Micro, Small and Medium Enterprise (MSMEs) Economy

#### National level indicators

- GDP growth of the agricultural sector.
- Productivity levels of maize, sorghum, and other critical crops.
- Productivity levels of livestock (dairy and meat animals).
- Livestock deaths from drought /number of livestock slaughtered due to drought.
- Agricultural land under irrigation (acreage).
- GHG emissions in the agriculture sector.

Action	Expected Results by 30 June 2028	Adaptation Mitigation
1. Enhance the uptake of CSA technologies in crop and livestock production systems	<ul style="list-style-type: none"> <li>▪ Agro-weather and climate information services cascaded to sub-counties in 47 counties, while tapping essential local traditional and indigenous knowledge, and co-producing climate information with communities.</li> <li>▪ Number of beneficiaries accessing Index-based crop insurance increased from 1,600,000 to 3,500,000 of which at least 30% and 10% should be women and youth respectively.</li> <li>▪ The number of farmers accessing socially-inclusive appropriate input subsidies increased from 2,300,000 per year to 2,500,000 per year in 2027.</li> <li>▪ 100,000 additional farmers access specialised markets for climate-smart produced produce/products (e.g. organically produced) of</li> </ul>	Adaptation/ Mitigation

	<p>which at least 30% and 10% should be women and youth respectively.</p> <ul style="list-style-type: none"> <li>▪ 2 million farmers (of which at least 30% and 10% should be women and youth respectively) adopt climate-smart post-harvest technologies (e.g., green energy powered cold storage facilities, solar crop dryers).</li> <li>▪ Acreage under the rain-fed rice system is increased from 44,255 ha to 140,677 ha for enhanced resilience and productivity.</li> <li>▪ Production of rice under intermittent irrigation system increased from 25,000 ha to 140,677 ha.</li> <li>▪ Increase efficiency on water resource management in rice production from 50% to 90%.</li> </ul> <p><i>Enabling</i></p> <ul style="list-style-type: none"> <li>▪ Promote the uptake of gender-responsive climate-oriented agricultural input subsidies and agricultural insurance.</li> <li>▪ Increase the adoption of crop insurance partnerships.</li> <li>▪ Capacity building of stakeholders on climate risk management in agro-food systems in 47 counties.</li> <li>▪ Promote the uptake of climate information in the crop sub sector for decision-making at all levels.</li> </ul>	
<p>2. Increase crop productivity through improved irrigation</p>	<ul style="list-style-type: none"> <li>▪ Acreage under irrigation increased from 202,000 ha to 486,000 ha.</li> <li>▪ Production efficiency from irrigated fields increased from 50% to 90%.</li> </ul>	<p>Adaptation</p>



<p>3. Diversify livelihoods to adjust to a changing climate</p>	<ul style="list-style-type: none"> <li>▪ 2,500,000 farmers (of which at least 30% and 10% should be women and youth respectively) adopt new adaptive crop varieties.</li> </ul>	<p>Adaptation</p>
<p>4. Increase adoption of Sustainable Land Management (SLM)</p>	<p>Acreeage of land SLM and restoration of degraded land increased:</p> <ul style="list-style-type: none"> <li>• Area under integrated soil nutrient management increased by 2,500,000 ha.</li> <li>• Farm area under conservation agriculture increased from 53,200 ha to 100,000 ha by incorporating minimum/no tillage.</li> <li>• Soil and water conservation measures used on 1,000,000 ha of farmland by 2,500,000 farmers (of which at least 30% and 10% should be women and youth respectively).</li> <li>• The agricultural land area under farm trees increased by 200,000 ha.</li> </ul>	<p>Adaptation/ Mitigation</p>
<p>5. Increase on-farm water harvesting and storage, wastewater recycling, and area under irrigation.</p>	<ul style="list-style-type: none"> <li>▪ Increase households harvesting water for agricultural production from 300,000 to 1,000,000 (of which at least 30% and 10% should be women and youth headed respectively).</li> <li>▪ Increase annual water harvesting and storage in counties (ASALs and those with water deficit) from 16 million cubic metres (MCM) to 20 MCM, through small dams, water pans, and river dredging. (<i>Link to Climate Action 3: Water, Fisheries, and the Blue Economy</i>).</li> </ul>	<p>Adaptation</p>

	<p><i>Enabling:</i></p> <ul style="list-style-type: none"> <li>▪ Improve capacity of institutions supporting water harvesting for agricultural use.</li> </ul>	
<p>6. Improve productivity in the livestock sector through the implementation of CSA interventions</p>	<ul style="list-style-type: none"> <li>▪ National livestock vaccination coverage increased from 13 million Tropical Livestock Units (TLUs) to 26 million TLUs per year by 2027 for 45 counties to enhance climate resilience and productivity gains in ruminant livestock (cattle, sheep, camels and goats).</li> <li>▪ 500,000 dairy farming households, out of 1.8 million households, supported to adopt climate smart technologies, innovations, and management practices (TIMPS) on quality feeds, precision feeding, breeding management and enhanced animal health for efficient dairy management. At least 30% and 10% of households should be women and youth headed respectively.</li> <li>▪ 1,000 farmer-facing<sup>2</sup> Small and Medium Enterprises (Cooperatives and Community-based Organisations), with at least 30% women and 10% youth headed, supported to install milk coolers and meat chilling facilities:</li> <li>▪ Post-harvest losses of animal source foods reduced from 15% to 7.5% through effective climate smart standards, food safety and a Hazard Analysis and Critical Control Point Management System.</li> <li>▪ 400,000 pastoral households, with at least 30% women and 10% youth headed, adopt Livestock Identification and Traceability Systems that support</li> </ul>	<p>Adaptation</p>



	<p>the offtake of 1,000,000 TLUs in 23 counties, to enhance access domestic and export livestock and livestock products markets in a changing climate.</p>	
	<ul style="list-style-type: none"> <li>▪ Manure management improved through the adoption of biogas technology (capture and use) by 80,000 households (of which at least 30% and 10% should be women and youth headed respectively), and at least 200 abattoirs.</li> </ul>	Mitigation / Adaptation
7. Improved productivity and resilience of farmers and pastoralists	<ul style="list-style-type: none"> <li>▪ Area under rehabilitated rangelands, with good soil health, increased to 5,000,000 ha through range planning, improvement, and re-seeding of 2,400,000 ha in 23 ASAL counties.</li> <li>▪ Sustainable grazing management and silvo-pastoralism implemented in 1,200,000 ha of rangeland for pasture-based finishing and feed lotting, to improve productivity of 400,000 TLUs in 23 ASAL counties over 5 years.</li> <li>▪ 500 new feed banks (at least one per ward in 500 wards) supported through establishment and conservation of climate-resilient forage (fodder and pasture) varieties and densified livestock feeds.</li> <li>▪ Number of pastoral households using index-based livestock insurance and other financial services increased from 21,000 to 800,000 pastoral households, with at least 30 % being women headed,</li> <li>▪ Index-based livestock insurance coverage increased from 110,000 to 2,400,000 TLUs over 5 years through partnerships with the private sector.</li> <li>▪ An additional 500 community-based breeding programmes for multiplication and in-situ conservation of adaptable indigenous animal genetic</li> </ul>	Adaptation

	<p>resources for sheep, goats, camels and cattle established.</p> <ul style="list-style-type: none"> <li>▪ 1 new national gene bank established for ex-situ conservation strategic national animal genetic resources.</li> <li>▪ Bachuma and Lamu Livestock Export Zone completed to support marketing to niche and export markets.</li> <li>▪ Water sources and points established along livestock migratory routes in 23 ASAL counties.</li> </ul>	
8. Enhance contribution of youth to food and nutrition security	<ul style="list-style-type: none"> <li>▪ 10 youth-led agri-hubs (at least 30% female) established to promote adoption of CSA practices.</li> <li>▪ 100,000 youth farmers (at least 30% female) across the country practising CSA.</li> </ul>	Adaptation/ Mitigation
9. Enabling (policy)	<ul style="list-style-type: none"> <li>▪ Development/review/finalisation/ operationalization of climate resilient-related policies, strategies and regulations in the agriculture sector (Kenya Climate Smart Agriculture Strategy, National Agricultural Mechanization Policy, Kenya Climate Smart Agriculture Implementation Framework, Kenya Climate Smart Agriculture - multi stakeholder platform, Strategic Plan 2022-2026, CSA-Monitoring and Evaluation online tool).</li> <li>▪ All counties have CSA strategies or plans, a result of cascading the KCSAS 2017–2026 and the KCSAIF 2018 – 2027.</li> </ul>	Enabling
10. Enabling Action (Technology)	<ul style="list-style-type: none"> <li>▪ Counties developing and implementing Climate Information Service (CIS) plans increased from 9 to 47.</li> </ul>	Enabling



<p>and knowledge management )</p>	<ul style="list-style-type: none"> <li>• Mainstream CSA into agricultural extension delivery and reporting.</li> <li>• Support the development of agriculture advisory services, and innovation and multi-stakeholder dissemination platforms.</li> <li>• Support the development of CSA curricular in all agriculture faculties of learning in the education and training sector</li> <li>• Develop, promote and transfer technologies to enhance milk and meat production and value addition.</li> <li>• Develop, promote and transfer technologies to enhance value addition and product diversification for tea, cereals, fruits, tubers, roots and nuts.</li> </ul>	
<p>11. Enabling (climate finance)</p>	<ul style="list-style-type: none"> <li>• Support county agriculture sector stakeholders at all levels to access climate finance for implementation of CSA through capacity building on prioritization of actions and development of bankable proposals.</li> </ul>	<p>Enabling</p>

### **Climate Change Priority 3: Water, Fisheries and the Blue Economy**

Water scarcity is a challenge in Kenya, with per capita water resources of less than 500 m<sup>3</sup> annually. A country is defined as highly water stressed if the per capita water resources are below 1,000 m<sup>3</sup> per year.<sup>i</sup> About 40% of the Kenyan population did not have water coverage in 2020/21, which is a particular problem in rural areas where 86% of people fetch water from springs, wells, boreholes, and streams.<sup>ii</sup> The water situation in Kenya is made worse by climate change and compounded by deforestation, low storage capacity, a growing demand for water, and sharing of over half the rivers, lakes, and aquifers with neighbouring countries.

Climate change is negatively affecting the availability of water in Kenya, which has impacts on agricultural systems, manufacturing, and electricity production, as well as at the household level. In addition, water scarcity increases the likelihood of conflict and is related to an increase in water-borne diseases. Water scarcity particularly affects populations in the ASALs, and women and girls who often travel long distances for water and have less water for hygiene.

Water is also linked to the Blue Economy, which refers to the “sustainable use and economic development of both aquatic and marine spaces, including oceans, coasts, lakes, rivers and underground water.”<sup>iii</sup> Blue economy-based livelihoods have been impacted by climate change, including extreme weather events that negatively impact maritime and shipping activities, and sea level rise and storm surges that flood coastal settlements, damage coastal infrastructure, such as ports, and displace communities. In the coastal regions, Kenya’s fisheries sector that is mainly comprised mainly of artisanal and small-scale fishers is expected to be negatively impacted by fish stocks shifting to cooler waters that are further offshore.

Coastal ecosystems, such as mangroves, absorb carbon dioxide and can contribute to mitigation efforts; and ports and marine infrastructure can use renewable energy.

The NCCAP 2023-2027 actions aim to increase water availability through increased and improved water storage, improved water governance and management, and improved water harvesting. Efforts will be made to mainstream climate action in the Blue Economy programming, including support to assist fisher and coastal communities to cope with the impacts of climate change, and support for aquaculture and fish farming.

The expected outcomes of the climate change actions are:

Adaptation – increased quantity and quality of water in a changing climate through water harvest and storage, and improved water efficiency; and increased fisheries production in a gender responsive, climate smart manner.

**Strategic Objective 3: Enhance the resilience of the Blue Economy, Fisheries, and Water sector by ensuring adequate access to, and efficient use of, water for agriculture, manufacturing, domestic use, wildlife, and other uses.**



<b>Issue/Problem</b>	Access to and quality of water is expected to decline because of climate change (such as drought and reduction of glaciers). Coastal areas impacted by sea level rise, storm surges, increasing ocean temperatures and ocean acidification.
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**BETA Pillars Impacted by Action in this Climate Priority**

- Agricultural Transformation and Inclusive Growth
- Transforming the Micro, Small and Medium Enterprise (MSMEs) Economy

<b>National level indicators</b>
<ul style="list-style-type: none"> <li>▪ Water storage per capita.</li> <li>▪ Water coverage.</li> <li>▪ Per capita water availability.</li> <li>▪ Coverage of protected areas in relation to marine area.</li> <li>▪ GDP growth through Blue Economy and Fisheries development.</li> <li>▪ National per capita fish consumption.</li> </ul>

<b>Action</b>	<b>Expected Results by 30 June 2028</b>	<b>Adaptation Mitigation</b>
Increase annual per capita water availability through the development of water infrastructure (mega dams, small dams, water pans,	<ul style="list-style-type: none"> <li>▪ Fast-track implementation of multipurpose dams at advance stage to completion by 2027: Thwake (72%), Mwache (6%), Soin Koru (5%) and Siyoi Muruny (65%), Ruiru II (7.5%).</li> <li>▪ 3000 water pans constructed to supply 296,720,000 m3 of water in 23 ASALs counties.</li> <li>▪ 300 climate proofed underground reservoirs constructed in ASALs each with a storage capacity of 1 million MCM constructed to store water for three seasons to mitigate water resources conflicts during droughts.</li> </ul>	Adaptation

<p>untapped aquifers)</p>	<ul style="list-style-type: none"> <li>▪ Water resources monitoring is enhanced through rehabilitation and upgrading of 350 hydrometeorological stations.</li> <li>▪ 256 sub-basin /catchment plans are implemented.</li> <li>▪ 5 national water quality monitoring stations are established.</li> <li>▪ Groundwater resource mapping and assessment undertaken in 5 counties.</li> <li>▪ Piloting of artificial aquifer recharge in identified two aquifers to increase the supply of ground water.</li> <li>▪ Complete exploration of Turkana aquifers to realize the potential to irrigate an additional 265,000 ha.</li> <li>▪ Flood early warning systems developed for areas prone to floods.</li> <li>▪ A total of 100 km dykes and 20 dykes constructed in flood prone areas.</li> <li>▪ 20 check dams and 15 flood control infrastructure constructed in flood prone areas.</li> <li>▪ 1,150 water harvesting projects supported for irrigation in 23 ASAL counties providing 517.5 MCM of water.</li> <li>▪ 6,450 water pans (100,000 to 300,000 M3) constructed along Laghas in ASAL counties.</li> </ul> <p><i>Enabling</i></p> <ul style="list-style-type: none"> <li>▪ Catchment areas conservation, protection and rehabilitation is enhanced across all the basins areas – national and transboundary.</li> </ul>	
<p>Improve access to good quality water, increased sewerage</p>	<ul style="list-style-type: none"> <li>▪ Number of people and entities accessing good quality water for domestic (potable), agricultural, and industrial use increased from 58% to 65% through: <ul style="list-style-type: none"> <li>• Large-scale installation of water meters.</li> <li>• Regular inspection of water quality.</li> </ul> </li> </ul>	<p>Adaptation</p>



<p>coverage, and onsite sanitation</p>	<ul style="list-style-type: none"> <li>▪ Sewerage cover increased with a focus on promoting onsite sanitation technologies: <ul style="list-style-type: none"> <li>• National population with access to sanitation increased from 66% to 70% (sewer urban 4,539,176 and rural 1,527,875)</li> <li>• 4 climate-proofed holding stations constructed for sewer management in Nairobi, Kisumu, Garissa and Uasin Gishu counties.</li> </ul> </li> </ul>	
<p>Promote water efficiency (monitor, reduce, re-use, recycle and modelling)</p>	<ul style="list-style-type: none"> <li>▪ Share of Non-Revenue Water in all the counties reduced to less than 25% from 45%.</li> <li>▪ 25 innovations developed on water efficiency.</li> </ul> <p><i>Enabling</i></p> <ul style="list-style-type: none"> <li>▪ Governance and accountability for water service providers enhanced in all counties.</li> <li>▪ Technology is utilized to manage water use through the use of smart metres.</li> <li>▪ 50 research studies undertaken on water efficiency.</li> <li>▪ Sensitization of water consumers in all counties undertaken to enhance water use efficiency and water resource management.</li> </ul>	<p>Adaptation</p>
<p>Increase gender- and youth responsive affordable water harvesting-based livelihood resilience programmes</p>	<ul style="list-style-type: none"> <li>• Drilling and equipping 465 boreholes and installation of 510 greenhouses through initiatives that deliberately promote gender-responsive actions to improve participation of women and youth</li> </ul>	<p>Adaptation</p>
<p>Increase crop productivity through</p>	<ul style="list-style-type: none"> <li>▪ 228 community-managed irrigation projects developed for an additional 170,000 acres.</li> </ul>	<p>Adaptation</p>

improved irrigation	<ul style="list-style-type: none"> <li>▪ Existing irrigation schemes expanded to an additional 200,000 acres.</li> <li>▪ 22 large-scale irrigation projects developed to realize an additional 398,000 acres.</li> <li>▪ Support farmer-led irrigation development initiatives for an additional 40,000 acres in partnership with select financial institutions for de-risking.</li> </ul> <p><i>Enabling</i></p> <ul style="list-style-type: none"> <li>▪ Promote use of efficient irrigation technologies and practices among 20 Irrigation Water Users Association (IWUAs) in irrigation schemes.</li> <li>▪ Capacity building on diversification of irrigated enterprises, water use rights and scheme governance among 20 IWUAs.</li> </ul>	
Increase on farm water harvesting and storage, wastewater recycling, and area under irrigation	<ul style="list-style-type: none"> <li>▪ Annual water harvesting and storage in ASALs increased by 25 per cent from 16 million Cubic Metres (MCM) to 20 MCM, through small dams, trapezoidal bunds, semi-circular bunds, <i>zai</i> pits and water pans, and river drenching; and 700 m<sup>3</sup> through large multipurpose dams.</li> </ul>	
Increase adoption of Sustainable Land Management (SLM)	<ul style="list-style-type: none"> <li>▪ Land degradation assessments undertaken, disseminated, and implemented:</li> <li>▪ Undertake, disseminate, and implement 35 land degradation assessments (LADAs)</li> <li>▪ Establishment of land degradation assessment centre.</li> <li>▪ Implement land reclamation programmes to reclaim 6,750 acres of degraded land in 10 counties</li> </ul>	Adaptation
Improve the ability of people	<ul style="list-style-type: none"> <li>▪ Flood control measures enhance through development and maintenance of flood control infrastructure:</li> </ul>	Adaptation



to cope with disasters	<ul style="list-style-type: none"> <li>▪ Construction of 70kms of additional dykes.</li> <li>▪ Maintenance of 100kms of existing dykes.</li> <li>▪ Construction of 20 check dams.</li> </ul>	
Enhance sustainable Blue Economy and fisheries development	<ul style="list-style-type: none"> <li>▪ Number of climate-smart cages for fish farming increased from 6,000 to 8,000.</li> <li>▪ Number of fish ponds increased from 11,300 to 25,000.</li> <li>▪ Climate smart fish production from aquaculture increased from 27,000 MT to 50,000 MT.</li> <li>▪ Increased climate smart marine fisheries production from 38,000 MT to 50,000 MT.</li> <li>▪ Increased fish landed from Lake Turkana from 17,000 MT to 30,000 MT in a climate smart manner.</li> <li>▪ Number of fishers benefitting from social safety net interventions (Insurance products, cash transfers and subsidies) increased from 9,496 to 20,600 of which at least 30% and 10% are women and youth respectively.</li> <li>▪ Number of farmers using low-carbon aquaponics systems increased from 10 to 100 of which at least 30% and 10% are women and youth respectively.</li> <li>▪ Climate smart fish landing sites and fish markets (10 each) developed to reduce fish post-harvest losses.</li> <li>▪ 445 fishery cooperatives – that involve indigenous peoples and local communities – formed and operationalized to promote processing, marketing, and financial linkages.</li> <li>▪ Development of Liwatoni Ultra-Modern Fishing Hub.</li> </ul>	Adaptation/ Mitigation

	<ul style="list-style-type: none"> <li>▪ Coastal fisheries improved by increasing deep/offshore fishing fleet from 9 to 68.</li> <li>▪ Development of 2 fish processing plants (Lamu processing plant and Kalokol processing plant).</li> <li>▪ 3,000 acres of mangrove forests and seagrass restored and rehabilitated.</li> <li>▪ 60 ha coral reef restoration; reduce pressure on reef fishery.</li> </ul>	
Enhance contribution of youth to sustainable blue economy development	<p><i>Enabling:</i></p> <ul style="list-style-type: none"> <li>▪ 2,000 youth have improved capacity on fisheries and blue economy development.</li> <li>▪ Youths trained on value addition in fisheries and blue economy.</li> </ul>	
Enabling (capacity)	<ul style="list-style-type: none"> <li>▪ County Irrigation Development Units established.</li> <li>▪ Irrigation Research, Innovation and Training Institute established.</li> <li>▪ Irrigation Licensing and Quality Assurance Unit operationalized.</li> <li>▪ Seaweed farming is expanded (beyond Kwale county) to other coastal counties through capacity building for 1,000 seaweed farmers.</li> <li>▪ Capacity of WRUAs, CFAs, and BMUs to engage in mangrove restoration enhanced in 5 coastal counties.</li> </ul>	Enabling
Enabling (technology)	<ul style="list-style-type: none"> <li>▪ Support to develop, promote and transfer technologies to enhance value addition and product diversification for fish, fish feed and sea weed.</li> <li>▪ Adaptive research to strengthen understanding of the adaptability of fish breeds that are tolerant in changing climatic conditions undertaken- Kabonyo Aquaculture and Research Centre of Excellence.</li> </ul>	Enabling



<p>Enabling (Policy)</p>	<ul style="list-style-type: none"> <li>▪ Land Reclamation Policy and Bill approved and enacted.</li> <li>▪ National Irrigation Masterplan and Investment Plan developed and implemented.</li> <li>▪ National Land Reclamation Masterplan and Investment Plan developed and implemented.</li> <li>▪ Irrigation and Drainage Management Information &amp; Licensing System developed</li> <li>▪ Operationalization of Water Act (No. 43 of 2016) is finalized – <ul style="list-style-type: none"> <li>○ Proposed amendments on Public Private Partnerships in water harvesting and storage infrastructure (dams) approved and implemented.</li> <li>○ Amendment of the Act and enactment of regulations to fully operationalize the Water Tribunal.</li> </ul> </li> <li>▪ Water resources; water services; and water harvesting and storage regulations (2021) implemented.</li> <li>▪ Rules and regulations of hydrologists regulation board developed and implemented.</li> <li>▪ National Water Master Plan 2030 reviewed and updated to aid national/county water harvesting and storage infrastructure investments.</li> <li>▪ National Lakes Management Strategy developed and implemented in a climate smart manner.</li> <li>▪ Kenya Fisheries Policy implemented in a climate smart manner.</li> <li>▪ National Blue Economy Strategy launched and implemented in a climate smart manner.</li> </ul>	<p>Enabling</p>
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	<ul style="list-style-type: none"> <li>▪ Aquaculture Policy finalized and implemented.</li> <li>▪ National aquaculture guidelines on climate-smart standards for cage fish farming developed.</li> <li>▪ Marine and inland spatial plans prepared.</li> </ul>	
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#### **Climate Change Priority 4: Forests, Wildlife and Tourism**

NCCAP 2023-2027 will contribute to the restoration, preservation, and sustainable management of forests and other ecosystems that play an essential role in Kenya’s economy. These actions will contribute to achieving the goal in the Constitution of Kenya that the country work to achieve and maintain a tree cover of at least 10% of total land area.<sup>iv</sup> In addition, the actions will contribute to the President’s National Tree Growing and Restoration Campaign that aims to plant 15 billion trees by 2032. This initiative of the President includes the Green Army that will engage the youth in tree growing and environmental conservation.

Kenya’s forest area covered 8.83% of total land area in 2022, comprising natural forests, plantation forests, open woodlands, and a small amount of mangrove forests along the coast.<sup>v</sup> Forests are important national assets in terms of economic, environmental, social, and cultural values. The forest sector is estimated to contribute about 3.6% of the country’s GDP.<sup>vi</sup> Five forests in the main water towers regulate 75% of the country’s renewable water supplies, and more than 80% of the energy generated in Kenya comes from wood.<sup>vii</sup> Forests offer water catchment and biodiversity conservation functions, provide homes for wildlife, and provide a variety of goods that support the subsistence livelihoods of many communities, including forest resource users.<sup>viii</sup>

Actions to build the resilience of wildlife and wildlife habitat to climate impacts have significant co-benefits, including enhanced anti-poaching of wildlife and combating illegal trade in wildlife. Deforestation and forest degradation release large amounts of greenhouse gases, driven mainly by clearing for agriculture that is linked to rural poverty, rapid population growth, unsustainable utilisation of forest products (including timber harvesting, charcoal production, and grazing in forests), and past governance and institutional failures in the forest sector.<sup>ix</sup> The negative impacts that result from deforestation (such as soil erosion and increased flooding) are exacerbated by climate change. Climate change will continue to degrade, damage, and transform forest areas, and changes in forest distribution and composition could adversely affect wildlife, biodiversity,



ecosystem services, and water towers. Other negative impacts include reduced access to forest products including food and fuelwood/charcoal.

Forests provide significant carbon benefits by mitigating the harmful effects of GHG emissions by acting as “sinks” through carbon sequestration, and the sector offers large potential to sequester carbon and reduce emissions.

NCCAP 2023-2027 actions in the forestry, wildlife and tourism sector include actions to increase and maintain forest and tree cover, including REDD+ projects, afforestation and forest restoration, wildlife habitat restoration programmes, improved monitoring and enforcement in forest and wildlife habitat areas, and improved research and development to improve monitoring of projects, knowledge of carbon sequestration, and understanding of the impacts of climate change on forests and wildlife.

The expected outcomes of the climate change actions are:

- Adaptation – forests, rangelands, and grasslands managed in a manner that accounts for climate hazards and risks, maintenance of ecosystems and conservation areas for wildlife and linking of protected areas.
- Mitigation – GHG emission reductions of 37.3 MtCO<sub>2</sub>eq by 2027 through forest restoration, afforestation and reforestation, and reducing deforestation.

**Strategic Objective 4: Strengthen the ability of forest, tree, wildlife and tourism resources to respond to impacts of climate change, provide climate mitigation solutions, and improve resilience of social systems across various landscapes.**

<b>Issue/Problem</b>	Unplanned development, such as agricultural expansion, settlements, infrastructure development, and overreliance on biomass for cooking leads to deforestation, forest degradation, and environmental degradation, with negative impacts on forest communities, wildlife, and the tourism industry, and increased GHG emissions.
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**BETA Pillars Impacted by Action in this Climate Priority**

- Agricultural Transformation and Inclusive Growth
- Transforming the Micro, Small and Medium Enterprise (MSMEs) Economy

<b>National Level Indicators</b>
<ul style="list-style-type: none"> <li>▪ Forest cover as a % of total land area.</li> </ul>

- Tree cover as a % of total land area.
- Wildlife deaths as a result of drought
- Proportion of degraded land as a % of total land area.
- GHG emissions in the LULUCF sector.

Action	Expected Results by 30 June 2028	Adaptation Mitigation
1. Reduce emissions from deforestation and forest degradation	<p>National Tree Growing and Restoration Campaigns (carbon stock enhancement) to increase tree cover to 30% of total land area:</p> <ul style="list-style-type: none"> <li>• Grow 15 billion trees to increase national tree cover from 12.13 % to 30 % by the year 2032.</li> <li>• Expansion of the existing 300 Kenya Forestry Service (KFS) tree nurseries to produce 300 million seedlings annually; establishment of 290 new tree nurseries.</li> <li>• Drilling and equipping of 100 boreholes in tree nurseries in ASALs.</li> <li>• Establishment of 5,000 ha of public forest plantations.</li> <li>• Rehabilitation of 1,400 ha of degraded mangrove forests and 7,000 ha of degraded mangrove ecosystems.</li> <li>• Rehabilitation of 25,000 ha of degraded forests and water towers outside gazetted forest reserves; rehabilitation of 650,000 ha of degraded rangelands/ASALs.</li> </ul> <p>In all public forests:</p> <ul style="list-style-type: none"> <li>• Rehabilitation and restoration of 35,000 ha of degraded public natural forest areas.</li> </ul>	Mitigation



	<p><i>Enabling:</i></p> <p>Improved enforcement and monitoring to prevent disturbances in public forests.</p>	
2. Reduce emissions from land degradation outside forests.	<ul style="list-style-type: none"> <li>▪ The agricultural land area under farm trees increased by 200,000 ha.</li> </ul> <p><i>See SLM action and target under Priority Area 2: Food and Nutrition Security.</i></p>	Adaptation/ Mitigation
3. Incentivize tree growing value chain enterprises	<ul style="list-style-type: none"> <li>• 1000 ha of bamboo commercial forest established.</li> <li>• 300,000 ha of commercial forest plantation established.</li> <li>• 1,000,000 ha agroforestry established on farmlands.</li> </ul> <ul style="list-style-type: none"> <li>▪ The production of 1 billion metric tonnes high quality tree seeds and 1 billion seedlings including by the private sector (women, youth, CFAs, nurseries)</li> <li>▪ The processing efficiency of forest materials is improved, including recovery rates from 15% to 30%.</li> </ul> <p><i>Enabling</i></p> <ul style="list-style-type: none"> <li>▪ Incentives developed and provided for commercial forestry enterprises across the value chain.</li> <li>▪ Public Private Partnership (PPP) strategy for commercial forestry</li> <li>▪ Amendment and revision of Forest Conservation and Management Act.</li> </ul>	Adaptation/ Mitigation
4. Enhanced forest-based climate change	<ul style="list-style-type: none"> <li>▪ Access to high quality tree germplasm (both indigenous and fast-growing exotic species) for the changing agroecological zones and end market needs is improved.</li> </ul>	Enabler

research and technological development (Enabling)	<ul style="list-style-type: none"> <li>▪ Breeding of drought tolerant tree species.</li> <li>▪ 100 forest research and allied natural resources technologies developed.</li> <li>▪ Development of planting materials for difficult to propagate indigenous tree species.</li> <li>▪ 18 seed processing units constructed.</li> <li>▪ 450 ha of seed sources maintained and 36 ha of new seed sources established.</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ REDD+ implementation is tracked and reported.</li> <li>▪ The REDD+ Safeguards Information System is operationalized.</li> <li>▪ The National Forest Monitoring System and Forest Reference Level are implemented to improve forest monitoring and measurement.</li> <li>▪ A national program on Monitoring, Control and Surveillance of pests, diseases and invasive species in forestry linked to the forest information management system is implemented.</li> </ul>	Enabler
5. Enhance forest health for climate change resilience research (Enabling)	<ul style="list-style-type: none"> <li>▪ A climate risk vulnerability assessment is undertaken to guide the suitable selection of species for different sites.</li> </ul>	Enabler
6. Enhance the resilience of wildlife, their habitats, and	<ul style="list-style-type: none"> <li>▪ Increase tree cover in 30,000 ha of protected areas to enhance resilience of the wildlife habitat.</li> <li>▪ Restore 1,000 ha of degraded wildlife habitats through reseedling of pasture in ASAL protected areas and soil and water conservation measures.</li> </ul>	Adaptation/ Mitigation



<p>their ecosystems</p>	<ul style="list-style-type: none"> <li>▪ Construction/rehabilitation/maintenance of fences in National parks and reserves, and in strategic corridors and dispersal areas in community areas to link protected areas and minimize human-wildlife conflict resulting from climate change.</li> <li>▪ Establishment and operationalization of Human Wildlife conflict Insurance Scheme and payment of climate-induced human-wildlife conflict claims</li> <li>▪ Climate-proofing infrastructure: 100 km new access roads, rehabilitate 200 km and maintain 7,200 km of the access roads in national parks and reserves; construct 49 airstrips in various parks; and maintain 150 km of runways and upgrade of five (5) runways to bitumen standards all in a manner that accounts for projected climate impacts.</li> <li>▪ Management and control of alien invasive species is undertaken in protected areas to restore wildlife habitats.</li> <li>▪ Wildfires are controlled and managed by establishing and maintaining fire breaks.</li> <li>▪ Critical wildlife habitats including migratory corridors and dispersal areas are mapped and secured to enhance connectivity and species resilience.</li> <li>▪ Rehabilitation and construction of water pans, boreholes, and earth dams for provision of water for wildlife.</li> <li>▪ Forage, feed supplements and water provided for wildlife for feed supplementation during droughts.</li> </ul> <p><i>Enabling:</i> Operationalize the National Wildlife Climate Change Adaptation Strategy 2022-2032.</p>	
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7. Enhance contribution of youth to forestry and wildlife	<ul style="list-style-type: none"> <li>▪ 5,000 youth-owned tree seedling nurseries established.</li> <li>▪ 5 streams of non-timber forest products developed and implemented by youth groups with gender and social inclusion.</li> <li>▪ 1,000 ha degraded mangroves forests sites restored through youth-led programmes.</li> </ul>	Adaptation
8. Wildlife Training and Research (Enabling)	<ul style="list-style-type: none"> <li>▪ Enhance wildlife research to guide adaptation for the sector</li> </ul>	Enabler
9. Enhance climate resilience of tourism destinations and their ecosystems	<ul style="list-style-type: none"> <li>▪ Programme developed and implemented that raises awareness with tourism facilities about sustainable tourism, including the use of clean and green energy in operations of tourism facilities (resorts, hotels) and for tourist transport.</li> <li>▪ Programme developed and implemented that promotes Kenya as a climate-friendly tourism destination, sensitization and implementation of the ecotourism standards.</li> </ul> <p><i>Enabling</i></p> <ul style="list-style-type: none"> <li>▪ Provision of information to enable tours operators to assess the impacts of climate risks on their business and facilities.</li> <li>▪ Develop and implement climate smart ecotourism guidelines.</li> </ul>	Adaptation

### **Climate Change Priority 5: Health, Sanitation and Human Settlements**

NCCAP 2023-2027 sets out an integrated approach to climate actions that address sustainable health, human settlements and sanitation services.



Climate change impacts pose health risks and contribute to the spread of diseases in Kenya. Heat stress can reduce the productivity of outdoor workers, including agricultural workers, and can increase heat-related deaths among the elderly. Heat stress, drought, and floods can alter disease transmission patterns. The compromise of water and sanitation systems as a result of flooding can increase waterborne illnesses such as cholera, dysentery, and typhoid. A warming climate is increasing the prevalence of vector-borne diseases like malaria and dengue fever. Mosquitoes that transmit malaria in Sub-Saharan Africa have moved to higher elevations by about 6.5 meters per year.<sup>x</sup> Vulnerable populations, including pregnant women, children, the elderly, and those with pre-existing health conditions, are particularly at risk.

Climate change increases risks for human health by impacting human settlements. Affected populations include the urban poor who tend to live along river banks; on hillsides and slopes prone to landslides; in unstable structures vulnerable to collapse in heavy rains, and along waterfronts in coastal areas. This is especially true in informal settlements and other low-income areas, where high population density and lack of infrastructure aggravates these problems. Improving the resilience of the built environment in human settlements is needed, including flood control, green building technologies, and climate-resilient waste disposal systems and facilities. Currently, the waste sector contributes minimal GHG emissions in Kenya in comparison to other sectors such as agriculture, forestry, and energy. However, there is need to enhance disaggregated data collection to provide a more accurate picture.

NCCAP 2023-2027 actions focus on improved management of climate-sensitive diseases, training for healthcare workers, implementing the climate change and health strategy, ensuring that cities and communities are climate resilient, and reducing GHG emissions in the waste sector.

The expected outcomes of the climate change actions are:

- Adaptation – reduced vulnerability to health risks that are exacerbated by climate change, with an emphasis on malaria and other vector-borne diseases; flood control in rural and urban settlements and climate-proofed landfill sites that account for expected changes in precipitation and extreme weather events.
- Mitigation – GHG emission reductions of 2.6 MtCO<sub>2</sub>eq by 2027 through mitigation actions including segregating 90% of solid waste at source, which will reduce the tonnage of solid waste at dumpsite and emissions of methane.

**Strategic Objective 5: Mainstream climate change adaptation into the health sector, and increase the resilience of human settlements, including through improved solid waste management in urban areas.**

<b>Issue/Problem</b>	Kenya’s improvements in the control of malaria, water-borne diseases, respiratory diseases, infant mortality, and malnutrition are at risk from setbacks relating to climate change. Inappropriate waste management could contribute to increased GHG emissions and enhance negative health impacts.
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**BETA Pillars Impacted by Action in this Climate Priority**

- Housing and Settlement
- Healthcare

<p><b>National Level Indicators</b></p> <ul style="list-style-type: none"> <li>▪ Malaria incidence per 1,000 population</li> <li>▪ GHG emissions from management of medical waste.</li> <li>▪ Percentage of urban solid waste regularly collected and well managed.</li> <li>▪ Proportion of urban population living in slums, informal settlements or inadequate housing.</li> </ul>
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<b>Action</b>	<b>Expected Results by 30 June 2028</b>	<b>Adaptation Mitigation</b>
1. Enhance management of climate-sensitive diseases	<ul style="list-style-type: none"> <li>▪ Health programs, protocols, and guidance to identify and manage new climate change-related diseases and risks are developed and implemented.</li> <li>▪ Incidents of malaria and other vector-borne health conditions are reduced.</li> <li>▪ Community-level interventions to address climate-sensitive diseases are scaled up.</li> </ul>	Adaptation
2. Reduce GHG emissions from	<ul style="list-style-type: none"> <li>▪ Clinical waste microwave equipment (non-burn technology) for medical waste management installed in</li> </ul>	Mitigation





	<ul style="list-style-type: none"> <li>• Determine financial requirements of setting up composting facilities in all counties in the country</li> <li>▪ Develop and implement guidelines for closure and decommissioning of existing dumpsites.</li> </ul>	
6. Enabling (research)	<ul style="list-style-type: none"> <li>▪ A National Climate-Health Research Network that promotes multidisciplinary collaboration between researchers, policymakers, and stakeholders is developed and implemented.</li> </ul>	
7. Policy (enabling)	<ul style="list-style-type: none"> <li>▪ Kenya Climate Change &amp; Health Strategy 2023-2027 is developed and implemented.</li> <li>▪ CoP 26 health commitments are implemented: <ul style="list-style-type: none"> <li>▪ Develop a Health National Adaptation Plan 2023-2027</li> <li>▪ A baseline assessment of GHG emissions of the health system and healthcare facilities (including supply chains).</li> <li>▪ Develop an action plan setting out a roadmap to a sustainable low carbon health system (including supply chains).</li> <li>▪ Implement the WHO Air Pollution Roadmap.</li> <li>▪ Develop and implement a 5-year Household Air Pollution Strategy.</li> </ul> </li> <li>▪ Guidelines for climate change-resilient WASH infrastructure for health facilities, schools and communities developed and implemented.</li> <li>▪ Standards for biodegradable sanitary pads are developed and implemented.</li> </ul>	Enabling



	<ul style="list-style-type: none"> <li>▪ Standards for disposal of sanitary pads for schools are developed and implemented.</li> <li>▪ Standards for disposal of diapers are developed and implemented.</li> <li>▪ Review and align current national waste management strategy to the waste management hierarchy and circular model.</li> <li>▪ County waste management laws and strategies aligned to the waste management hierarchy</li> <li>▪ Mainstream county waste management oversight in the county environment committee.</li> <li>▪ Policy and regulatory framework developed to enhance adoption of climate smart green building technologies.</li> </ul>	
8. Enabling (capacity building)	<ul style="list-style-type: none"> <li>▪ A training curriculum for Health Care Workers is developed to integrate climate change and health in all health courses in all middle level colleges and universities.</li> <li>▪ The capacity of health care workers to develop proposals for funding from the GCF and other partners is enhanced.</li> <li>▪ Community Health Volunteers are trained on clean cooking and health linkages.</li> </ul>	Enabling

### **Climate Change Priority 6: Manufacturing**

The manufacturing sector is a critical pillar of growth as Kenya strives to become a newly industrializing middle-income economy as articulated in Kenya Vision 2030. Manufacturing and construction industries contributed 26% of national GDP in 2022. NCCAP 2023-2027 aims to catalyse the manufacturing sector by building resilience to the impacts of climate change on its activities, reducing GHG emissions, and creating new economic and market opportunities.

Manufacturing is capital intensive, with many long-life fixed assets, long supply chains, and significant water and energy requirements, which are negatively impacted by floods, droughts, and extreme weather events. Climate change will increase resource scarcity (such as water and raw materials) that are inputs to the manufacturing process. Reduced crop production will have impacts on the agro-manufacturing sector. An example is the 2017 drought that affected tea production and resulted in diminished turnover in processed tea.

While being impacted by climate change, manufacturing produces GHG emissions. Industrial manufacturing processes in Kenya with significant GHG emissions include cement production, iron and steel production, and chemical manufacturing. The use of green building design for manufacturing facilities can help to reduce GHG emissions and ensure that facilities are resilient to climate hazards.

The climate actions in NCCAP 2023-2027 will help to accelerate integration of climate change in private sector initiatives and increase investments in climate adaptation and mitigation, The actions focus on improving energy and resource efficiency, including energy efficiency in the industrial sector and reducing emissions from industrial processes.

The expected outcomes of the climate change actions are:

- Adaptation – climate-resilient manufacturing processes through improved industrial symbiosis and green building design that accounts for expected climate impacts.
- Mitigation – GHG emission are expected to increase in this sector by 0.08 MtCO<sub>2</sub>eq mainly because of an increase in the use of cement, whose production is responsible for high emissions.

**Strategic Objective 6: Promote energy and resource efficiency in the manufacturing sector.**

<b>Issue/Problem</b>	Scarcity of resources, including water, energy, and other inputs in industrial processes, which arises due to climate change; inefficient energy use in the manufacturing sector increases GHG emissions.
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**BETA Pillars Impacted by Action in this Climate Priority**

- Transforming the Micro, Small and Medium Enterprise (MSMEs) Economy



**National Level Indicators**

- Number of manufacturing facilities adopting energy efficiency processes.
- GHG emissions in the manufacturing sector.

Action	Expected Results by 30 June 2028	Adaptation/Mitigation
1. Enhance energy efficiency	<p>Energy efficiency implementation rates improved from 50% to 75% in the manufacturing sector.</p> <ul style="list-style-type: none"> <li>▪ Implementation of Minimum Energy Performance Standards (MEPS): <ul style="list-style-type: none"> <li>• Six devices put under MEPS.</li> <li>• Study on adoption and impact of MEPS conducted.</li> <li>• Adoption of MEPS increased by an additional 20%.</li> </ul> </li> <li>▪ Energy auditing and process optimization is promoted among designated facilities: <ul style="list-style-type: none"> <li>○ increase from 2,000 audits in 2022 to at least 3,000 audits.</li> <li>• 50 production process optimization audits.</li> <li>• Support 100 companies to map out their carbon footprint.</li> </ul> </li> <li>▪ Energy Service Companies established to increase implementation rates of audit recommendations among designated facilities from 50% to 75%.</li> </ul>	Mitigation
2. Promote resource use efficiency and circular	<ul style="list-style-type: none"> <li>▪ Implementation of Extended Producer Responsibility Regulations and formation of 7 Producer Responsibility Organizations.</li> </ul>	Mitigation

economy in industrial processes	<ul style="list-style-type: none"> <li>▪ Implementation of cleaner production mechanisms in industries.</li> <li>▪ Promote industrial symbiosis in 3 Special Economic Zones and 20 County Aggregation and Industrial Parks.</li> </ul>	
3. Promote green building design and construction	<ul style="list-style-type: none"> <li>▪ At least 30% of building projects to be certified to green building standards that promote emission reductions and construction that accounts for expected climate impacts.</li> <li>▪ Implement a green construction material industrial park at the East African Portland Cement Company.</li> </ul>	Mitigation / Adaptation
4. Technology (enabling)	<ul style="list-style-type: none"> <li>▪ Support to develop, promote and transfer technologies for energy efficient processes, biogas production, and circular economy processes.</li> </ul>	

### Climate Change Priority 7: Energy and Transport

Clean, sustainable, and affordable energy and transportation systems are essential for Kenya's sustainable development and are infrastructure enablers for the BETA Agenda.

Climate risk drivers including temperature increase, higher frequency and intensity of extreme weather events – such as heavy rains resulting in floods and landslides – damages energy and transport infrastructure. These climate hazards increase the risk of delays, disruptions, damage, and failure across land-based, air, and marine transportation systems and impacts the design, construction, location and operation of power infrastructure. The impact of drought on hydro-generated electricity is well understood in Kenya. Low water levels in the country's hydroelectric dams lead to the increased use of diesel-powered generators and an increase in the cost of electricity.

The government has taken steps to address the impacts of climate change for energy and transport infrastructure, including modifying hydropower operations by increasing dam capacity and adding



turbines increasing power generation from other renewable sources, and assessing large transportation projects for climate impacts and adjusting design to address those impacts. The Kenya National Highways Authority participated in a vulnerability assessment of the Horn of Africa Gateway project, a large road infrastructure project, that found projected increased rainfall is expected to increase the risk of flooding, erosion, washouts, and siltation, and to aggravate connectivity problems. Climate-proofing, or pro-active adaptation, is a key recommendation of Kenya's NAP as a means of addressing infrastructure-related climate change impacts.

Emissions in the energy sector and transport sector are expected to increase due to an increase in energy demand. Kenya's electricity generation is largely renewable at 89.5%, with about 10.5% generated from fossil fuels (down from 35% in 2010).<sup>xi</sup> In 2022, the installed electricity generation capacity was 3,300 megawatts, with geothermal accounting for 40.5% of the generation mix, hydro 27.4% , wind 16.8% , solar 2.5% , and imports 3%. Geothermal is increasingly used for base load electricity generation, helping Kenya to increase and maintain reliance on renewable energy as the country increases electricity generation to meet the target of 100% generation from renewable sources, and a 100% access to electricity by 2030. This includes decentralized solutions to meet the needs of a growing population and industrializing economy.

With regard to energy demand, the transition to clean cooking is a priority action that presents an opportunity for technological leapfrogging with energy and GHG emissions savings, and health and cost-saving benefits. The transition to clean cooking – through the uptake of LPG, ethanol, biogas, electric cooking, and other alternative fuels in urban areas, and improved biomass cookstoves in rural areas – has substantial co-benefits, including improving the health of women and children, and reducing pressure on forests. Women and children are disproportionately affected by the challenge of using raw biomass for cooking, suffering from toxic smoke, time-poverty and the consequences of deforestation. The use of clean cooking technologies should therefore be integrated into community development initiatives.

Kenya is working to reduce emissions in the transport sector, including through expansion of the rail line, implementation of electric mobility, mainstreaming climate change in the Integrated National Transport Policy, and implementing Kenya's Action Plan for the Reduction of CO<sub>2</sub> Emissions in Aviation.

Priority NCCAP 2023-2027 actions in the energy sector include increasing renewable energy for electricity generation in a climate resilient manner; improving energy efficiency and conservation;

climate proofing energy infrastructure; and transitioning to clean cooking. The focus of climate action in the transport sector is the establishment of efficient, sustainable, world class transport systems and logistics services that withstand the projected impacts of climate change. Actions including developing affordable, safe, and efficient public transport systems; improving non-motorized transport facilities; transitioning to electric mobility; encouraging low-carbon technologies in the aviation and maritime sectors; and climate proofing transportation infrastructure.

The expected outcomes of the climate change actions are:

- Adaptation – climate-proofed energy and transport infrastructure.
- Mitigation
  - Electricity supply - GHG emission reductions of 23.66 MtCO<sub>2</sub>eq through development of geothermal and other renewable energy for electricity supply.
  - Energy demand - GHG emission reductions of an estimated 3.3 MtCO<sub>2</sub>eq through the transition to modern clean cooking technologies.
  - Transport - GHG emission reductions of 4.1 MtCO<sub>2</sub>eq through promotion of electric mobility, implementation of the BRT system in Nairobi, and improved fuel efficiency in trucks through improved standards.

***Climate Change Priority 7a: Energy***

**Strategic Objective 7a: Ensure an electricity supply mix that is based mainly on renewable energy, an electricity system that is resilient to climate change and promotes energy efficiency, and encourage the transition to clean cooking to reduce demand for fuelwood.**

<b>Issue/Problem</b>	A renewable and affordable electricity supply Is needed that meets the needs of a growing population. The electricity supply needs to be based mainly on renewable energy, and be resilient to climate change. Continued efforts are needed to improve energy efficiency and to encourage the transition to clean cooking to reduce demand for fuelwood and reduce indoor air pollution.
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**BETA Pillars Impacted by Action in this Climate Priority**

- Agricultural Transformation and Inclusive Growth
- Transforming the Micro, Small and Medium Enterprise (MSMEs) Economy



- Housing and Settlement
- Healthcare
- Digital Superhighway and Creative Economy

**National Level Indicators**

- Share of renewable energy in the total electricity generation mix.
- Percentage of households using clean cooking fuels.
- Percentage of households using biomass for energy.

Action	Expected Results by 30 June 2028	Adaptation Mitigation
1. Promote clean, affordable, and quality alternative renewable energy sources	<ul style="list-style-type: none"> <li>▪ Energy centres increased from 16 to 47 for increased dissemination of renewable energy technologies.</li> <li>▪ Alternative energy technologies, 195 energy efficient charcoal kilns developed, biogas digesters, small hydro plants, biofuel plants, wind masts, and data loggers, ethanol production plants, clean cooking solutions.</li> <li>▪ 589 MW new renewables developed, including:               <ul style="list-style-type: none"> <li>• Geothermal (208 MW) and prioritised as baseload generation that is climate resilient.</li> <li>• Solar - 174 MW.</li> <li>• Wind - 161 MW.</li> </ul> </li> <li>▪ Two biofuel plants developed for value chain addition by the private sector.</li> </ul>	Mitigation
2. Enhance electricity network expansion and improvement	<p>Connection to electricity enhanced:</p> <ul style="list-style-type: none"> <li>▪ 2.3 million additional customers and 30,000 public facilities.</li> <li>▪ 90,000 transformers installed and maximized.</li> <li>▪ 150 mini grids and 50,473 standalone systems installed.</li> </ul>	Mitigation

<p>t, as well as electricity access in both on-grid and off-grid areas.</p>	<ul style="list-style-type: none"> <li>▪ 75,000 lanterns installed under the Public Lighting Project.</li> <li>▪ Losses in electricity transmission and distribution reduced from 23% to 16.5%.</li> </ul>	
<p>3. Promote clean cooking fuels and technologies</p>	<ul style="list-style-type: none"> <li>▪ About 75% of households have adopted modern cooking energy services (LPG, e-cooking, biogas, and bioethanol).</li> <li>▪ 23% (3,450,000 households) of Kenya households cooking with improved cooking (biomass) solutions.</li> <li>▪ About 25% of households using improved biomass technologies.</li> <li>▪ Subsidized Mwananchi gas project implemented in Nairobi and its environs for urban and peri-urban households.</li> <li>▪ Global eCooking Coalition implemented to have electricity as a primary cooking fuel for additional 10% of the population of Kenya by 2030.</li> <li>▪ 5,000 public secondary schools transition to LPG: <ul style="list-style-type: none"> <li>• Installation of the infrastructure - 2-ton storage bullet and piping from bullet to gas burners and the gas burners.</li> <li>• Training and capacity building on use and risk management.</li> </ul> </li> <li>▪ Production of non-forest biomass fuel briquettes such as agricultural waste, sawdust, and human waste through youth-led programmes increased.</li> </ul>	<p>Mitigation</p>
<p>4. Promote geothermal energy for</p>	<ul style="list-style-type: none"> <li>▪ The Menengai grain dryer is commercialized.</li> <li>▪ Menengai geothermal brine heat used in cement manufacturing.</li> </ul>	<p>Mitigation</p>



alternative use (direct use)	<ul style="list-style-type: none"> <li>▪ Steam and brine supplied to industries in the KenGen Green Energy Park.</li> </ul>	
5. Climate-proof energy infrastructure	<ul style="list-style-type: none"> <li>▪ 50% of new poles either concrete or eco-poles.</li> <li>▪ 2,500 hectares of water catchment areas conserved and rehabilitated by protecting the areas feeding hydro-generation reservoirs.</li> <li>▪ Existing hydropower plants optimised, and water management and conservation improved.</li> <li>▪ Raising of Masinga Dam by to enhance storage capacity: <ul style="list-style-type: none"> <li>• Conduct Environmental Social Impact Assessment</li> <li>• Resettlement Action Plan</li> <li>• Detailed feasibility study and designs</li> <li>• Enhance dam capacity.</li> </ul> </li> </ul>	Adaptation
6. Enabling Actions (Technology)	<ul style="list-style-type: none"> <li>▪ Climate change resilient technologies, such as modern coolers and scrubbers promoted.</li> <li>▪ Research undertaken on new and emerging energy technologies that would reduce GHG emissions in the energy sector e.g., Small Modular Reactor Nuclear Technology, Power-to-X and Green Hydrogen, SF6-free Gas Insulated Switchgear, among others.</li> <li>▪ Baseline study on use of Sulphur hexafluoride (SF6) in the power sector.</li> <li>▪ Support to develop, promote and transfer technologies for clean cooking.</li> <li>▪ Modern Biogas Laboratory</li> </ul>	Enabling
7. Enabling Actions (Capacity development)	<ul style="list-style-type: none"> <li>▪ Modern Clean Cooking and Stove Testing Laboratory <ul style="list-style-type: none"> <li>• Geothermal Development Capacity Building - Training of 60 participants per year (coordinated by KenGen &amp; GDC)</li> </ul> </li> </ul>	

<p>8. Enabling (policy)</p>	<ul style="list-style-type: none"> <li>• Training 1,000 participants, including women and youth, annually on renewable energy technologies (coordinated by REREC).</li> <li>• Training of 100 participants, including women and youth, per year by Kenya Power’s Institute of Energy Studies and Research on renewable energy technologies.</li> <li>• Establish 1 Public Information Centre on Nuclear Energy, Science &amp; Technology to drive awareness on nuclear electricity generation.</li> <li>• Capacity building for construction and operation of nuclear power plant (nuclear scientists &amp; engineers).</li> <li>• Train 500 industry representatives annually on climate change, circular economy, carbon footprint and emerging climate change themes (Coordinated by Kenya Association of Manufacturers [KAM])</li> <li>• Stakeholder engagements and sensitization on the climate change and energy sector nexus.</li> <li>▪ The 2020 Kenya National Energy Efficiency and Conservation Strategy is implemented.</li> <li>▪ Bioenergy Strategy 2020</li> <li>▪ Kenya Clean Cooking Compact</li> <li>▪ Develop regulations on Captive Power</li> <li>▪ Develop regulations on Net Metering</li> <li>▪ Develop market rules for power trading in Kenya to promote renewable energy uptake (energy auctions, power wheeling)</li> <li>▪ Policy and regulatory framework for emerging technologies like green hydrogen, battery energy</li> </ul>	
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	<p>storage systems, pumped storage hydropower, carbon capture and storage.</p> <ul style="list-style-type: none"> <li>▪ Review the Energy (Appliances, Standards and Labelling) Regulations, 2012</li> <li>▪ Review of National Electrification Strategy.</li> <li>▪ Develop a policy to guide in the management of vegetation, wayleaves acquisition, and corridors for energy infrastructure.</li> </ul>	
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*Climate Change Priority 7b: Transport*

**Strategic Objective 7b: Establish efficient, sustainable, world-class transport systems and logistics services that withstand projected impacts of climate change.**

<b>Issue/Problem</b>	Operational inefficiency, technology limitations, heavy traffic congestion, and high fossil fuel consumption lead to high levels of carbon emissions; need for resilience, and adaptive transport infrastructure to reduce vulnerability to extreme weather conditions
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**BETA Pillars Impacted by Action in this Climate Priority**

- Agricultural Transformation and Inclusive Growth
- Transforming the Micro, Small and Medium Enterprise (MSMEs) Economy
- Housing and Settlement

<p><b>National Level Indicators</b></p> <ul style="list-style-type: none"> <li>▪ Percentage of freight moved by rail instead of by road.</li> <li>▪ km of expansion of non-motorised transport (NMT) infrastructure.</li> <li>▪ km of expansion of Bus Rapid Transportation (BRT) infrastructure.</li> <li>▪ Number of electric vehicles deployed/registered.</li> <li>▪ Km of roads that are climate-proofed.</li> </ul>
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Action	Expected Results by 30 June 2028	Adaptation/ Mitigation
1. Reduce traffic idling	<ul style="list-style-type: none"> <li>▪ Intelligent Transport Systems including Traffic Management Centre designed and implemented for 81 junctions.</li> </ul>	Mitigation
2. Efficient public transport operations	<ul style="list-style-type: none"> <li>▪ 70 km of the Bus Rapid Transit (BRT) for Nairobi metropolitan area (BRT design, infrastructure, equipping and operation).</li> <li>▪ Matatu operations/public transport operations upgraded through fleet upgrading to more efficient vehicles.</li> <li>▪ Intermodal connectivity for rail, road, air, and NMT improved (e.g., BRT and rail connection to the Jomo Kenyatta International Airport [JKIA], BRT connection to the commuter rail, commuter rail line to JKIA).</li> <li>▪ Commuter rail in cities (including in Nairobi and Mombasa) expanded by 52 km.</li> <li>▪ Increase the number of passengers using commuter rail from 3.1 million per year to 6 million per year.</li> </ul>	Mitigation
3. Develop and improve Non-Motorised Transport (NMT) facilities	<ul style="list-style-type: none"> <li>▪ 500 km of NMT (walkways, cycle lanes) designed, constructed, and maintained.</li> </ul>	Mitigation
4. Transition to electric mobility	<ul style="list-style-type: none"> <li>▪ Electric vehicles deployed:</li> <li>▪ 1,000 electric buses</li> <li>▪ 50 Government of Kenya passenger cars.</li> <li>▪ Electric vehicle charging infrastructure deployed.</li> <li>▪ Local manufacture and use of electric vehicles including 2- and 3-wheelers enhanced.</li> </ul>	Mitigation



	<ul style="list-style-type: none"> <li>▪ Fuel efficiency in trucks increased through adoption of improved standards.</li> </ul> <p><i>Enabling:</i></p> <ul style="list-style-type: none"> <li>▪ Standards for electric/hybrid vehicles in Kenya developed and implemented.</li> </ul>	
5. Climate proof transportation systems	<p>Climate-proofing of roads, including through:</p> <ul style="list-style-type: none"> <li>• 5,000 km of roads climate proofed.</li> <li>• Pavement design, drainage structures and use of sustainable materials undertaken.</li> <li>• Green road corridors (landscaping and tree planting and growing).</li> </ul>	Adaptation
6. Improve the rail sector's contribution to reducing emissions	<ul style="list-style-type: none"> <li>▪ Extension of Standard Gauge Railway (SGR) from Naivasha-Kisumu-Malaba: <ul style="list-style-type: none"> <li>• Naivasha-Kisumu2B (262 km).</li> <li>• Kisumu- Malaba 2C (107 km).</li> </ul> </li> <li>▪ 30% freight shifted from road to rail.</li> <li>▪ Increase long distance passengers from 2.5 million per year to 2.8 million per year.</li> <li>▪ Development of integrated climate-resilient rail cities (Eldoret and Nairobi).</li> <li>▪ Modernisation, upgrading and rehabilitation of meter gauge railway system.</li> <li>▪ Construction of 20 rail stations in Nairobi.</li> <li>▪ Modernisation of railway fleet: locomotives, wagons, Diesel Multiple Units.</li> <li>▪ Development of cooling logistics for movement of fresh produce through railway and sea.</li> <li>▪ Greening rail corridors.</li> </ul>	Mitigation
7. Explore alternative	<ul style="list-style-type: none"> <li>▪ Promote adoption of energy efficient technologies and uptake of low carbon fuels for vessels</li> </ul>	Mitigation

propulsion technologies	operating in Kenya waters, such as green hydrogen, nitrogen and ammonia.	
8. Green and climate proof airport infrastructure to facilitate efficient aviation operations	<ul style="list-style-type: none"> <li>▪ Modern terminal buildings with natural light, smart lighting, more parking spaces for aircrafts, solar panels, fixed electric ground power units constructed at JKIA.</li> <li>▪ JKIA runway upgraded to reduce occupancy time.</li> <li>▪ Solar power plants installed at JKIA and other major airports to reduce grid energy demand.</li> <li>▪ Rainwater harvesting implemented at international airports through development of infrastructure: <ul style="list-style-type: none"> <li>• 15 million litres of rainwater harvested at JKIA per year.</li> <li>• 8 million litres rainwater harvested at Moi International Airport per year.</li> </ul> </li> </ul>	Mitigation
9. Improve the air sector's contribution to reducing GHG emissions	<p>Air traffic management enhanced through:</p> <ul style="list-style-type: none"> <li>▪ Modernisation of aircraft fleet through purchase of 3 Bombardier Q400 series.</li> <li>▪ Acquire Aircrafts with more fuel-efficient Engines: 8 ERJ145 and *ERJ135 aircrafts to replace the ageing 18 Dash-8.</li> <li>▪ Implementation of <i>Carbon Offsetting and Reduction Scheme for International Aviation</i> and report to ICAO.</li> <li>▪ Development of Sustainable Aviation Fuels with lower life cycle CO2 emissions and capacity building.</li> <li>▪ Implementation of measures to ensure efficient pre-departure planning and arrival planning (departure management and arrival management).</li> </ul>	Mitigation
10. Improve maritime	<ul style="list-style-type: none"> <li>▪ Increasing the number of water buses as a means of transport from five.</li> </ul>	Mitigation



sustainability and decarbonization.	<ul style="list-style-type: none"> <li>▪ Domestication and implementation of Annex 6 of the International Convention for the Prevention of Pollution from Ships.</li> <li>▪ Installation of shore power at the Port of Mombasa, including determination whether to use solar or wind power (Berth 1).</li> </ul>	
11. Enabling (policy)	<ul style="list-style-type: none"> <li>▪ E-Mobility Policy and requisite frameworks developed and implemented.</li> <li>▪ Appropriate incentives provided to increase uptake of electric vehicles.</li> <li>▪ Integrated National Transport Policy finalized and implemented.</li> <li>▪ Regulations to implement the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) developed and implemented.</li> <li>▪ Regulations on the prevention of air pollution from shipping under MARPOL 73/78 developed and implemented.</li> <li>▪ Planning and building control regulations updated to encourage compact development, mixed-use, and reduced provision of parking near BRT stations.</li> </ul>	Enabling

### 5.8 Climate Change Priority 8: Children and the Youth

Children and youth under the age of 35 years made up 75% of the population in 2019 and are particularly susceptible to the adverse impacts of climate change. The effects of extreme weather events, including flooding, droughts, rising temperatures, and climate-induced conflicts, pose substantial threats to their health, well-being, and future prospects. As a result, the rights of children are directly endangered by climate change. This section focuses on the impact of climate change on sectors that are sensitive to children, the need for increased resilience in these sectors, and the potential for children and the youth to contribute as agents of change in climate action.

*The Youth have a key role to play in addressing climate change*

Kenya is currently faced with the opportunity and challenge of a so called ‘youth bulge’, which occurs when more than 20 per cent of a country’s population is composed of young people, which can be a valuable asset for both present and future generations. Challenges facing the youth include, low level of awareness of climate change and its impacts, insufficient public participation and sensitization; climate change issues not fully integrated into Kenya’s formal education system; inadequate capacity for policy makers at national and sub-national levels on climate change mainstreaming; lack of adequate data and information to guide policy making among others.

The youth require appropriate platforms and means to support and initiate adaptation actions globally in order to secure a safer future. These efforts span different areas, including lobbying and influencing political attitudes, advocacy, capacity building, mobilizing, and establishing or working in social enterprises. The younger generation is adaptable to newer forms of political expression, mobilization and engagement, such as through social media and other online modes. With the need for increased political commitments towards climate adaptation, youth involvement in newer forms of political mobilization and engagement is essential to drive action.

#### ***Children are Uniquely Vulnerable to Climate Change but Often Overlooked***

Many children lack access to basic services like safe water, sanitation, and hygiene (WASH). Droughts and floods worsen these conditions, causing diseases and school disruptions. Rural households have limited access to basic drinking water services<sup>3</sup> (56.4% compared to 90.4% in urban areas) and basic sanitation (37.7% compared to 47.3% in urban areas), with 8.5% practicing open defecation. The recent drought left millions without sufficient water, doubling travel times to water sources in many areas and thus increasing risks such as gender-based violence for women and children. Floods also damage water systems and sanitation facilities, leading to disease outbreaks such as cholera and other diarrheal diseases.

Climate change affects education. Currently there are significant variations in net enrolment rates between counties. Some counties have primary school net enrolment rates below 30%, particularly in the ASALs, while others reach 90% or higher.<sup>xiii</sup> Drought’s force children to travel long distances for water or pasture, hampering school attendance. Lack of midday meals and school damage from floods contribute to dropouts. Education must be resilient to the impacts of climate change and include climate-focused curricula.



Malnutrition and stunting rates for children under 5 remain high (8.1 % and 17.6 % respectively). Climate change directly impacts agriculture, worsening these numbers. Even brief periods of malnutrition have lifelong effects. Health services lack flood-proof infrastructure and proper WASH facilities.

Climate change contributes to making the land uninhabitable and causes resource-based conflicts, leading to population migration. Migrant children, especially those unaccompanied or separated, face large risks of exploitation, abuse, neglect, and violence.<sup>xiii</sup>

### ***Child-Centred and Inclusive Climate Change Action***

Children and youth have critical skills, experiences and ideas needed for safer and more sustainable societies everywhere. Therefore, empowering children and youth is crucial. They should be educated, prepared, and equipped with the necessary resilience and skills to face disasters and the wider impacts of climate change. Their meaningful participation in decision-making processes and actions related to disasters and climate change should be facilitated at all times, allowing their voices to be heard and considered.

For children to survive and thrive it is key to:

- Prioritize child-critical services such as education, health, nutrition, and child protection to make them more inclusive, resilient, and prepared for climate change impacts.
- Increase investment and resources in disaster risk reduction and climate change adaptation measures that are focused on children and youth.
- Promote partnerships between the public and private sectors to enhance resilience.
- Integrate child-specific interventions into national and local disaster risk reduction and climate policies to address the risks that climate change poses to children's survival, well-being, and development.
- Strengthen the capacities of governments and stakeholders in child-centred disaster risk reduction and climate change adaptation.
- Foster partnerships, collect age- and gender-disaggregated data, and share technical expertise to shape effective actions for and with children and youth.

These actions will foster a child-centred and inclusive approach to climate change, ensuring the protection and well-being of children and their communities in the face of climate and environment challenges.

The enabling actions set out in the table below aim to facilitate the participation of children and youth in implementing this NCCAP 2023-2027.

**Strategic Objective 8: Children and youth rights are safeguarded from the impacts of climate change including through active and continuous involvement in climate action and related policy and decision making.**

<p><b>Issue/Problem</b></p>	<p>Children and youth in Kenya, comprising about 75% of the population, face severe risks from climate change. Child critical services are put under pressure by climate-related hazards. They lack access to safe water and sanitation, with rural areas particularly affected. Climate-related events disrupt education and malnutrition rates are high. Climate change also makes certain areas uninhabitable, leading to population migration and increased vulnerability for migrant children.</p> <p>Finance for climate change adaptation is increasing through many different means. However, there are little or no existing adaptation finance schemes that are focused on financing, replicating or scaling up youth-led or youth-focused adaptation action. Innovative financing options from multilateral funds, development agencies, and local governments are needed to enhance and scale up youth-led adaptation efforts in the civil society and entrepreneurship sector, so these can form a part of national adaptation efforts. Considering the institutional challenges faced by youth, large-scale climate change adaptation financing organizations should create specific financing initiatives that focus on and encourage adaptation efforts led by young people. One of the common narratives of vulnerability to climate change and disasters is one of the passivity and victimhood of children and youth in the process of climate change adaptation and mitigation.</p>
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**BETA Pillars Impacted by Action in this Climate Priority**

- Agricultural Transformation and Inclusive Growth
- Transforming the Micro, Small and Medium Enterprise (MSMEs) Economy
- Housing and Settlement



- Affordable Healthcare to All
- Digital Superhighway/ Creative Economy

<b>National Level Indicators</b>	
▪	Extent to which child-critical services are more inclusive, and resilient to and prepared for disasters and wider climate change impacts.
▪	Increase finance in and extent to which youth led innovations and technologies will be scaled up
▪	Proportion of national and local DRM and climate policies and plans that integrate child- and youth specific interventions.
▪	Proportion of children and youth that have access to climate and environment education.
▪	Clear engagement framework on youth engagement in climate actions
▪	Growth in numbers of youth led funded climate innovations actions programmes
▪	Growth of financial investment in climate change adaptation and resilience measures centered on children and youth and their communities, including promoting public and private sector partnerships for resilience

<b>Action</b>	<b>Expected results by 2028</b>	<b>Adaptation / Mitigation / Enabling</b>
1. Develop a children and youth climate change engagement strategy	A national strategy developed to engage children and youths across the country on climate change actions.	Enabling (policy and planning)
2. Enhance children and youth engagement in national and county climate	470 youth groups and children-focused local entities are regularly and systematically involved in policy development on climate action. National and county level climate policies and strategies are child sensitive.	Enabling (policy and planning)

change policy processes		
3. Establish and operationalize county youth climate change innovation hubs	5 youth climate change innovation hubs established. Scaled up youth climate innovations and solutions such as eco-friendly technologies, nature-based solutions, knowledge based and technology base solutions.	Enabling (Technology / Capacity and Knowledge)
4. Build capacity of children and youth on climate change technologies and innovations	4,700 youth adopt climate change technologies for climate action.	Enabling (Technology)
5. Build capacity of children and youth on climate change and risk management education and practice	Increased focus on mainstreaming climate change in teaching and dissemination through skills-based curriculum. At least 16 counties have child-sensitive risk management plans that address risks related to education challenges in extreme climate shocks. At least 22,300 vulnerable children able to access school education in areas highly disadvantaged by extreme climate events. Increased climate change and risk management education and practice.	Enabling (Capacity and Knowledge)
6. Build the capacity of children and youth on climate action	At least 100,000 children and youth taking climate action through schools, arts, competitions among others.	Enabling (Capacity and Knowledge)
7. Develop a youth platform for accessing climate finance	Operationalization of Climate Change Knowledge Portal that includes a platform with information on climate finance and opportunities and initiatives for youth.	Enabling (Capacity and Knowledge)



information and initiatives		
8. Empower youths in climate change advocacy and financing	Engage youth to create spaces to make their voices heard at global, national, and local level climate change platforms (may include participating in UNFCCC meetings, , assisting with updating the NAP and NDCs, inputting to local action plans, etc.) Engage with institutions and organizations to develop strategies to integrate climate action into their activities.	Enabling (Policy and planning)
9. Build capacity of youth on development of bankable climate change project proposals	100,000 youth increase capacity to develop proposals and access climate change funding through various funding mechanisms.	Enabling (Finance)
10. Increase in climate finance for building resilience of child critical services	Children are specifically mentioned and considered in all GCF, GEF, and other Paris Agreement-linked climate financing proposals and implementation.	Enabling (Finance)

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