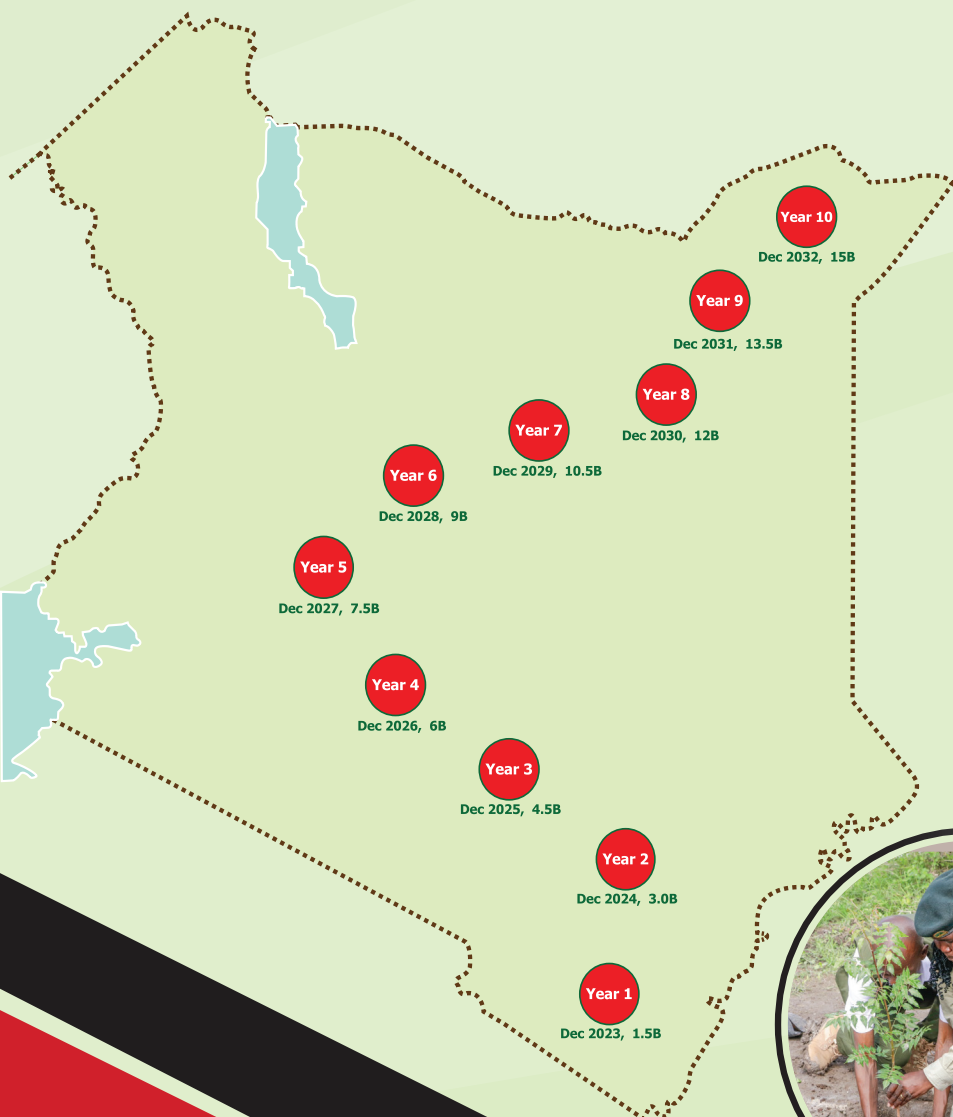




MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY

NATIONAL LANDSCAPE AND ECOSYSTEM RESTORATION STRATEGY 2023-2032

Support Towards 15B Tree Growing Initiative



Mission15B#JazaMiti



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CLIMATE CHANGE AND FORESTRY

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GLOSSARY AND DEFINITIONS OF TERMS

Afforestation: involves planting trees to create new forests or increase tree cover on land that was previously devoid of trees for environmental economic and societal benefits.

Agroecosystem: An intricate web of relationships and interactions between various components of soil, climate, plants, animals, other organisms, and humans within agricultural landscapes, guided by ecological principles and a commitment to sustainability and social justice.

Biodiversity: The variability among living organisms from terrestrial, marine and other ecosystems. Biodiversity includes variability at the genetic, species and ecosystem levels.

Carbon sequestration: The uptake of carbon containing substances, in particular carbon dioxide (CO²), in terrestrial or marine reservoirs. Biological sequestration includes direct removal of CO² from the atmosphere through land-use change (LUC), afforestation, reforestation, revegetation, carbon storage in landfills and practices that enhance soil carbon in agriculture (cropland management, grazing land management).

Climate change adaptation: The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.

Climate change mitigation: A human intervention to reduce the sources or enhance the sinks of greenhouse gasses (GHGs).

Climate change: A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically three decades or longer.

Deforestation: Conversion of forest to non-forest use.

Disaster: Severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic or environmental effects that require immediate emergency response to satisfy critical human needs and that may require external support for recovery.

Drought: A period of abnormally dry weather long enough to cause a serious hydrological imbalance.

Ecosystem: The intricate web of life, where living and non-living elements collaborate to sustain biodiversity and ecological balance.

Ecosystem services: are the benefits derive from nature, whether tangible or intangible essential for human well-being and the health of the planet.

Forest and landscape restoration: An active long-term process to regain ecological integrity and enhance human well-being across deforested, degraded forests and landscapes.

Forest: Land spanning more than 0.5 hectares with trees of at least 2 meters and a minimum canopy cover of 15%, and include natural and planted plantation forests on state, community, and private land.

Forest cover: Refers to a land area of more than 0.5ha with a canopy cover of at least 15%, a minimum tree height of 2 meters which is not primarily under agricultural or other specific non-forest land use.

Intervention area: Refers to a specific landscape or ecosystem where planned restoration activities are carried out.

JazaMiti App: The JazaMiti App is a mobile app that facilitates and enhances tree planting programs by allowing users to users in selecting suitable tree species for planting based on their location, documenting, tracking, and monitoring the growth of documented trees over time.

Land use: The total of arrangements comprising human actions, activities and inputs undertaken in a certain land- cover type

Landscape: A social-ecological system that consists of a mosaic of natural and/or human-modified ecosystems, often with a characteristic configuration of topography, vegetation, land use, and settlements that is influenced by the ecological, historical, economic and cultural processes and activities of the area

Land-use change: A change in the use or management of land by humans, which may lead to a change in land cover and quality.

Rangeland ecosystem: Refers to an extensive area of landscape or ecosystem primarily occupied by native herbaceous or shrubby vegetation in the form of grasslands, bushland, woodlands, wetlands and deserts, which is grazed by domestic or wild herbivores.

Reforestation: Planting forests on landscape or ecosystem that have previously contained forests but have been converted to some other use.

Rehabilitation: Restoration of the capacity of the degraded landscape to deliver goods and services.

Sustainability: A dynamic process that guarantees the persistence of natural and human systems in a trans-generational equitable manner.

Tree cover: This encompasses the presence of trees in the landscape or ecosystem, irrespective of whether it forms a dense forest or occurs individually or in small groups.

Water towers ecosystems: This are critical components of the landscapes and ecosystems that consists of mountainous areas and their associated river basins.

PREFACE



Kenya is a country blessed with diverse natural resources, rich cultural heritage, and immense potential for development. However, the country is also facing serious environmental challenges, such as deforestation, land degradation, drought, that are being accelerated by climate change. These challenges threaten the livelihoods of millions of Kenyans, especially the rural poor who depend on natural resources for their survival.

To address these challenges, my government launched a 10 year ambitious and visionary strategy to restore 10.6m hectares of degraded landscapes and ecosystems. This strategy aims to increase the tree cover of the country

from the current 12.13 percent to 30 percent by 2032. This will not only enhance the ecological integrity of the country, but also contribute to the social and economic well-being of the people.

This strategy explains the rationale, objectives, and structures for landscapes and ecosystems restoration. This is in line with the national development agenda, the Constitution, the Vision 2030, the Bottom-up Economic Transformation Agenda (BETA) and the Green Economy Strategy. It contributes to the achievements of international commitments, such as the Paris Agreement on Climate Change, the Sustainable Development Goals, and the African Landscape Restoration Initiative (AFR100).

The strategy is based on the principle of whole of government, whole of society approach that calls for the participation and contribution of all Kenyans, from individuals to institutions, from public to private sectors, from urban to rural areas, and from young to old. It leverages on the use of technology and innovations such as the Jaza Miti App, which enables the tracking and monitoring of the trees planted across the country. The program also recognizes and rewards the outstanding efforts of the tree planters through the issuance of certificates of Green Conduct and awards.

The Programme is a historic and transformative opportunity for Kenya to secure its future and prosperity. It is a legacy that will benefit the present and future generations of Kenyans. It is a patriotic duty that every Kenyan should embrace and support. It is a noble cause that will make Kenya a greener and better place for all. Join the Mission15B#JazaMiti today and be part of the change that you want to see in Kenya. Together, we can make it happen.

His Excellency Hon. William Samoei Ruto, PhD., C.G.H.
President of the Republic of Kenya and
Commander-in-Chief of the Defence Forces

FOREWORD



The Ministry of Environment, Climate Change and Forestry, through the State Department for Forestry, is coordinating the implementation of the national landscape and ecosystem restoration strategy towards restoration of 10.6M Hectares. This strategy will lead to; growing of 15B trees that will contribute to, increasing national tree cover by 17.8% by 2032; enhance community livelihoods resilience to climate change; promote sustainable land management practices; improve forest sector governance and strengthen policy, regulatory and institutional frameworks for sustainable landscapes and ecosystems management. The strategy has adopted a whole of government, whole of society approach where all government entities, private

sector players and citizenry have a role to play in the tree growing.

The ministry recognizes the critical role the environment and especially forest related landscapes play in sustaining life, supporting livelihoods, and driving economic growth. This strategy presents key information and facts about the programme and will act as a decision-making guide while implementing various interventions area across different landscapes as a ministry we recognize the value of a people centered approach in implementing its policies, programs, and plans. Through this Strategy, collaborative efforts with partners and enhanced public participation will be prioritized. It is in this context that this Strategy is strongly anchored on the Bottom-up Economic Transformation Agenda (BETA) that's visualized to be a game changer towards restoration agenda.

I am confident that the strategy will serve as a guide map for Ministries, Departments Agencies, Development partners, private sector players and the Citizenry towards resilient and sustainably managed environmental and forestry resources. We look forward to working with all stakeholders to realize the objectives of the Programme for the benefit of present and future generations!

**Hon. Soipan Tuya, CBS
Cabinet Secretary,
Ministry of Environment, Climate Change and Forestry.**

ACKNOWLEDGEMENT FROM THE PRINCIPAL SECRETARY, STATE DEPARTMENT FOR FORESTRY



I take this opportunity to acknowledge all the stakeholders that made development of this strategy a success. The process of developing this strategy was comprehensive and elaborately encompassed views and ideas of the two State Departments of Environment, Climate Change and Forestry and their collaborators.

In a special way, I highly appreciate the President of this Nation His Excellency Dr. William Samoei Ruto for championing the noble cause of prompting Kenya to grow 15 billion trees in 10 years which will greatly contribute to restoration of 10.6 million ha of Kenya's landscapes.

I also appreciate the critical and leading role of the Cabinet Secretary, Hon Soipan Tuya, in giving strategic direction and guidance throughout the development of this Strategy.

Further I extend my gratitude to the World Bank for their unwavering support in bringing together various stakeholders to the writeshops and hiring a consultant who provided significant contributions to the development of this strategy. The series of engagement we had with the World Bank and their views significantly shaped this version of the strategy. I also express my sincere acknowledgement to all the technical experts drawn from the two State Departments and their agencies led by ourselves PS Mugambi Gitonga, EBS and Eng. Festus K. Ng'eno for their enormous contributions and dedication.

Special thanks goes to all other state actors, development partners, non-state actors, and collaborators for special insights and inputs to the strategy. Specifically I acknowledge the contributions from Alliance for Restoration of Forest Landscapes and Ecosystems in Africa (AREECA), Tsavo Heritage Foundation and Worldwide Fund for Nature (WWF) for their specific insight on restoration experiences in Kenya and some African countries, more so those that contributed to Global Bio-diversity Framework target to restoration. This has given the strategy a national outlook and enhanced the inclusive approach to uphold "a whole of government and whole of society approach."

In a special way, I appreciate all strategic collaborators who have agreed and expressed interest to invest resources and time to attain the goals of this strategy.

Finally, this is to acknowledge the coordination and guidance provided by the 15 Billion and Restoration Secretariat led by Dr. Vincent Oeba and other technical committees. The team organized the strategy within eleven intervention areas that cut across seven ecosystems with specific targets to guide various stakeholders to implement in efforts to raise Kenya's tree cover to 30% by 2032 for enhanced climate resilient, improved livelihoods, national economic growth and development.

I look forward to provide able leadership and participatory collaboration to plan, implement and conduct regular monitoring, evaluation and reporting throughout the life of the programme.

Mr. Gitonga Mugambi, EBS
Principal Secretary,
State Department for Forestry.

ACKNOWLEDGMENT FROM THE PRINCIPAL SECRETARY STATE DEPARTMENT FOR ENVIRONMENT & CLIMATE CHANGE



The development of this Strategy comes at the time when Kenya is confronted with unprecedented environmental challenges such as deforestation, desertification, biodiversity loss, loss of productivity potential, soil erosion, and pollution which have caused ecosystems degradation of time. The situation is compounded by the effects of climate change. Scientists recently warned that 24 billion tons of fertile soil was being lost per year, largely due to unsustainable agriculture practices. If this trend continues, 95 percent of the Earth's land areas could become degraded by 2050.

Currently, notable environmental degradation drivers in Kenya include: encroachment of water catchment areas and wetlands; poor solid and liquid waste management; pollution; deforestation and forest degradation and unsustainable land use practices among others. Addressing these drivers requires a holistic approach so as to attain a balance between development and resource use that respects environmental integrity.

Kenya being a party to various conventions such as Ramsar Convention, United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention to Combat Desertification (UNCCD), United Nations Convention on Biological Diversity (UNCBD) and other Multi-Lateral Environmental Agreements (MEAs) has made commitments towards addressing climate change and promoting environmental conservation initiatives. This has led the country to develop various Policies, strategies, programmes and plans so as to systematically address various gaps on taming the ecological challenges.

This National Landscape and Ecosystem Restoration Strategy forms part of the Ministry of Environment, Climate Change and Forestry initiatives towards a holistic approach of restoring key ecosystems. Specifically, rehabilitation and restoration of wetlands, water catchments /water towers and marine ecosystems will go a long way in achieving the United Nations Decade of Landscape restoration. Further, these ecosystems are considered the kidneys of the earth as they support a myriad of livelihoods for adjacent communities and for the country at large. Towards achieving healthy wetlands ecosystems, the MECCF developed and launched the Wetlands Restoration Strategy 2023 which outlines various interventions geared towards reclaiming our wetland areas. The success of this strategy is anchored on close collaboration with county governments, communities and development partners.

The State Department of Environment and Climate Change will remain instrumental in guiding the implementation of the various initiatives in this strategy. It will also play a vital role in ensuring that carbon-based opportunities emerging from the restoration of various ecosystems such as wetlands, forest, rangelands, agro ecosystem and settled areas are enabled in line with already enacted laws and regulations. This instills confidence to the public and investors who

are expected to spur social economic development among the Kenyan people. State Department of environment and climate change will work with all relevant stakeholders to ensure successful implementation of the strategy.

I therefore extend my heartfelt congratulations to the Hon. Soipan Tuya, Cabinet Secretary, MECCF for her stewardship towards landscape and ecosystem restoration; Mr. Mugambi Gitonga, Principal Secretary, State Department for Forestry for his leadership in the development of this strategy; the World Bank team for positive engagement with the MECCF in regard to the landscape restoration initiatives; the technical working group that led the development and drafting of this strategy; 15B and Restoration Secretariat for their active role and shaping development of this strategy; the agencies in the State Department for Environment and Climate Change for their contribution towards development of this strategy; and stakeholders who provided useful inputs that grounded key interventions spelt out in this strategy.

Finally, many people contributed to the realization of this strategy. Lack of mention of their names does not in any way mean their deserved contribution is not appreciated but to you all I say thank you as we pull together towards the implementation of this Strategy.

Eng. Festus K. Ng'eno
Principal Secretary,
State Department for Environment & Climate Change.

ABBREVIATIONS

AFR100	African Forest Landscape Restoration Initiative
ARLI	African Resilient Landscapes Initiative
ASALs	Arid and Semi-arid Lands
BETA	Bottom Up Economic Transformation Agenda
CBOs	Community Based Organisations
CDEs	County Directors of Environment
CECs	County Environment Committees
CECMs	County Environment Committee Members
CEO	Chief Executive Officer
CIDPs	County Integrated Development Plans
CIF	Climate Investment Funds
CIFOR-ICRAF	The Center for International Forestry Research and World Agroforestry Centre
COG	Council of Governors
CS	Cabinet Secretary
CSOs	Civil Society Organizations
CSR	Corporate Social Responsibility
EAC	East African Community
EMCA	Environment Management and Coordination Act
ECC	Environmental Compliance Certificate
ELD	Economics of Land Degradation
FAO	Food and Agriculture Organization of the United Nations
FBOs	Faith Based Organisation
FMNR	Farmer Managed Natural Regeneration
FLR	Forest and Landscape Restoration
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GOK	Government of Kenya
ICT	Information Communication Technology
JICA	Japanese International Development Agency
KALRO	Kenya Agricultural and Livestock Research Organisation
KAM	Kenya Association of Manufacturers

KEPSA	Kenya Private Sector Association
KFS	Kenya Forest Service
KEFRI	Kenya Forestry Research Institute
FOLAREP	Forest and Landscape Restoration - Implementation Plan 2023-2027
KMD	Kenya Meteorological Department
KWTA	Kenya Water Towers Agency
KWRTI	Kenya Wildlife Service (KWS) and Kenya Wildlife Research & Training Institute
M&E	Monitoring and Evaluation
MEF	Ministry of Environment and Forestry
MDAs	Ministries, Departments and Agencies
MEAs	Multilateral Environmental Agreements
MECCF	Ministry of Environment, Climate Change and Forestry
MSME	Micro, Small and Medium Enterprises
NACOFA	National Alliance for Community Forest Associations
NAMA	National Appropriate Mitigation Actions
NEMA	National Environment Management Authority
NETF	National Environment Trust Fund
NYS	National Youth Service
PPP	Public Private Partnerships
PS	Principal Secretary
RDAs	Regional Development Authorities
SDF	State Department for Forestry
SDGs	Sustainable Development Goals
SAGAs	State Agencies
ToC	Theory of Change
TVET	Technical, Vocational Education and Training
TWG	Technical Working Group
WWF	Worldwide Fund for Nature
UNCBD	Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UFCCC	United Framework Convention on Climate Change
UNDP	United Nations Development Programme
USD	US Dollar



NATIONAL LANDSCAPE AND ECOSYSTEM RESTORATION STRATEGY

EXECUTIVE SUMMARY

Kenya is endowed with diverse natural capital, rich cultural heritage, and immense potential for sustainable development. The country ranks among the world's richest biodiversity nations and hosts over 35,000 species, including more than 7,000 plant species and many endemic, rare, endangered and threatened species. These resources provide critical ecological goods and services that support the country's socio-economic development. The Country depends on these ecosystem services as natural capital for driving the economic growth. Forest ecosystems, for example, is a livelihood base of over 82% of Kenya's households and offers direct employment to over 4 million Kenyans besides contributing about USD 365 million (3.6%) to the Gross Domestic Product (GDP). Moreover, forest ecosystems also contribute to more than USD 140 million worth of goods annually to other productive sector of the economy such as agriculture, fisheries, livestock, energy, wildlife, water, tourism, trade and industry. In the same vein, Water Towers Ecosystem of Kenya which include Mount Kenya, Aberdares, Mau Forest, Mount Elgon and Cherangany Hills among others provide necessary recharge for rivers draining into several water basins and providing water for domestic use, agriculture, wildlife and the manufacturing industry. This ecosystem interlinks well with agroecosystem that is the largest contributor to Kenya's GDP at 33% directly and 27% indirectly through agro-based industries and service sector (GOK, 2018a). Specifically, the agriculture sector in the agroecosystem employs more than 40% of the total population and about 70% of the rural population (GOK, 2018b). This proportion is largely dominated by small-holder farmers accounting for over 75% of the total agricultural output and over 70% of the marketed agricultural produce.

However, Kenya's natural capita is rapidly depleting due to various factors that have led to gradual reduction of the natural capital and loss of biodiversity. They include a growing human population, poverty, inequality in access to resources and lack of regulatory capacity, changes in production and consumption patterns, human population and settlement as well as environmental deterioration. These challenges threaten the livelihoods of millions of Kenyans, especially the rural poor who depend on natural resources for their survival.

The Kenya Government recognizes that the sustainable management and conservation of natural capital and biodiversity is essential for maximizing production of natural resources and sustaining growth. To this end, Kenya drew up the 10-year ambitious and visionary strategy to restore 10.6m hectares of degraded landscapes and ecosystems. The strategy aims to increase the tree cover of the country from the current 12.13 percent to 30 percent by 2032 while restoring degraded landscapes and ecosystems. The Theory of Change (ToC) is grounded on the need to accelerate approaches to address the key drivers of degradation in each of the seven ecosystems to prevent, halt and reverse landscape and ecosystem degradation. Some of the activities to be undertaken to achieve this goal include: growing of 15 billion trees, promoting sustainable agricultural practices, soil and water conservation, sustainable livelihood options, proper land-use planning and proper waste disposal among others.

This Strategy is meant to bridge this gap and bring a coordinated effort for restoration of the seven degraded landscapes ecosystems that are: Forests, Agro-ecosystems, Rangelands,

Wetlands, Oceans/Marine, Water Towers, Settlement and Infrastructure. This will be achieved through implementation of the following five (5) strategic objectives:

1. Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands;
2. Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability;
3. Improve landscape and ecosystem governance by strengthening policy, regulatory and institutional frameworks;
4. Promote sustainable financing mechanisms and private sector investment for restoration of degraded landscapes and ecosystems; and
5. Strengthen capacity, research, M/E and knowledge management for the implementation of the strategy.

In order to restore the stipulated 10.6 M hectares, this strategy will promote tree growing, landscape and ecosystem restoration through prioritized eleven (11) intervention areas namely; (1) Rehabilitation of degraded dryland landscapes, (2) Rehabilitation of degraded natural forests in gazetted forests and water towers, (3) Rehabilitation of degraded water towers, wetlands and riparian areas outside forests, (4) Greening of infrastructure (roads, railway lines, dams), (5) Grow tree on farms and agroforestry, (6) establishment of commercial private forests, (7) Establishment of bamboo woodlots and plantations, (8) Rehabilitation of degraded mangrove and marine ecosystem, (9) Growing of fruit trees and woodlots in schools, colleges, and universities and other institutions, (10) Restocking of forest plantation in gazetted forests, and (11) Establishment of Urban forests, arboretum, green spaces, roadside planting in wards and sub counties.

The strategy was developed through a consultative process involving both internal and external stakeholders. In addition, key documents were reviewed to inform development of this strategy. These include: the Constitution of Kenya 2010; the Wetlands Restoration Strategy 2023-2032; National Wetlands Conservation and Management Strategy, Kenya 2015-2025; Agriculture Sector Transformation and Growth Strategy 2019-2029; Kenya Bamboo Development Strategy and Action Plan 2022-2032; Forest and Landscape Restoration Implementation Plan (FORELAP) (2023-2027); Technical Report on the National Assessment of Forest and Landscape Restoration Opportunities in Kenya 2016; Development Stakeholder Mapping Report; Economic Analysis of Forest Landscape Restoration Options in Kenya; Land Degradation Neutrality Target Setting Final Report 2017; and draft National Agro-forestry Strategy 2024.

This Strategy is grounded on the Bottom-Up Economic Transformation Agenda (**BETA**) is geared towards economic turn around and inclusive growth. The agenda aims at increasing investments in the five sectors that form the core pillars which include: Agricultural transformation, Micro, Small and Medium Enterprises (MSMES), Housing and Settlement, Health Care, Digital Superhighway and Creative Industry. The agenda also contributes to the following key enablers: Services economy, infrastructure, manufacturing, blue economy, Environment and Climate change, education and training, women agenda, youth empowerment

and development agenda, social protection, sports, culture and Arts; and governance. This strategy will contribute to the outcomes of the BETA priority interventions through enablers of environment and climate change.

Implementation of this strategy is based on the principle of “whole of government, whole of society approach” that calls for the participation and contribution of all Kenyans. It leverages on the use of technology and innovations such as the Jaza Miti App, which enables the tracking and monitoring of the trees planted across the country. The strategy also recognizes and rewards the outstanding efforts of the tree planters through the issuance of certificates of Green Conduct and awards.

The Strategy is divided into six (6) chapters as follows;

Chapter One- sets the context for strategy formulation providing the background and context of the strategy.

Chapter Two- presents the situational and stakeholder analysis providing overview of the external and internal environment.

Chapter Three- presents the strategic interventions outlining the theory of change the strategic goal, prioritized interventions, for landscape and ecosystem restoration, and strategic actions in each implementation component.

Chapter Four- covers the coordination and implementation of the strategy.

Chapter Five- outlines the resource mobilization for strategy implementation at national and county levels.

Chapter Six- provides the monitoring and evaluation framework of the strategy. It employs a robust monitoring, evaluation and reporting framework that considers various input processes, outputs and outcomes in each of the strategic objectives. Monitoring and tracking of the 15 Billion tree growing will be done through use of technology and innovation by Jaza Miti App.

The total budget for implementation of this Strategy is KES 1.294 Trillion. This is to be implemented for a period of 10 Years. The realization of this strategy will be of immense value as it will catalyze the countries social economic development through creating 3.5 Million direct green jobs in tree nurseries, distribution and planting of seedlings, management and watering as well as other related sectors that will support livelihoods, through sustainable nature-based enterprises. Further it will increase the national landscape value by KES 75 trillion assuming total value of a mature tree is as low as KES 5,000 while contributing KES 40B to other productive sectors of the economy, such as; agriculture, fisheries, livestock, energy, wildlife, water, tourism, recreation, trade and industry. The ultimate goal to increase the Countries tree cover to 30% by restoring 10.6 M Hactares will double current GDP contribution by forestry to USD 730 million (7.2%) annually.

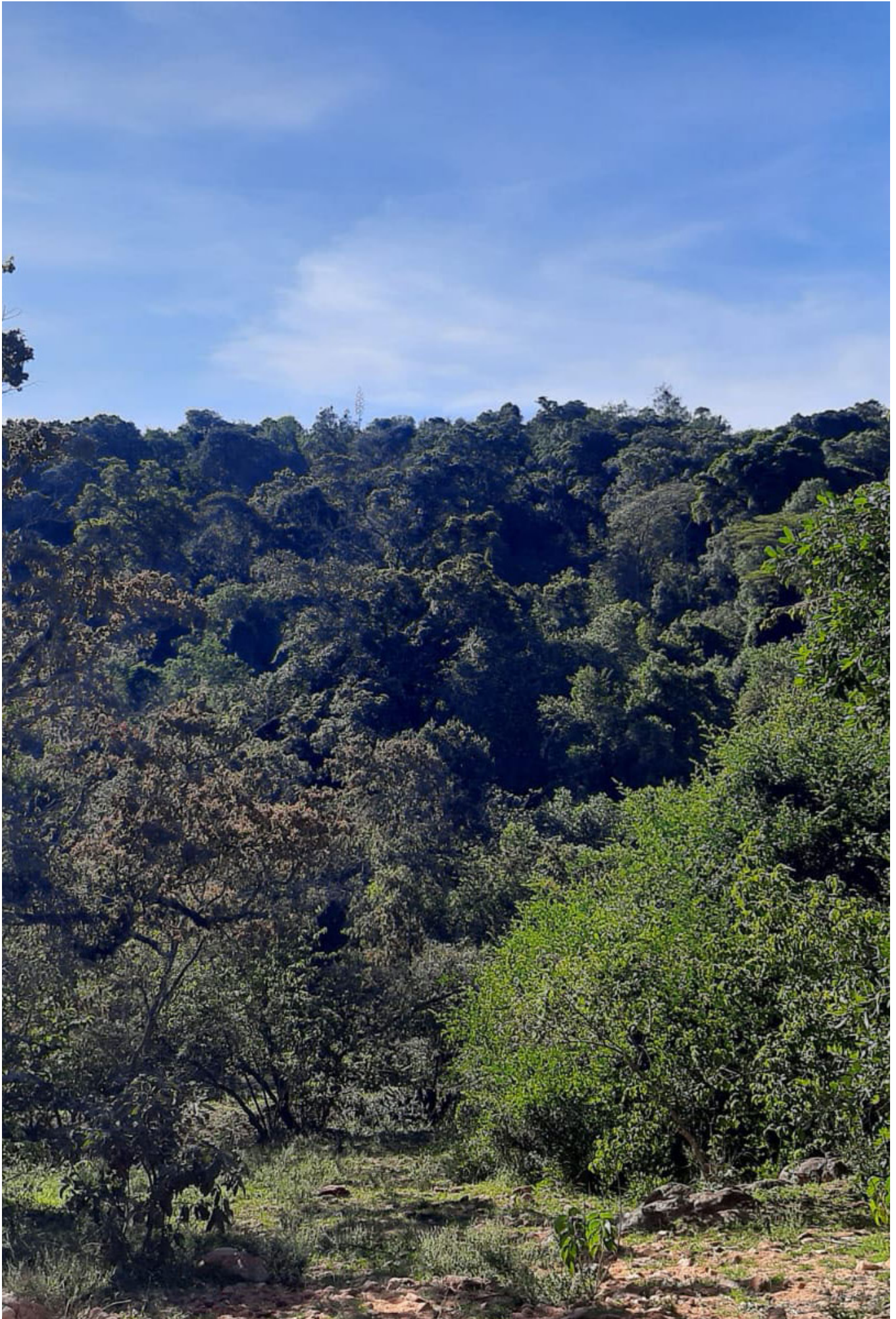


Plate 1.1: Sample Forest

CHAPTER 1: BACKGROUND

Kenya has a landmass area of 582,646 km² an equivalent of 58,264,600 ha that is endowed with diverse ecosystems such as forests, freshwater, agroecosystem, wetlands, rangeland and marine. These and other natural resources provide critical ecological goods and services that support the country's economic development. The Country depends on these ecological goods and services as natural capital for driving the Gross Domestic Product (GDP). The forest ecosystem, for example, is a livelihood base of over 82% of Kenya's households. It offers direct employment to over 4 million Kenyans and contributes about USD 365 million (3.6%) to the Growth Domestic Product (GDP). This ecosystem also contributes to more than USD 140 million worth of goods annually to other productive sector of the economy such as agriculture, fisheries, livestock, energy, wildlife, water, tourism, trade and industry (KFS, 2014 and MEF, 2018). Additionally, the forest ecosystem provides a wide range of ecological services such as watershed protection and carbon sequestration that contributes to climate change adaptation and mitigation, respectively.



Plate 1.2: Forest Ecosystem

In the same vein, Water Towers ecosystem of Kenya which include Mount Kenya, Aberdare's, Mau Forest, Mount Elgon and Cherangany Hills among others provide necessary recharge for rivers draining into several water basins and providing water for domestic use, agriculture, wildlife and the manufacturing industry. This ecosystem interlinks well with agroecosystem that is the largest contributor to Kenya's GDP at 33% directly and 27% indirectly through agro-based industries and service sector (GOK, 2018a). Specifically, the agriculture sector in the agroecosystem employs more than 40% of the total population and about 70% of the rural population (GOK, 2018b). This proportion is largely dominated by small-holder farmers accounting for over 75% of the total agricultural output and over 70% of the marketed agricultural produce.



Plate 1.3: Water Towers Ecosystem together with agricultural landscapes

The rangeland ecosystem that comprises of woodlands, bushlands, grasslands, wetlands and bare land accounts for 89% of the Kenya's landmass (Birch, 2018) and supports over 70% of the country's livestock, 90% of the wildlife populations (Njoka *et al.*, 2016). This ecosystem also provides over 90% of the meat consumed in Kenya, employs over 10 million people and accounts for 95% of the household income in the Arid and Semi-arid Lands (ASALs). Rangelands are also rich in plant diversity that are sources of various economic products such as fuelwood, timber, medicine, honey, dye, resins, gum, fruits and vegetables. They also hold a significant natural resource such as oil, gas and renewable energy (MoALF&C, 2021; World Bank, 2018; GOK, 2010).



Plate 1.4 and 1.5: Rangeland ecosystem

The other important ecosystems in Kenya include wetlands and marine that performs crucial functions in provision of goods and services as well as mitigating and adapting to climate change. Specifically, they provide many ecological and socio-economic goods and services which include but not limited to: water supply; food production; construction materials; and products for the cottage industry, tourism and recreation. The ecological services comprise flood control, water recharge and discharge, water filtration, wildlife habitats, nutrient storage and re-cycling. Notably, the estimated monetary value of Kenya's marine ecosystems is around USD 2.5 billion per year, or 4 percent of GDP forming part of Kenya's blue economy that is worth around the US \$4.8 billion a year.



Plate 1.6: Wetlands Ecosystem

However, these ecosystems face myriad of threats and challenges such as: degradation due loss of vegetation; climate change and climate variability; human settlement and encroachment; illegal logging; unsustainable charcoal production and firewood collection; uncontrolled wild and human induced fires; rapid infrastructural developments; overstocking; overgrazing; spread of invasive species such as *Prosopis juliflora*; and land-use cover changes such as encroachment of crop production into pastoral land among others. These have resulted to decline of provision of goods and services. It is in this context that the conservation and management of these ecosystems remains core as they contribute to the national economy that directly and intrinsically linked to the integrity of the environment and natural resources.



Plate 1.7: Degraded landscape

1.1 Justification and Rationale for the Strategy

The Bottom-Up Economic Transformation Agenda (BETA) is geared towards economic turn around and inclusive growth. The agenda aims at increasing investments in the five sectors that form the core pillars which include: Agricultural transformation, Micro, Small and Medium Enterprises (MSMES), Housing and Settlement, Health Care, Digital Superhighway and Creative Industry. The agenda also contributes to the following key enablers: Services economy, infrastructure, manufacturing, blue economy, Environment and Climate change, education and training, women agenda, youth empowerment and development agenda, social protection, sports, culture and Arts; and governance. The strategy will contribute to the outcomes of the BETA priority interventions through enablers of environment and climate change.

Degradation of land approximated at 38.8 million ha and ecosystem-based resources has resulted in reduced functionality and productivity. This has led to immense socio-economic and ecological losses estimated at USD 1.3 billion annually. Restoration of these ecosystems is therefore essential in order to: improve vegetation composition; forest cover; reclaim and protect biodiversity; restore natural processes and ecosystem functions; improve hydrological cycles; improve livelihoods, food and nutritional security; increase access to clean water and energy; enhance resilience to climate change and climate variability; mitigate against climate change; and increase employment opportunities across sectors of Kenya's economy.

Kenya has also committed to restore 5.1 million ha of forest and degraded landscapes by 2030 in line with Bonn Challenge and African Forest Landscape Restoration Initiative (AFR100) which has been doubled to 10.6 million ha. The country has equally made various commitments to specific conventions such as: United Framework Convention on Climate Change (UNFCCC); United Nations Convention to Combat Desertification (UNCCD); and United Nations Convention on Biological Diversity (UNCBD).

The National Forest Resource Assessment conducted in 2021 established Kenya's National Tree Cover at 12.13% and forest cover at 8.83% (KFS, 2022). During the launch of the National Forest Resources Assessment Report 2021, H.E the President, set a new national ambition of achieving 30% tree cover by 2050. However, on 20th October 2022, H.E the President, Hon Dr. William Samoei Ruto, CGH, directed for acceleration and attainment of 30% tree cover by 2032. Other National strategies have also highlighted landscape and ecosystems degradation challenges as being key towards social economic development. These include: the Wetlands Restoration Strategy 2023-2032; National Wetlands Conservation and Management Strategy, Kenya 2015-2025; Agriculture Sector Transformation and Growth Strategy 2019-2029; Kenya Bamboo Development Strategy and Action Plan 2022-2032; Forest and Landscape Restoration Implementation Plan (FORELAP) (2023-2027); Technical Report on the National Assessment of Forest and Landscape Restoration Opportunities in Kenya 2016; Development Stakeholder Mapping Report; Economic Analysis of Forest Landscape Restoration Options in Kenya; Land Degradation Neutrality Target Setting Final Report 2017; and draft National Agro-forestry Strategy 2024.

It is in this context that this strategy was conceived in response to the Presidential directive and the national landscapes and restoration efforts. The strategy will address the triple planetary crisis of climate change, pollution, land degradation and biodiversity loss, restoration and growing 15 billion trees, an equivalent of restoring 10.6 million ha by 2032.

This strategy therefore provides a framework to:

- a) Support a “whole government and whole society approach” to realize the full rehabilitation and restoration of 10.6 million hectares of degraded landscapes and ecosystems in order to improve tree cover to 30% by 2032;
- b) Coordinate institutional and multi-stakeholder participation in the realization of Article 42 of the Constitution of Kenya that guarantees the right to clean and healthy environment for present and future generations;
- c) Implement several national and global commitments with respect to climate change, biodiversity conservation and land degradation;
- d) Resource mobilization and strategic partnership towards conservation and restoration of landscapes and ecosystems as well as reduce emissions and build resilience for community livelihoods; and
- e) Enhance the contribution of various ecosystems towards implementation of the social economic development of the country.

1.2 Strategy Formulation Process

The formulation of this strategy used multi-sectoral and multi-stakeholders’ approach under the leadership of the Ministry Environment, Climate Change and Forestry. A wide range of scholarly and grey literature documents were reviewed for primary data. Secondary data was collected through questionnaire surveys, focused group discussions and key informant engagements. Stakeholders’ workshops were held for scoping and formulation of key intervention areas and tree growing targets. The strategy was subjected to stakeholder validation processes that collected national wide views on landscape and ecosystem restoration for incorporation. Cabinet Secretary, MECCF, PSs and SAGA heads and technical staff largely contributed views and ideas on the strategy through continuous consultations.



Plate 1.8: Unprotected wetlands



Plate 1.9: Illegal logging

CHAPTER 2: SITUATIONAL ANALYSIS

The situational analysis of this strategy entailed an assessment of potential of landscapes and ecosystems restoration. This was guided by the on-going restoration initiatives across the country implemented by different stakeholders. The analysis also focused on review of legal frameworks and strategic focus milestones, barriers and challenges in various ecosystems, opportunities for landscape and ecosystem restoration, and key stakeholders that will spearhead implementation of this strategy.

2.1 Global Context for Landscape and Ecosystem Restoration

Kenya is a party and a signatory to many Multilateral Environmental Agreements (MEAs), treaties, strategies and commitments relevant to restoration of landscape and ecosystems. Some of these instruments that are relevant to the tree growing initiative towards landscape and ecosystem restoration in Kenya, include but not limited to the following: 2030 Agenda for Sustainable Development (SDG); United Nations Convention to Combat Desertification (UNCCD); the Bonn Challenge; United Nations Convention on Biological Diversity (UNCBD); UN Decade of Ecosystem Restoration 2021-2030; RAMSAR Convention on Wetlands; United Nations Strategic Plan for Forests 2017-2030; New York Declaration on Forests; Glasgow Declaration on Forests and Land use; United Nations Framework Convention on Climate Change (UNFCCC); the Paris Agreement; and the Kyoto Protocol. The implementation of the identified strategic interventions in this strategy are expected to significantly contribute to the realization of Kenya's commitments to these global instruments.

2.2 Continental Initiatives on Re-Greening Landscapes and Ecosystems

Kenya is party to various initiatives in Africa aimed at re-greening degraded landscapes and ecosystems. Some of these initiatives include: African Forest Landscape Restoration Initiative (AFR100) that aims to restore 100 million hectares of deforested and degraded land in Africa by 2030; and African Resilient Landscapes Initiative (ARLI) that is implemented through forest and ecosystem restoration, biodiversity conservation, climate smart agriculture, and rangeland management. ARLI has mobilized African countries and partners to leverage sectorial interventions and collectively ensure the integrity, resilience, restoration and sustainable management of landscapes across regions. This is expected to contribute to the improvement of soil fertility and food security, access to clean water, combat desertification, increase biodiversity and habitat, create green jobs, bolster economic growth and livelihood diversification, and increase the capacity for climate change resilience and adaptation. This transformative initiative connects agriculture land, forest land and rangeland under one single management concept - the landscape approach – to boost the resilience of both ecosystems and livelihoods.

Kenya is also enjoined on the African Union's Agenda 2063 that focuses on building climate resilient economies and communities in the continent. The country as a member to East African Community (EAC) has aligned itself to various policies and strategic instruments relevant to re-greening degraded landscapes. Some of these instruments include: Climate Change EAC Policy and Strategy (2018- 2023); Lake Victoria Basin Commission's Climate Change Adaptation Strategy and Action Plan; the Protocol for Sustainable Development of Lake Victoria Basin; and

the Protocol on Environment and Natural Resources for the EAC.

2.3 National Instruments for Tree Growing Towards Landscape and Ecosystem Restoration

Kenya has enacted laws and legislation that provides enabling environment for tree growing towards landscape and ecosystem restoration. The Kenya Constitution 2010, for example, Article 60 on Principles of policy of land, Article 61 on classification of land (public, community or private), and more so Article 69 on obligations in respect to the environment that outlines for the State to ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and work to achieve and maintain a minimum tree cover of 10% of the land area. This provision implies that the government is obligated to involve the public in efforts to improve forest and tree cover in the country. There are other key legislations that grounds this strategy towards landscape and ecosystem restoration such as: Environmental Management and Coordination Act Cap. 387 of the Laws of Kenya; Forest Conservation and Management Act, 2016; Climate Change Act, 2016; Climate Change Amendment Bill, 2023; Agriculture (Farm Forestry) Rules, 2009; Land Act Cap 295 of the Laws of Kenya; The Physical and Land Use Planning Act, 2019; Wildlife Conservation and Management Act, 2017; and the Water Act, 2016.

The country has also developed various policies, programmes, strategies, plans and technical reports that are relevant to landscape and ecosystem restoration. These include: National Forest Policy (2023), Model Policy and Law on County Sustainable Forest Management and Tree Growing 2021; National Forest Programme (2016-2030); National Strategy for Increasing Tree Cover to 10% by 2022; and County Integrated Development Plans (CIDPs); Wetlands Restoration Strategy 2023-2032; National Wetlands Conservation and Management Strategy, Kenya 2015-2025; Agriculture Sector Transformation and Growth Strategy 2019-2029; Kenya Bamboo Development Strategy and Action Plan 2022-2032; Forest and Landscape Restoration Implementation Plan (FORELAP) (2023-2027); Technical Report on the National Assessment of Forest and Landscape Restoration Opportunities in Kenya 2016; Development Stakeholder Mapping Report; Economic Analysis of Forest Landscape Restoration Options in Kenya; Land Degradation Neutrality Target Setting Final Report 2017; and draft National Agro forestry Strategy 2024.

2.4 Challenges and Threats in Landscapes and Ecosystems

Forest, Water Towers, Agroecosystem, Rangelands, Marine and Settlement ecosystems are currently facing myriad of challenges that are hindering them to provide required goods and services for sustainable economic developments. Some of the challenges per ecosystem are highlighted in the following sub sections.

NATIONAL TREE COVER

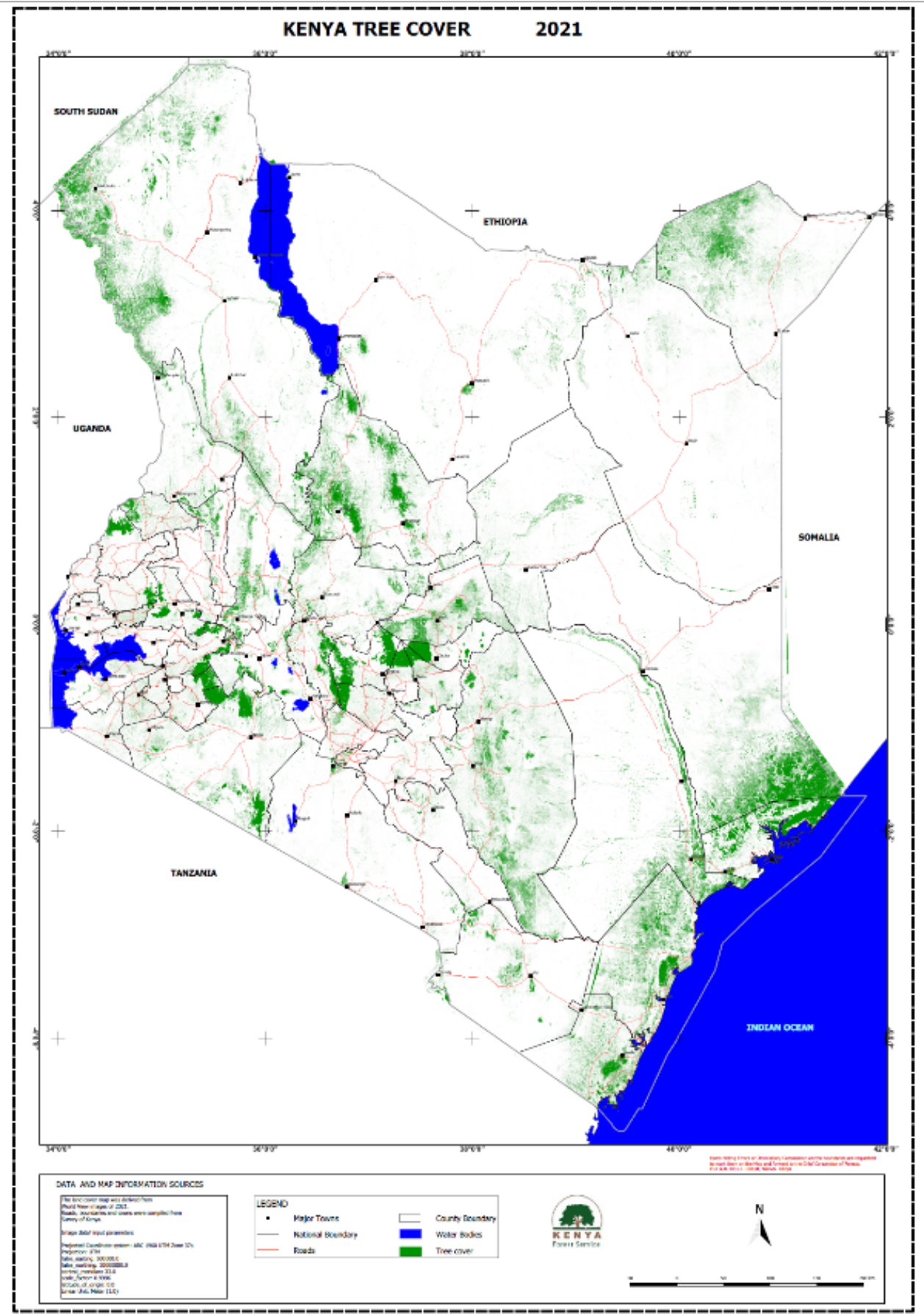


Plate 2.1: Kenya Tree cover (NFRA report 2021)

2.4.1 Challenges and Threats in Forest Ecosystem

Globally, the forest sector contributes more than USD 1.52 trillion to world's gross domestic product and employs 33 million people. One-third of the global population (about 2.6 billion people) relies on wood and other traditional fuels for household cooking. It is also estimated that up to 5.76 billion people use non-timber forest products for their own use or to support their livelihoods. Forests are home to over 60,000 species of trees and provide a safe haven for 80% of amphibian species, 75% of bird species, and 68% of mammal species globally. Forests contain 662 billion tons of carbon, which is more than half the global carbon stock in soils and vegetation. The monetary value of the global forest ecological services is estimated at about 9% of global GDP (FAO, 2022a).

The forest ecosystem faces the following challenges:

- Forest degradation due to rapid population growth, urbanization, increase poverty levels, and expanding of agricultural land;
- Weak or poor forest governance;
- Weak enforcement of regulatory framework in the forest sector;
- Under-regulation of forests on private and communal lands;
- Conflicting laws, policies and sector roles and mandates on water and forest resources;
- Unsustainable forest management practices;
- Impacts of climate change and climate variability;
- Loss of forest cover that has resulted in reduced water flows;
- Inadequate information on water quality and quantity from forested watersheds;
- Inadequate resources for conservation of forest ecosystems;
- Insufficient soil and water conservation measures in farming;
- Limited use of new technologies;
- Over-reliance on wood biomass for energy;
- Unsustainable raw material supply for wood-based industries;
- Unstandardized timber grading and valuation;
- Undervaluation of the sector's contribution to GDP; and
- Excessive reliance on cheap imported forest products contribute to the unsustainable management of forests.

FOREST COVER IN KENYA

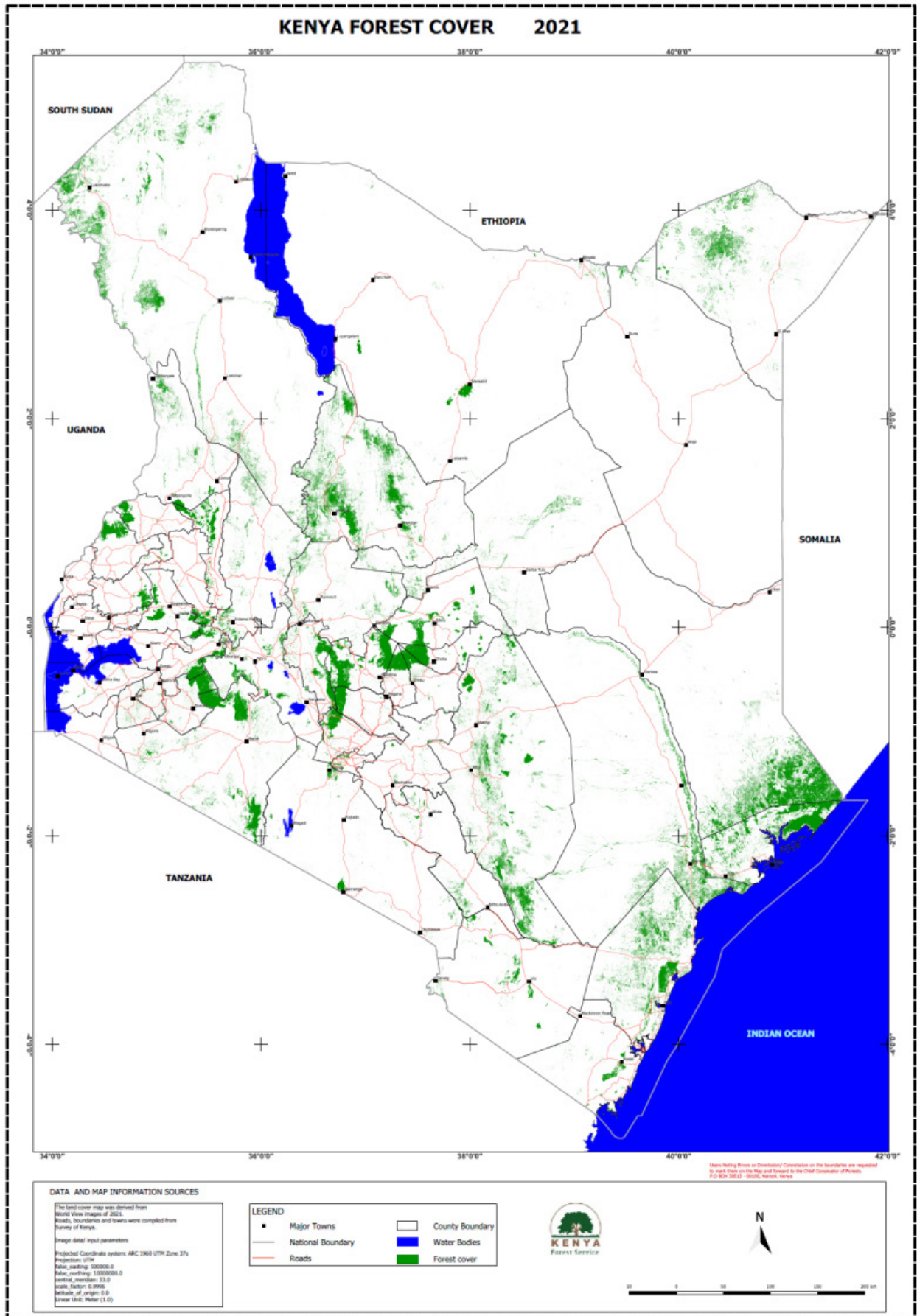


Plate 2.2: Forest cover in Kenya

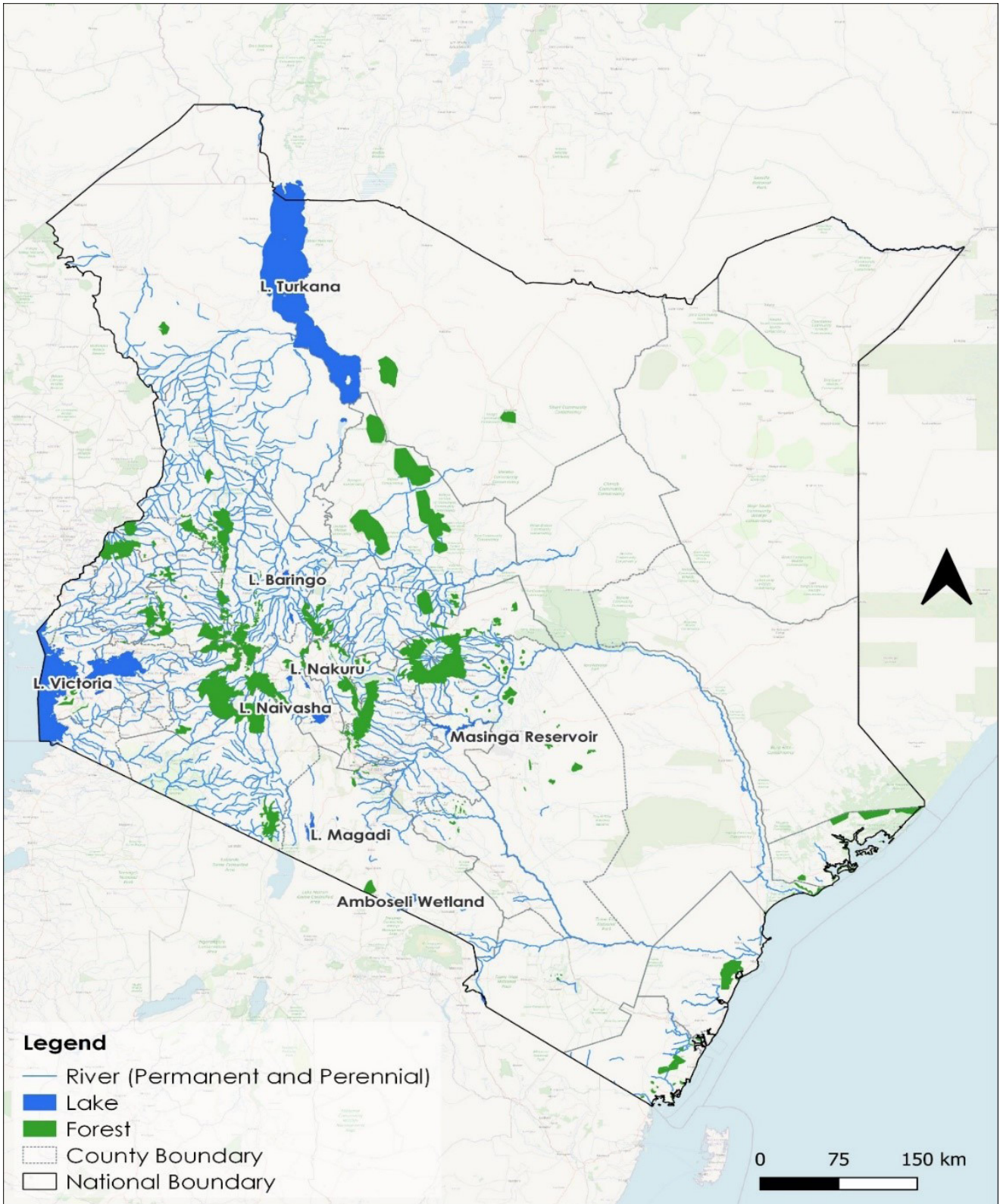


Plate 2.3: Map showing Kenya’s forests and water catchment areas

2.4.2 Challenges and Threats in Water Towers Ecosystem

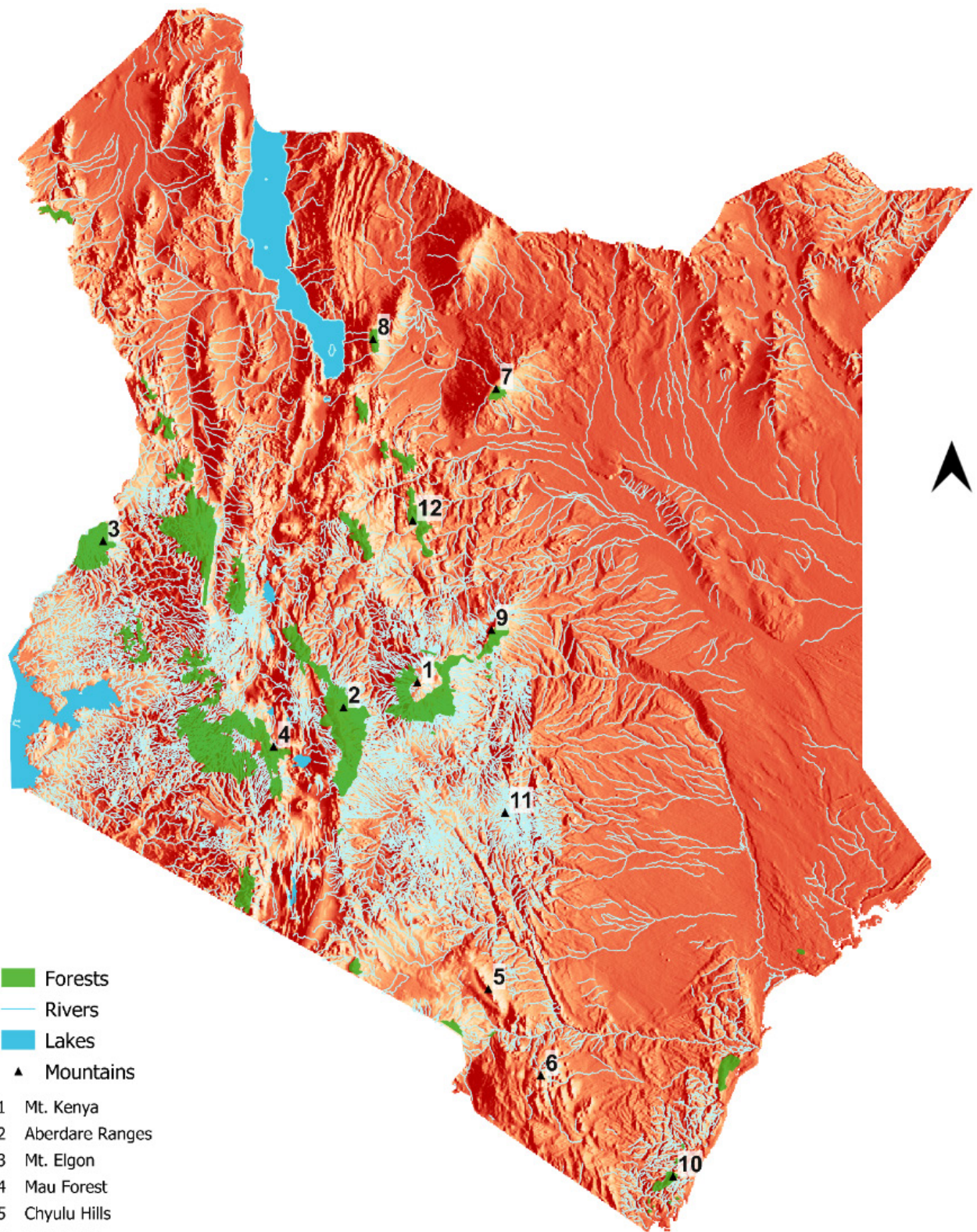
Water Towers ecosystem is a major source of rivers essential for agricultural irrigation, industrial processes, and domestic use, contributing significantly to the country's water resources and supporting food security, energy production, and overall development. They are also source of biodiversity conservation, tourism destinations and regulate climate change. This ecosystem also provides cultural significance, supports in erosion control, hydropower generation and forms good sites for research and education.

However, Water Towers ecosystems are under severe threats due to land degradation, desertification, climate change, population growth, urbanization, and natural resource overexploitation leading to reduced ecosystem health and productivity. They are also experiencing spread of invasive species, leading to habitat loss, reduced water availability and quality, biodiversity loss and decline, glacier retreat, increased fire frequency and intensity, and diminished carbon storage. The other notable challenges include:

- Conflicting policy priorities on the part of the decision makers;
- Lack of coordination among government agencies and different stakeholders;
- Habitat loss, soil erosion and landslides;
- Destruction of water sources and pollution;
- Encroachment by human settlements and agriculture;
- Illegal logging and arson fires; and
- Unsustainable farming practices and resource over extraction.



Plate 2.4: Nyambene Hills Water Towers



- Forests
 - Rivers
 - Lakes
 - ▲ Mountains
- 1 Mt. Kenya
 - 2 Aberdare Ranges
 - 3 Mt. Elgon
 - 4 Mau Forest
 - 5 Chyulu Hills
 - 6 Taita Hills
 - 7 Mt. Marsabit
 - 8 Mt. Kulal
 - 9 Nyambene Hills
 - 10 Shimba Hills
 - 11 Kitui Hills
 - 12 Lenkiyo Hills (Matthew Ranges)

Plate 2.5: Fresh water ecosystems and associated drainage systems

2.4.3 Challenges and Threats in Agroecosystem

Agroecosystems are inextricably linked to global food security as they harbor agro-biodiversity for food production and associated agricultural enterprises (Leakey, 2020). The Global Land Outlook estimates that 50% of agro-ecosystems are degraded worldwide. This means that for restoration targets to be reached, efforts to restore degraded agricultural lands will need to be doubled (Crossland *et.al.*, 2022). The costs of agroecosystem degradation indirectly affect everyone. For example, the global economic loss of ecosystem services due to this degradation has been estimated at US\$ 6.3–10.6 trillion or US\$ 870–1,450 per person per year (ELD Initiative, 2015). The following are key challenges associated with agroecosystem degradation:

- Demographic growth leading to resource conflicts;
- Unsustainable land use practices;
- Unclear land tenure;
- Variation of climatic conditions;
- Declining soil fertility;
- Spread of alien and invasive species;
- Limited support for climate smart agriculture;
- Inadequate extension services;
- Weak law enforcement and governance;
- Low involvement of stakeholders in policy formulation, planning, implementation, and management; and
- Inadequate access to markets for agroforestry products.

2.4.4 Challenges and Threats in Rangelands Ecosystem

Rangelands are an essential resource for maintaining environmental services and biodiversity conservation. They are a source of livelihood especially for rural communities and provide habitat for many species of wildlife. Grasslands contribute to the livelihoods of over 800 million people globally and are a source of goods and services such as wild foods, medicinal plants, water, food and forage, energy and wildlife habitat. Rangelands globally support livestock, mining and tourism sectors. They provide carbon and water storage, recreation, and watershed protection. Grasslands are further important for in situ conservation of genetic resources. The rangelands are in 23 counties, which constitute about 88% of the country's land mass. Of the 23 counties, 9 of them are classified as arid and 14 as semiarid (Plate 11). Overall, Kenya Rangelands comprise of; Tsavo, Amboseli-Magadi, Laikipia-Samburu, Masai Mara, Meru- Kora, Naivasha-Nakuru, Nairobi-Athi Kapiti and the Northern Frontier Counties of Lamu, Garissa, Wajir, Mandera, Turkana and Marsabit. With climate change, rangelands have further susceptible to degradation due to increase in occurrence and spread of invasive species mainly *Prosopis juliflora*, *Leucaena spp.*, *Sansevieria spp.*, *Opuntia spp.*, *Acacia reficiens*, *solanum*, *lantana*, *parthenium*, *Ipomoea species* etc. have further degraded rangelands and reduced biodiversity;

Rangelands experience challenges as highlighted below:

- Land degradation that is due to clearing of vegetation for agriculture, logging, settlement, and infrastructure development;
- Overstocking of livestock beyond land carrying capacity;

- Grass fires;
- Occurrence and spread of invasive species;
- Resource conflicts;
- Changes in morphology and soil characteristics;
- Unharmonized sectoral policy, legal and institutional frameworks;
- Inadequate financial resources;
- Transformation of land rights from communal to formalized and individual property;
- Limited spatial and land use planning at national and county level;
- Human wildlife conflicts;
- Inadequate extension service;
- Inadequate research; and
- Impacts of climate change and climate variability.



Plate 2.6: Challenges in rangeland ecosystem

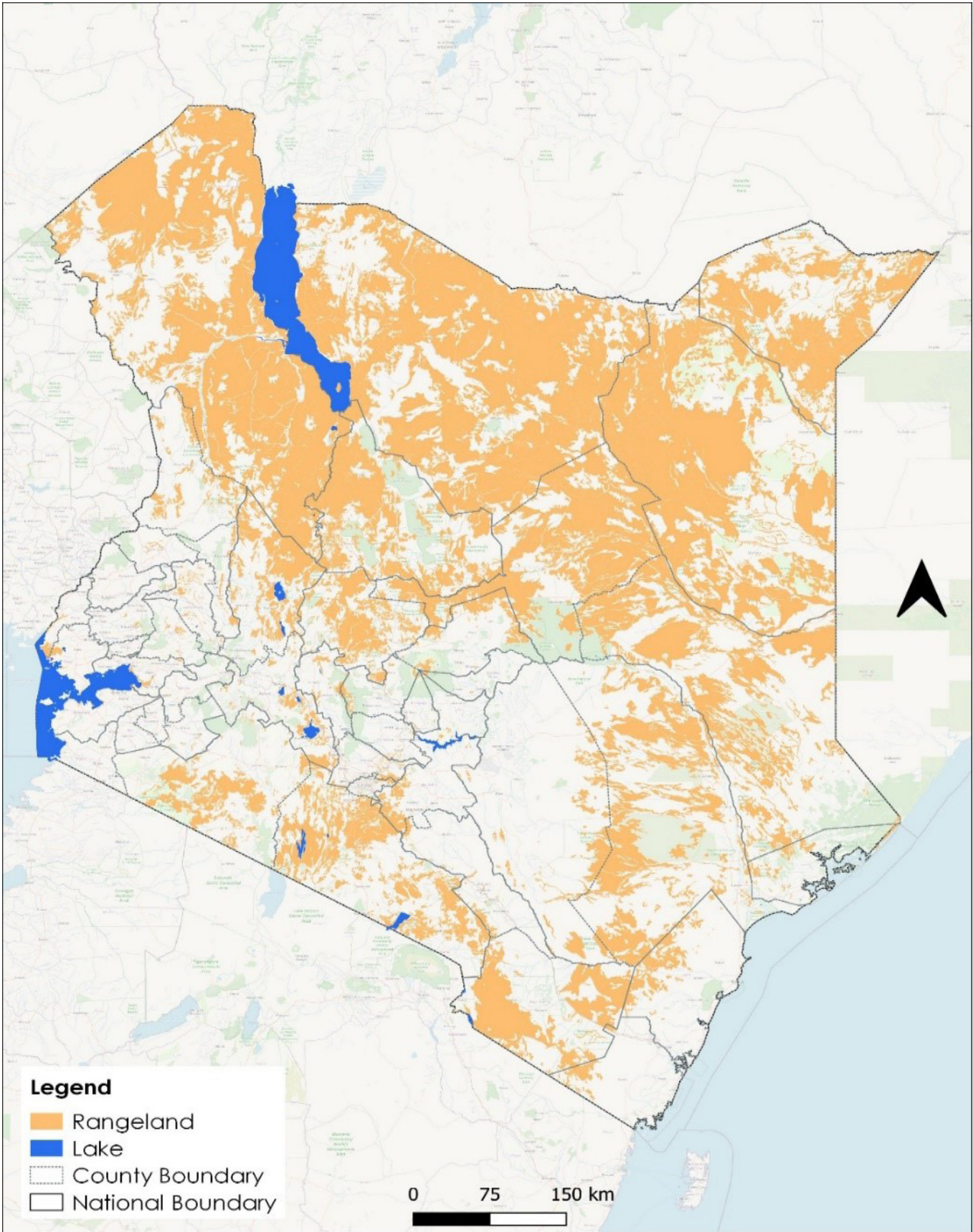


Plate 2.7: Map showing Kenya's rangelands

2.4.5 Challenges and Threats in Marine Ecosystem

Marine or ocean ecosystems, including mangroves, seagrasses, and corals, are critical ecosystems and provide goods and services, including coastal protection, nutrient cycling, air purification, and the creation of feeding, spawning, and breeding grounds for fish and other marine organisms, while equally supporting the socio-economic livelihoods of coastal communities (Leal and Spalding 2022). However, this ecosystem has some challenges and threats. The key sources of pollution affecting coastal and marine environments are industrial discharge and oil spills, while sewage discharge and agricultural activities lead to loss of biodiversity. In most of the larger coastal urban centers and their suburbs, the use of septic tank soak pits, pit latrines and open drains is prevalent. For example, the major threats on coastal and marine biodiversity includes pollution from effluent and solid waste, eutrophication, permanent alteration and destruction of habitats, invasive species as well as climate variability and adverse weather patterns.

Marine ecosystems challenges are as highlighted below:

- Poor sewage disposal systems;
- Poor disposal of non-biodegradable plastics that end up in the environment;
- Human population pressure;
- Invasive plants pose significant risks on livelihoods and the environment;
- Climate variability;
- Mangrove receding;
- Ocean acidification;
- Loss of biodiversity;
- Overfishing; and
- Habitat destructions coral reefs and sea grass beds.

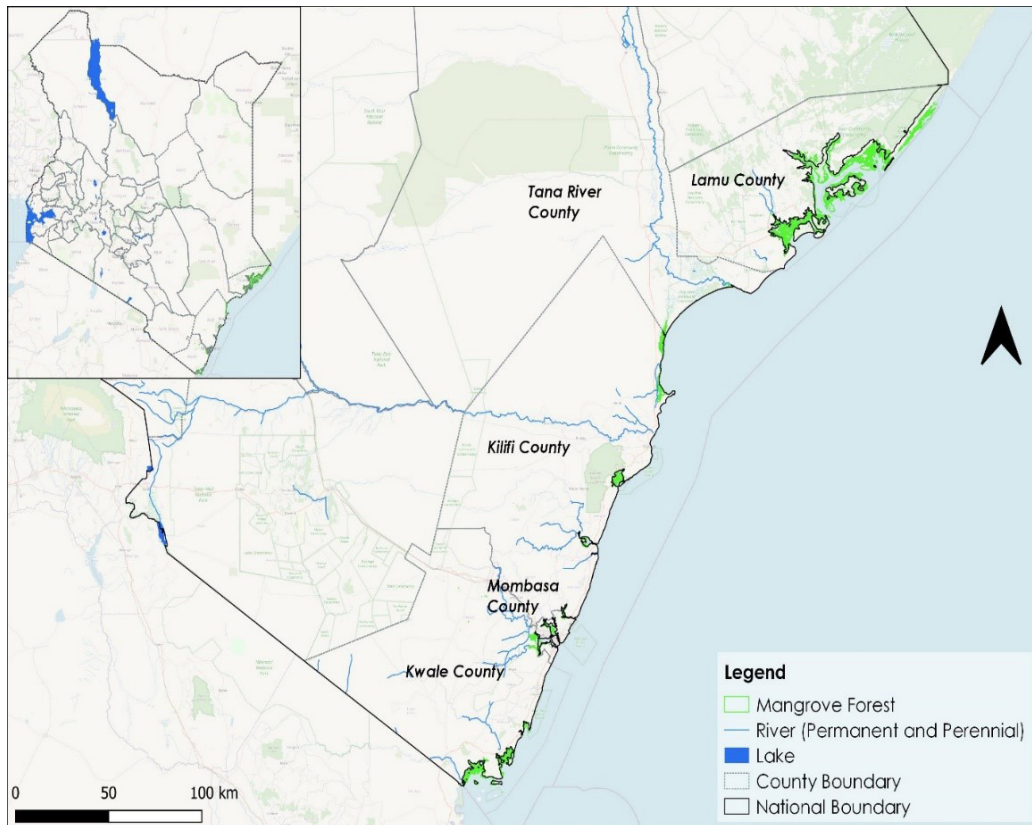


Plate 2.8: Distribution of Kenya’s mangrove forests

2.4.6 Challenges and Threats in Wetlands Ecosystem

Wetlands are known to perform crucial functions and provide vital products and services essential for environmental integrity and human well-being. Apart from being biodiversity hotspots, the wetland resources are equally crucial for income generation and a source of livelihood and well-being of the communities. They provide many ecological and socio-economic goods and services. These include water supply, food production, construction materials, and products for the cottage industry, tourism and recreation. The ecological services comprise flood control, water recharge and discharge, water filtration, wildlife habitats, nutrient storage and re-cycling. Wetlands are recognized as net carbon sinks providing an effective system for carbon capture and storage. The long retention of carbon in wetlands reduces the amounts of atmospheric carbon, thereby reducing global warming. Wetlands are equally important in Disaster Risk Reduction (DRR) especially in controlling extreme flooding.

While wetlands have the potential of contributing significantly to the socio-economic development of Kenya, they face diverse and severe threats. The threats have induced changes that have eroded the ecological and socio-economic values and services derived from wetlands. These threats include:

- Unsustainable human activities such as reclamation and conversion of wetlands for agricultural development;
- human settlement and infrastructure development;
- overexploitation of wetland goods and services;
- Eutrophication and salinization;
- Invasive species;

- Climate change;
- Inadequate institutional capacities in management of wetlands;
- Inadequate awareness amongst the public and policy makers on importance of wetlands;
- Weak regulatory, policy and governance;
- Conflicting and competition for resources; and
- Poor coordination of conservation efforts in the wetlands.

2.4.7 Challenges and Threats in Settlement and Infrastructure

The settled area ecosystems are becoming more prevalent and diverse as the world's population and urbanization increase. According to the United Nations, 55% of the world's population lived in urban areas in 2018, and this proportion is expected to increase to 68% by 2050. Urban areas are expanding faster than urban populations, resulting in urban sprawl and the conversion of natural and agricultural lands into built-up areas. This has implications for biodiversity, functioning, and services of settled area ecosystems, as well as for the human well-being and environmental quality of urban dwellers. The notable challenges in settled areas include the following:

- Unclear land tenure systems and boundaries;
- Poor solid waste management practices;
- Loss of green spaces;
- Insufficient water;
- Pollution;
- Unsustainable energy sources; and
- Population pressure.

2.5 Restoration Opportunities and On-going Government Initiatives

The Technical Report on the National Assessment of Forest and Landscape Restoration Opportunities in Kenya 2016 identified 38.8 million ha of landscape potential for restoration. Some of the notable opportunities identified for restoration in this report include the following: Afforestation or reforestation of natural forests; Rehabilitation of degraded natural forests; Agroforestry in cropland; Commercial tree growing on potentially marginal cropland and unstocked forest plantation forests; Bamboo growing on potentially marginal cropland and unstocked forest plantation forests; Tree-based buffer zones along water bodies, wetlands, roads; and Restoration of degraded rangelands.

Landscapes and ecosystems restoration is a priority for the Kenyan government. There has been other landscape and ecosystem restoration initiatives spearheaded by various stakeholders such as government ministries, community, development partners, private sector and civil society actors among others. However, many of these efforts remain fragmented and with silo approach. These programmes need to be interphase with this strategy implementation at the budgeting, reporting, and monitoring and evaluation level.

Table 2.1: Summary of initiatives by government

ECOSYSTEM	RESTORATION INITIATIVES
Forest ecosystem	<ul style="list-style-type: none"> i. Fencing: This is mainly aimed at reducing encroachment, illegal grazing, charcoal burning and forest fires ii. Afforestation iii. Reclamation of degraded forests through evictions and reforestation iv. Strengthening of local forest management through CFAs and PELIS schemes v. Species site matching vi. Forest fires management vii. Management of invasive species viii. Monitoring forest and tree cover
Agroecosystem	<ul style="list-style-type: none"> i. Soil erosion control ii. Agroforestry iii. Soil and water management iv. Promotion of sustainable agricultural practices v. Promotion of organic and non-tillage agriculture vi. Fruit tree technology
Rangeland ecosystem	<ul style="list-style-type: none"> i. Management of invasive species e.g., <i>Prosopis Juliflora</i> ii. Fencing of wildlife parks to prevent encroachment. iii. Wildfires management iv. Control of overstocking and overgrazing through awareness and training v. Monitoring of habitat cover and biodiversity loss vi. Reseeding of degraded rangelands vii. Fodder management. viii. Nature Based Solutions (NBS)
Wetland ecosystem	<ul style="list-style-type: none"> i. Management of invasive species e.g. Water hyacinth ii. Prevention of water pollution iii. Restoration of water catchment areas iv. Protection of buffer cones and riparian reserves v. Awareness creation on removal of unfriendly species such as eucalyptus vi. Cleaning of rivers e.g., the Nairobi Water Commission vii. Water quality and quantity monitoring viii. Strengthening of local water resource management through WRUAs

ECOSYSTEM	RESTORATION INITIATIVES
Marine ecosystem	<ul style="list-style-type: none"> i. Awareness creation and prevention of pollution solid waste and sewage ii. Cleaning of the marine ecosystems iii. Planting of the mangroves iv. Training on light fishing methods v. Oil spills treatments. vi. Strengthening of beach management units vii. Awareness and prevention of soil erosion upstream which leads to siltation. viii. Training on sustainable marine/ocean resource utilization and conservation ix. Construction of sea walls
Water Towers ecosystem	<ul style="list-style-type: none"> i. Preventing encroachment through evictions ii. Management of invasive species iii. Prevention of forest fires iv. Controlled tourism activities v. Monitoring biodiversity loss
Settled ecosystem	<ul style="list-style-type: none"> i. Improving sanitation ii. Storm water management iii. Greening of public spaces, road side and walk ways iv. Solid waste management- safe collection and disposal v. Installation of renewable energy - solar vi. Improved water harvesting from roof catchments

2.6 Ongoing Restoration initiatives by Private Sector, Civil Society Organizations and Development Partners

Private sector, which includes enterprises, companies, businesses, or individuals are consumers of natural resources such as land and its resources, fresh and marine water resources, trees and other vegetation products. The private sector brings in strong expertise across disciplines such as technology and innovation, agile and lean methodologies, strategic communications and knowledge management. While engaging in their business, private sector such as flower farms, tourism companies, tea factories, road construction companies, energy companies among others contribute to the degradation of ecosystems mainly through overutilization of resources, abstraction of water, introduction of invasive species e.g. *Parthenium Spp* along the roads, clearing of vegetation, poor disposal of solid waste and wastewater and degradation of cultural values that are key to ecosystems management.

Private sector participates in ecosystem restoration mainly through corporate social investments such as tree planting, drilling of boreholes, building schools and health projects among others. However, some of these projects and programmes are unsustainable, while at the same time create centers of degradation by concentrating people into one area leading to more degradation. While the corporate social investments have environmental impact assessments conducted before implementation, majority do not follow through to decommissioning. For instance, most of the mining project leave open quarries with no efforts of restoration. There is therefore need to enforce implementation of environmental managements plans for every corporate social investment by private sectors.

Equally, some private sector players such as KEPSA and KAM play an important role in whipping other companies on environmental management, and self-regulation in sustainable waste management and partnerships and collaboration on climate change and circular economy. Afforestation and Reforestation Research and Technology. It is therefore fundamental for the private sector to participate actively in landscape restoration. They can allocate resources for environmental protection and ecosystem restoration, Corporate Social Responsibility (CSR), partnerships, collaboration, research and education.

The development partners such as Japanese International Development Agency (JICA) is supporting restoration through social forestry, training on nursery practices and producing quality seeds for dryland species in Kenya in collaboration with KEFRI and KFS. Vi-Agroforestry with support from Sida, German Development Organization is undertaking restoration activities in Kenya by boosting milk value chains and carbon trading in Narok, Bomet, Kisumu, and Trans Nzioa Counties. Some of the restoration initiatives implemented include Kenya Agriculture Carbon Project, Shrubs for Change, The Alive Project, and Livelihoods Mount Elgon. World Resources Institute in partnership with various local Non-Governmental Organization is also implementing various restoration initiatives in degraded landscapes.

The Food and Agriculture Organization (FAO) of the United Nations- Kenya is implementing restoration projects under the Global Environment Facility (GEF) at Kirisia Forest (GEF 5 project), Mukogodo and Mt. Kulal landscapes (GEF 6), Mt. Elgon Landscape (GEF 7). Through these

projects and others FAO-Kenya seeks to strengthen policy and institutional capacity while supporting community-led Forest and Landscape Restoration (FLR) and the development of alternative livelihoods. In the same breath, WWF Kenya is partnering with stakeholders including County Governments and National Alliance for Community Forest Associations (NACOFA) within the Amboseli-Loitokitok and Lake Naivasha Basin landscapes and Kaptagat Forest to carry out Forest Landscape Restoration, agroforestry and livelihoods improvement through enhancement of various value chains. The Center for International Forestry Research (CIFOR)-World Agroforestry (ICRAF), CIFOR- ICRAF are currently carrying out various FLR projects that promote on-farm forestry in Makueni, Baringo, Isiolo, Samburu, Laikipia, Homabay, Migori and Taita Taveta counties. World vision is carrying out FLR activities mainly through Farmer Managed Natural Regeneration (FMNR) and enrichment planting with ongoing projects in Elgeyo Marakwet, Baringo, Marsabit, Migori, Homabay, Tana River, West Pokot and Isiolo counties.

The Economic Recovery Strategy, the Investment Promotion Act, the Privatization Act, the Constitution of Kenya and the Vision 2030 all promote creating an enabling environment for private sector investment. Over the years, Kenya has undertaken tremendous political, structural and economic reforms to attract private sector investment. The government has also developed the Public Private Partnerships (PPP) Act in 2013, which supports private sector participation in key economic sectors, including the energy sector. The government should put in place and enforce regulations for curbing environmental degradation by the activities of the private sector.

2.7 Stakeholders' Engagement for Landscape and Ecosystem Restoration

The key stakeholders to drive implementation of landscape and ecosystem restoration include all Government Ministries, Departments, Agencies (MDAs), County Governments, Development Partners, Private sector players, Civil Society Organizations (CSOs), Faith-based Institutions, Community and community groups, Special groups of women, youth and persons with disability among others.





CHAPTER 3: STRATEGIC INTERVENTIONS

The strategic interventions of this strategy are hinged on three key approaches, namely; landscape, ecosystem and land tenure that orient the theory of change in addressing restoration through ecosystem and intervention areas. These approaches are informed by the diverse nature of how degradation manifests itself in each ecological setting that are in various forms, such as soil erosion, wildfires, and flooding. Some level of degradation may cut across different ecosystems, thus requiring a landscape intervention approach. Other forms of degradation may manifest only in one ecosystem without necessarily spreading to other ecosystems. Such a level of degradation requires only an ecosystem intervention approach. Degradation occurring on communal and privately owned land requires the landowners' consensus and consent and participation to the restoration interventions. This calls for a land tenure intervention approach that considers land ownership and use rights. Therefore, that is why this landscape and ecosystems restoration strategy has adopted the three approaches that will vary on different scenarios as demonstrated by the successive session.

3.1 Theory of Change

Landscapes and ecosystems degradation is a threat to national and societal livelihoods in Kenya since millions of people rely heavily on ecosystem goods and services. Degradation is a major cause of increased poverty index and decreased resilience to impacts of climate change. While several interventions are being undertaken to address the myriad threats to landscapes and ecosystems degradation, there is need for concerted effort and coordination to halt degradation and accelerate restoration. This Strategy is meant to bridge this gap and bring a coordinated effort for restoration of the seven degraded landscapes ecosystems.

i.e. Forests, Agro-ecosystems, Rangelands, Wetlands, Oceans/Marine, Water Towers, Settlement and Infrastructure.

The Theory of Change (ToC) is grounded on the need to accelerate approaches to address the key drivers of degradation in each of the seven ecosystems to prevent, halt and reverse landscape and ecosystem degradation. Some of the activities to be undertaken to achieve this goal include planting of 15 billion trees, promoting sustainable agricultural practices, promoting soil and water conservation, promoting sustainable livelihood options, promoting proper land-use planning and proper waste disposal among others. This theory of change envisages that, with adequate capacity building, monitoring and evaluation, coordination and communication, the strategy will achieve the desired goal by 2032 and contribute to all SDGs, and Kenya's commitment to the global community on its part in this UN decade of Ecosystem Restoration (Figure 3.1).

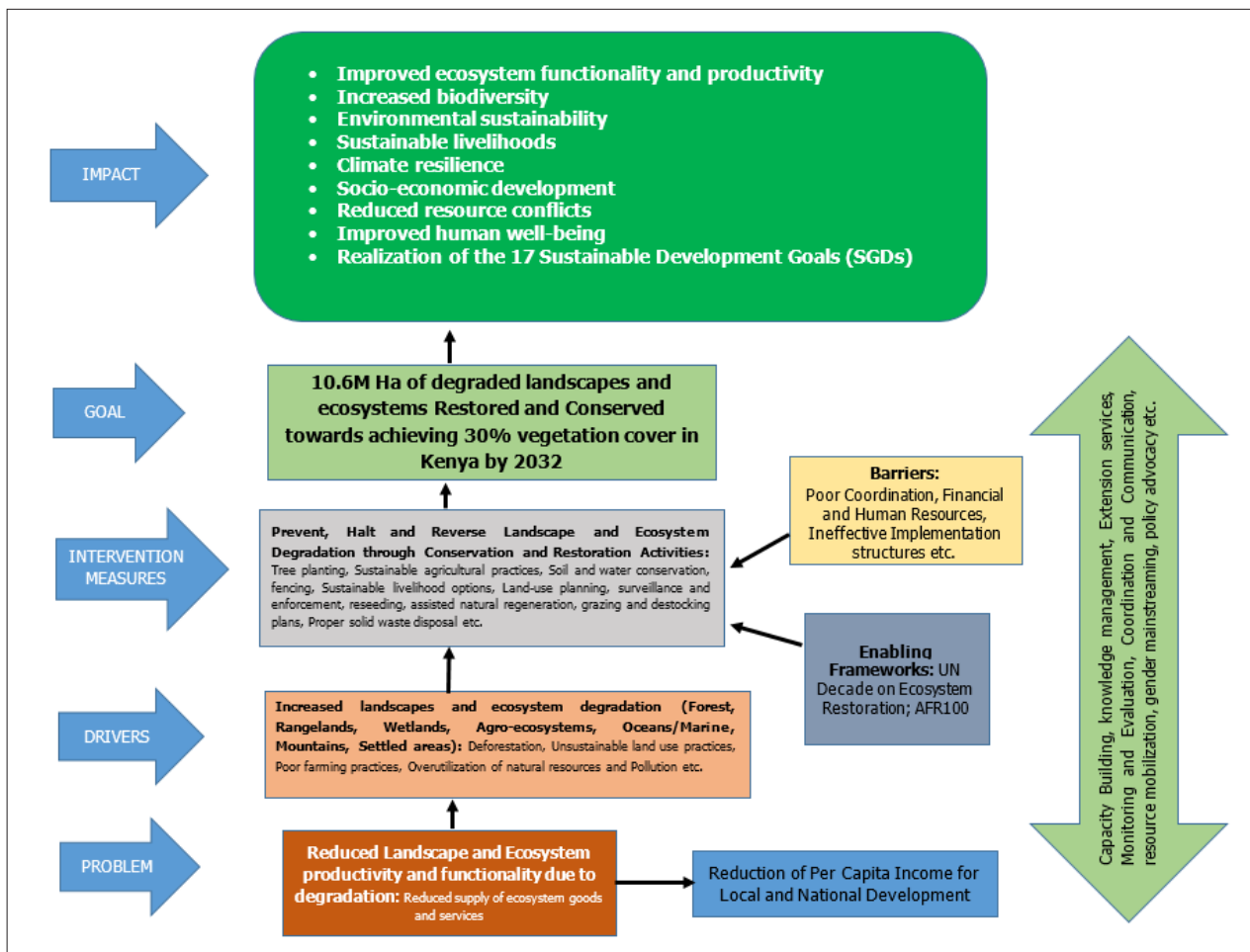


Figure 3.1. Theory of change for landscape and ecosystem restoration

3.2 Strategic Goal

To restore and conserve 10.6 million hectares of degraded landscapes and ecosystems towards achieving 30% tree cover that will contribute to; improving biodiversity conservation, environmental sustainability, better livelihoods, socio- economic development, climate resilience, and Kenya’s commitments to regional and global Conventions by 2032.

3.3 Strategic Objectives

Specifically, this strategy addresses the following objectives:

1. Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands;
2. Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability;
3. Improve landscape and ecosystem governance by strengthening policy, regulatory and institutional frameworks;
4. Promote sustainable financing mechanisms and private sector investment for restoration of degraded landscapes and ecosystems; and
5. Strengthen capacity, research, M/E and knowledge management for the implementation of the strategy.

These objectives will be realized through implementation of intervention areas across the seven (7) ecosystems.

Table 3.1: Prioritized intervention areas for landscape and ecosystem restoration

Intervention areas	Estimated area (ha)	Number of tree to be grown in 10 years	Percentage
1. Rehabilitation of degraded dryland landscapes	5,190,556	7,785,834,000	49.38
2. Growing of agroforestry trees on farmlands	3,000,000	4,200,000,000	26.64
3. Establishment of commercial private forests	750,000	1,200,000,000	7.61
4. Rehabilitation of degraded water towers wetlands and riparian areas outside forests	500,000	750,000,000	4.76
5. Greening of infrastructure (roads, railway lines, dams, and tree planting by Corporates and Ministries, Department and Agencies)	450,000	675,000,000	4.28
6. Rehabilitation of degraded natural forests in gazetted forests and water towers	350,507	525,761,175	3.33
7. Establishment of bamboo woodlots and plantations	150,000	225,000,000	1.43
8. Rehabilitation of degraded mangrove ecosystem	14,000	140,000,000	0.89
9. Growing of fruit trees and woodlots in schools, colleges, and universities and other institutions	70,000	105,000,000	0.67
10. Restocking of forest plantation in gazetted forests	54,000	86,400,000	0.55
11. Establishment of Urban forests, arboretum, green spaces, roadside planting in wards and sub counties	50,000	75,000,000	0.48
Total	10,579,063	15,767,995,175	100.00



Plate 3.1: Nature based solutions; Gums and Resins and beekeeping



Figure 3.2. Landscape and ecosystem restoration components

The implementation of strategic actions in each of the specific objectives are expected to yield key outputs and outcomes as summarize din the following tables.

Table 3.2: Strategic outcome, outputs and strategic actions for objective 1

S01: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands		
Outcome	Outputs	Strategic Actions
1.1. Increased Production of tree seeds and seedlings	1.1.1. 1,000 tons of tree seeds collected, processed and distributed	<ul style="list-style-type: none"> • Establish and maintain 400 Ha of seed sources. • Refurbish existing seeds processing facilities. • Construct and equip 18 seed centres. • Recruit staff for seed centres. • Acquire cold storage for seeds. • Establish tree breeding programs. • Construct a National Tree Seed Gene Bank. • Facilitate collection, processing and distribution of 1,000 tons of seeds. • ICT Infrastructure and maintenance to connect seed centres.
1.2. Increased productivity and ecological functions of 10.6M hectares of restored ecosystems.	1.1.2. 15.billion seedlings produced	<ul style="list-style-type: none"> • Map infrastructural gaps for MDAs supporting for seedling production. • Refurbish and expand the existing 3,000 tree Nurseries. • Map and certify tree nurseries. • Construct 500 new Tree Nurseries. • Drill and equip boreholes in 200 Tree Nurseries in areas of need. • Improve water harvesting and reticulation system for tree nurseries. • Provide technical support to MDAs, CSOs and private sector with seedling production target. • Develop partnership framework between State Department Forestry and the MDAs on seedlings production. • Establish partnership framework contractual seedlings production. • Recruit 5,000 green army to enhance production capacity. • Develop guidelines for establishing model tree nurseries. • Procure and distribute 16 Billion biodegradable tubes.

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands

Outcome	Outputs	Strategic Actions
<p>1.2. Increased productivity and ecological functions of 10.6M hectares of restored ecosystems.</p>	<p>1.2.1. 5,190,556 million Ha of degraded landscapes in ASALs, rehabilitated.</p>	<ul style="list-style-type: none"> • Identify and map out degraded rangelands. • Acquire high resolution satellite images/data for mapping rangelands. • Map areas with invasive species. • Support implements invasive species management plans. • Support development of holistic grazing plans. • Rehabilitate and restore 800,000 Ha of degraded areas in protected game reserves and national parks. • Rehabilitate 1,200,000 Ha of degraded areas in community, group and private conservancies. • Reseed grasslands. • Promote sustainable natural regeneration initiatives (enclosure, aided natural regeneration and fencing). • Establish 1,557,167 Ha of fruit trees. • Support tree growing initiatives for restoration. • Establish 200,000 Ha of dryland forestry plantations on community lands (including Gums and Resins, <i>Melia volkensii</i>, <i>Acacia tortilis</i>, <i>Acacia seyal</i>, sandal wood). • Support 2000 NBEs (bio-enterprises development, e.g. beekeeping, gums & resins production, game farming, wildlife conservancies). • Put up 1,000 water harvesting and reticulation systems. • Desilting of dams and water pans. • Pilot seedball and broadcasting technologies for restoring rangelands.
	<p>1.2.2. 350,507 Ha of degraded public natural forests and water towers rehabilitated and protect 2.6M hectares of natural forests.</p>	<ul style="list-style-type: none"> • Identify and map out degraded natural forests and water towers for rehabilitation. • Acquire high resolution satellite images/data for suitable sites. • Fence 9,600 Kms around public (gazetted) Forests. • Strengthen CFAs and community groups. • Enhance surveillance using remote sensing and drones' technologies. • Recruit 2000 more rangers and foresters. • Maintain 5,240 Km of fire breaks. • Support tree growing initiatives for restoration.

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands

Outcome	Outputs	Strategic Actions
	<p>1.2.3. 54,000 Ha of public forest plantations restocked and sustainably managed and stocked plantations.</p>	<ul style="list-style-type: none"> • Acquire appropriate seeds for broadcasting. • Pilot seed, seedball and broadcasting technologies. • Provide advisory services for quality production of seedlings. • Identify and map out plantations for restocking. • Acquire high resolution satellite images/data for forest plantations. • Review and update forest plantations management plans. • Establish 54,000 new plantation in the un-stocked areas. • Maintain 8,236 Km of forest roads. • Facilitate application of silvicultural treatments (pruning and thinning). • Establish public private partnerships and concession models in forest plantations.
	<p>1.2.4. 3,000,000 Ha of agroforestry established</p>	<ul style="list-style-type: none"> • Identify and map out cropland for agroforestry areas. • Acquire high resolution satellite images/data for suitable sites for agroforestry practices. • Mapped land on invasive species. • Support preparation and implementation of county forestry development programs. • Develop incentives for farm and private forest development. • Implement 4 renewable/green energy options. • Implement agroforestry strategy. • Support tree growing initiatives in crop lands. • Facilitate control and management of invasive species. • Promote sustainable land management technologies and practices. • Enhance capacity on soil and water management. • Enforce Implementation of the Agriculture (Farm Forestry) Rules, 2009.
	<p>1.2.5. 750,000 Ha of private commercial forest plantations established</p>	<ul style="list-style-type: none"> • Conduct public participation and gazette the draft Private Forest Registration Rules. • Establish and Strengthen 10 Private Tree Growers Associations. • Technical support to the Tree Growers Associations and farmers. • Provide incentives to commercial private forest plantations. • Build capacity on commercial forestry dynamics. • Support commercial forestry establishment.

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands	
Outcome	Strategic Actions
Outputs	<ul style="list-style-type: none"> • Support silvicultural and forest health extension initiatives.
1.2.6. 150,000 Ha of Bamboo established	<ul style="list-style-type: none"> • Identify and map out sites for establishment of bamboo woodlots and plantations. • Acquire high resolution satellite images/data for suitable sites for establishment of bamboo woodlots and plantations. • Scale technology and innovations in production of bamboo seedlings. • Strengthen bamboo association of Kenya. • Support bamboo growing initiatives . • Enhance knowledge and research on bamboo manufacturing technology. • Support cottage value addition towards creation of bamboo enterprises.
1.2.7. 500,000 ha of degraded water towers, wetlands, and riparian areas outside gazetted forests rehabilitated	<ul style="list-style-type: none"> • Identify and map out degraded water towers, wetlands and riparian areas outside gazetted forests. • Acquire high resolution satellite images/data for mapping degraded wetland ecosystem outside gazetted ones. • Establish nationwide knowledge management system on wetlands. • Support protection and conservation of wetlands on community and private lands. • Fence 2000km of selected wetlands and springs rehabilitated gazetted forests and water towers. • Develop wetlands training modules. • Hold national awareness and capacity building fora on sustainable management of wetland. • Support tree growing initiatives. • Develop incentives for sustainable management for wetlands. • Support nature-based solutions to incentivize wetlands and riparian protection. • Conduct regular nationwide monitoring and reporting. • Develop and strengthen enforcement mechanisms for wetlands protection.
1.2.8. 450,000 ha of infrastructure (Roads, railway lines, dams) greened by growing trees	<ul style="list-style-type: none"> • Mapping and identification of targeted areas. • Acquire high resolution satellite images/data for mapping infrastructure. • Enforce EMCA 2019 on implementation of ES) Reports on capital projects.

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands

Outcome	Outputs	Strategic Actions
		<ul style="list-style-type: none"> • Implementation of physical planning rules that require 5% of the residential premises be put under tree cover with appropriate tree species. • Build technical capacity on tree growing along selected infrastructures. • Support tree growing initiatives.
	<p>1.2.9. 70,000 ha of fruit trees and woodlots in schools, colleges, universities and other institutions grown</p>	<ul style="list-style-type: none"> • Identify and map out appropriate areas for growing fruit trees and woodlots. • Acquire high resolution satellite images/data for mapping institutions to grow fruit trees and woodlots. • Support establishment of 5,000 new tree nurseries in various wards. • Fence 2,000Km for protection of schools. • Establish woodlots and fruit trees. • Provide technical support and awareness. • Strengthen coordination of learning institutions in greening initiatives. • Support tree planting and management. • Environmental Conservation Clubs formed and strengthened in schools, colleges and universities.
	<p>1.2.10. 50,000 ha of urban forests, arboretum, green spaces & road-side plantings in wards & sub-counties established</p>	<ul style="list-style-type: none"> • Identify and map out appropriate areas for growing establishing urban forests, arboretum, green spaces. • Acquire high resolution satellite images/data for mapping targeted areas for greening. • Implement the physical planning rules that require 5% of all residential premises are covered by appropriate tree species. • Support tree growing initiatives. • Provide technical support and capacity. • Promote knowledge exchange programs.
	<p>1.2.11. 14,000 ha of degraded mangrove rehabilitated, and marine ecosystem restored</p>	<ul style="list-style-type: none"> • Identify and map out degraded mangrove ecosystem. • Acquire high resolution satellite images/data for mapping degraded mangrove ecosystem. • Support community livelihood improvement for the blue economy. • Support communities to develop mangrove tree nurseries.

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community and private lands	
Outcome	Strategic Actions
Outputs	<ul style="list-style-type: none"> • Rehabilitate the degraded 14,000 Ha. • Collection, transplanting of seagrass seedlings/shoots. • Zonation for seagrass natural regeneration. • Undertake Hydrological restoration. • Establish underwater Coral nurseries (colony). • Transplanting of established coral colonies. • Zonation of designated area for coral natural regeneration. • Recruit 1000 community scouts and rangers to increase surveillance. • Promote agroforestry activities along coastal terrestrial belt.

Table 3.3: Strategic outcome, outputs and strategic actions for objective 2

SO2: Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability	
Outcome	Strategic Actions
2.1. Improved livelihoods and incomes through sustainable nature-based enterprises.	<ul style="list-style-type: none"> • Identify sustainable nature-based enterprises (<i>fruit trees, bee farms, fodders/hay, mushroom, gums and resins, aloe farms. wild fruits, berries and herbs</i>) for communities living adjacent to ecosystems. • Support eco-tourism enterprises. • Promote privatization of nurseries enterprises. • Promote circular economy enterprises. • Promote sustainable charcoal enterprises. • Develop appropriate value chain for the identified nature-based enterprises. • Train communities on nature-based enterprises opportunities. • Develop and support carbon credit schemes for restoration of selected ecosystems. • Conduct public participation and gazette the draft Charcoal Regulations. • Sensitize law enforcement agencies on implementation of charcoal regulations. • Capacity build 300 charcoal producers associations (CPAs). • Map and promote utilization invasive species for charcoal production. • Develop and implement 200 charcoal production and management plans (CPMPs).
2.1.1. Inclusive sustainable value chains enterprises identified and promoted across all ecosystems.	

SO2: Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability		
Outcome	Outputs	Strategic Actions
	2.1.2. Market and market access for nature-based enterprise chain products identified and promoted	<ul style="list-style-type: none"> • Support 500 youth groups in briquette charcoal production enterprise. • Increase participation in national and international fora for promoting nature-based enterprises. • Undertake market analysis of the identified nature-based enterprises across all selected ecosystems. • Organize communities into nature-based enterprise groups and associations. • Identify and upscale best nature-based enterprise value chain products to promising ecosystems. • Support value addition initiatives. • Establish and strengthen 100 marketing cooperatives.
2.2. Enhanced land management practices for sustainability in restored ecosystems	2.2.1. Sustainable land and soil conservation practices promoted	<ul style="list-style-type: none"> • Design ecosystem land use based on County Spatial Plans. • Establish the level and type of soil erosion in ecosystems. • Establish appropriate soil erosion control structures. • Promote soil health interventions (crop rotation, mulching, fodder and use of inorganic fertilizers). • Promote climate smart agriculture. • Support efficient irrigation systems. • Integrate land use conflict management mechanisms in ecosystem-based restoration. • Fill up and restore mines and quarries. • Promote adoption of 6 renewable energy options. • Establish water harvesting and reticulation systems to collect run off. • Establish water quality and quantity monitoring systems along water catchment zones and wetlands. • Enforce the existing water quality and quantity monitoring systems. • Maintenance of the soil and water conservation structure.
	2.2.2. Reduced and controlled pollution	<ul style="list-style-type: none"> • Map out pollution sources from selected ecosystems. • Establish appropriate waste management structures.

SO2: Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability		
Outcome	Outputs	Strategic Actions
		<ul style="list-style-type: none"> • Strengthen enforcement mechanisms on pollution prevention. • Create awareness on pollution and control.

Table 3.4: Strategic outcome, outputs and strategic actions for objective 3

SO3: Improve landscape and ecosystem governance by strengthening policy, regulatory and institutional frameworks		
Outcome	Outputs	Strategic Actions
3.1. Strengthened policy, regulatory and coordination for the restoration strategy.	3.1.1. Ecosystem restoration policies, regulatory frameworks developed and implemented.	<ul style="list-style-type: none"> • Develop and review ecosystem restoration policies, regulatory frameworks and management plans. • Support implementation of ecosystem restoration policies, regulatory frameworks and management plans. • Conduct strategic environmental impact assessments for ecosystem-wide projects. • Gazettement of all ecosystem restoration and management plans. • Establish governance committees to steer implementation of the restoration and management plans. • Support enforcement of ecosystem restoration policies, regulatory frameworks, and management plans.
	3.1.2. Establish and operationalize the 15b and restoration secretariat.	<ul style="list-style-type: none"> • Recruit and acquire staff for secretariat to coordinate ecosystem restoration. • Develop and operationalize organizational and salary structure for the secretariat. • Implement remuneration and allowances to facilitate the secretariat. • Streamline and mainstream the performance contracting process for the secretariat. • Support acquisition of office and operational equipment and infrastructure. • Conduct capacity building training on various ecosystems and landscape restoration. • Support coordination of the strategy implementation. • Support monitoring activities for the strategy. • Acquisition of 10 vehicles for coordination. • Participate in national and international for a on ecosystem restoration.

SO3: Improve landscape and ecosystem governance by strengthening policy, regulatory and institutional frameworks	
Outcome	Strategic Actions
<p>Outputs</p> <p>3.1.3. Committees for coordination of landscape and ecosystem restoration strategy strengthened</p>	<ul style="list-style-type: none"> • Build capacity for various committees on the implementation of the strategy. • Facilitate committees in the coordination of the strategy. • Conduct periodic monitoring and evaluation missions. • Undertake benchmarking on best practices on landscape and ecosystem restoration. • Promote public private linkages on ecosystem restorations. • Support resource mobilization activities.

Table 3.5: Strategic outcome, outputs and strategic actions for objective 4

SO4: Promote sustainable financing mechanisms and private sector investment for restoration of degraded landscapes and ecosystems	
Outcome	Strategic Actions
<p>4.1. Increased resources for the program operation</p>	<ul style="list-style-type: none"> • Conduct capacity needs assessment on resource mobilization at national, county and non-government actors. • Enhance capacity on resource mobilization and proposal development. • Support stakeholders to develop a bankable investment projects and business plans. • Promote community-based innovative financing mechanisms to support ecosystem restoration. • Advocate for development of a public-private partnership (PPP) framework on ecosystem restoration financing. • Advocate for additional budgetary allocations by national and county governments towards ecosystem restoration. • Promote linkages to optimize bilateral and multilateral funding opportunities.
<p>4.1.2. Restoration fund schemes developed and strengthened</p>	<ul style="list-style-type: none"> • Develop and strengthen forest conservation fund and other funds. • Develop and strengthen fund structure and governance procedures. • Strengthen existing governance structures for 15B resources mobilization and disbursement. • Advocate and champion the use of existing funding schemes.

Table 3.6: Strategic outcome, outputs and strategic actions for objective 5

S05: Strengthen capacity, research, monitoring, evaluation, and knowledge management for the implementation of the strategy.		
Outcome	Outputs	Strategic Actions
5.1. Improved capacity and skills for implementation of ecosystem interventions	5.1.1. Capacity and skills of stakeholders built.	<ul style="list-style-type: none"> • Undertake capacity needs assessment among stakeholders. • Develop training modules and programmes based on identified capacity gaps. • Undertake training for trainer of trainers. • Strengthen traditional institutions in capacity building for ecosystems. • Support short and long-term courses. • Improve the country human development index on restoration through postgraduate trainings.
	5.1.2. Institutional capacity for implementation of the strategy strengthened	<ul style="list-style-type: none"> • Recruit and capacity build 5,000 green army. • Build 21 ecosystem-based resource centres. • Procure 50 vehicles for institutions implementing the strategy. • Construct rangers and forester facilities. • Employ other staff. • Strengthen Jaza miti App and other national monitoring platforms for use. • Enhance capacity of communities on use of Jaza Miti App.
5.2. Strengthened research and innovation for ecosystem restoration	5.1.3. National tree and ecosystem restoration campaigns conducted.	<ul style="list-style-type: none"> • Support annual national and county level tree planting campaign launches. • Conduct monitoring and evaluation on the tree landscape and restoration program. • Develop and implement a national award mechanism on tree growing. • Promote national and international tree growing ecosystem restoration events. • Support participation in relevant forums on rehabilitation and restoration. • Support publicity and visibility of green holiday activities and other national tree growing events.
	5.2.1. Studies on ecosystem restoration undertaken	<ul style="list-style-type: none"> • Conduct studies on: <ul style="list-style-type: none"> o Quantification of emissions reductions from ecosystems restored. o Best ecosystem-based practices for climate change mitigation and adaptation. o Viability of emission reduction practices to aid development of carbon offset projects. o Seed phenology.

SO5: Strengthen capacity, research, monitoring, evaluation, and knowledge management for the implementation of the strategy.		
Outcome	Outputs	Strategic Actions
		<ul style="list-style-type: none"> o Market systems of ecosystem based products. o Invasive species and control. o Identify and document ecosystem restoration technology gaps. o Study on use of hydrogels for tree nurseries.
	5.2.2. Scale up adoption of restoration technologies	<ul style="list-style-type: none"> • Demonstrate successful ecosystem-based mitigation and adaptation practices across landscapes. • Support adoption of emerging technology and innovations for ecosystem restoration. • Support technology partnerships and networks on ecosystem restoration. • Enhance north-south and south-south cooperation on ecosystem restoration. • Strengthen research innovations and technology for surveillance.
5.3. Enhanced program monitoring and evaluation	5.3.1. Monitoring and Evaluation landscape and ecosystem strategy strengthened.	<ul style="list-style-type: none"> • Develop a national monitoring, evaluation, reporting and learning framework for tree growing and ecosystem restoration. • Improve efficiency and robustness of Jaza Miti App. • Develop a communication and digitization strategy to facilitate information and knowledge sharing across all stakeholders. • Evaluate, select and implement technologies that support digitization, communication and knowledge management.
	5.3.2. Periodic Monitoring and Evaluation on tree growing and ecosystem restoration undertaken.	<ul style="list-style-type: none"> • Undertake planning fora with stakeholders. • Conduct quarterly monitoring and evaluation of seed and seedlings production. • Hold monitoring and evaluation, meetings write shops, workshops and conferences. Conduct mid and end term evaluations for the strategy.
5.4. Increased access to knowledge on landscape and ecosystem restoration	5.4.1. Landscape and Ecosystem knowledge acquired and managed	<ul style="list-style-type: none"> • Integrate 15B and ecosystem restoration knowledge and information into a central repository portal. • Publications. • Reports generation. • Update website and knowledge repository. • Capacity enhancement on knowledge management for the program.

3.4 Seedling Production Targets Towards Landscape and Ecosystem Restoration

The seedling production targets will be largely contributed by the national government institutions, followed by non-state actors and County Governments (Figure 3.3 and Table 3.3).

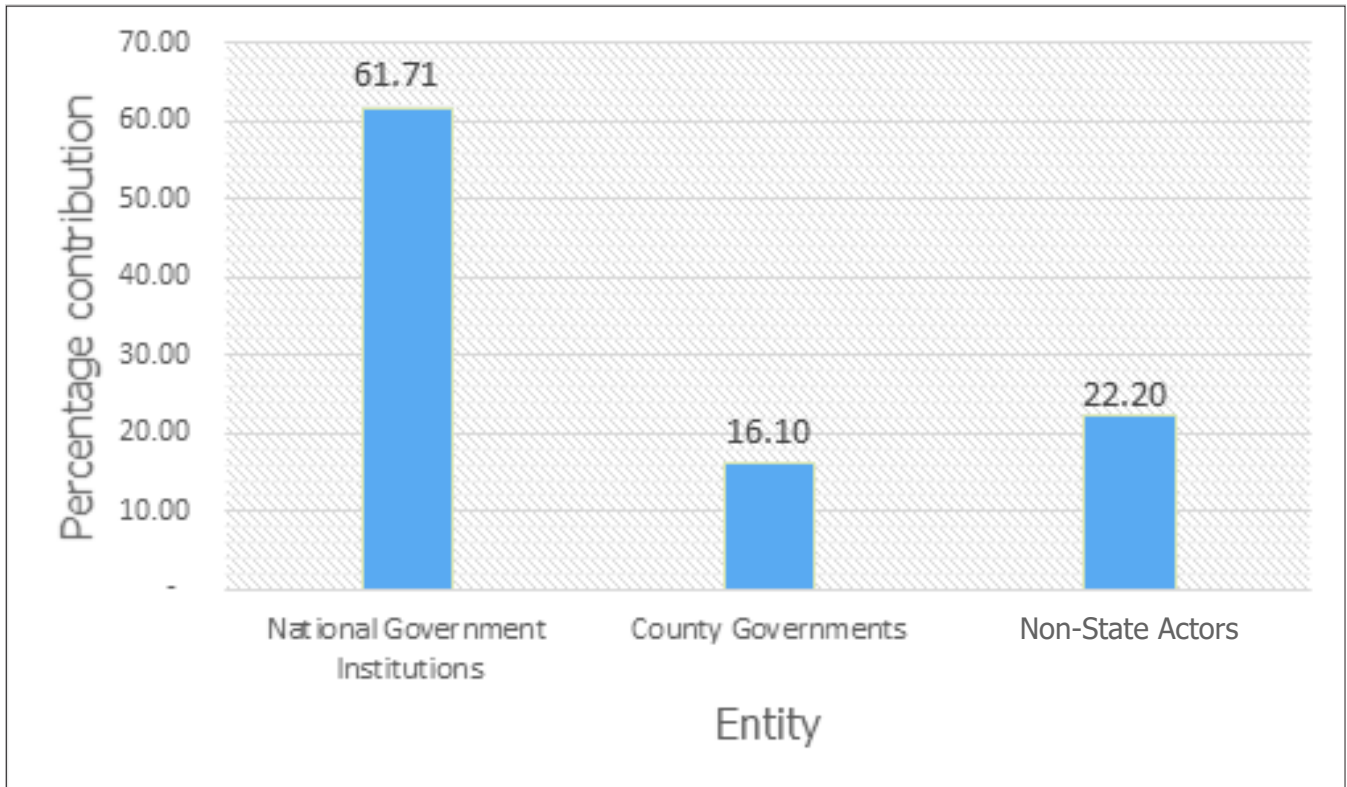


Figure 3.3. Distribution of seedling production targets to key entities

Table 3.7: Seedling production by selected institutions

No	Institution	Yearly target of seedling production	10 year target of seedling production	Percentage based on 10 year target
1	Kenya Forest Service (KFS)	300,000,000	3,000,000,000	19.03
2	Kenya Forestry Research Institute (KEFRI)	3,000,000	30,000,000	0.19
3	Kenya Defence Forces (KDF)	80,000,000	800,000,000	5.07
4	Regional Development Authorities (RDAs)	60,000,000	600,000,000	3.81
5	Kenya Wildlife Service (KWS) & Wildlife Training Institute	50,000,000	500,000,000	3.17
6	National Police Service	20,000,000	200,000,000	1.27
7	Correctional Services	100,000,000	1,000,000,000	6.34
8	State Department for Basic Education	200,000,000	2,000,000,000	12.68
9	State Department for Technical and Vocational Education Training (TVET)	80,000,000	800,000,000	5.07
10	State Department for Higher Education and Research	20,000,000	200,000,000	1.27
11	Kenya Agricultural Livestock Research Organisation (KALRO)	10,000,000	100,000,000	0.63
12	National Youth Service (NYS)	50,000,000	500,000,000	3.17
13	County Governments	253,799,518	2,537,995,175	16.10
14	Non-state Actors	350,000,000	3,500,000,000	22.20
Total		1,576,799,518	15,767,995,175	100



Plate 3.2: Friends of Karura Community Forest Association Tree nursery



Plate 3.3: Private fruit tree nursery in Muranga County



Plate 3.4 and 3.5: Tree nursery managed by NYS

3.5 Tree Growing Targets towards Landscape and Ecosystem Restoration

The tree growing 10-year targets are distributed to public institutions under the national government (63.4%), County governments (22.2%) and non-state actors (14.4%). The national government institutions consist of various Ministries, Departments and Agencies (MDAs) whereas the County Governments consists of all 47 devolved counties across the country. The non-state actors include private sector, Civil Society Organizations, Faith-based institutions and organizations, Foundations, Community-Based Organizations, Community Forest Associations, Trade Unions, Umbrella of Professional Bodies, individuals, media, philanthropic organizations, development, non-profit making international non-government organizations among others (Figure 3.6 and Table 3.4).

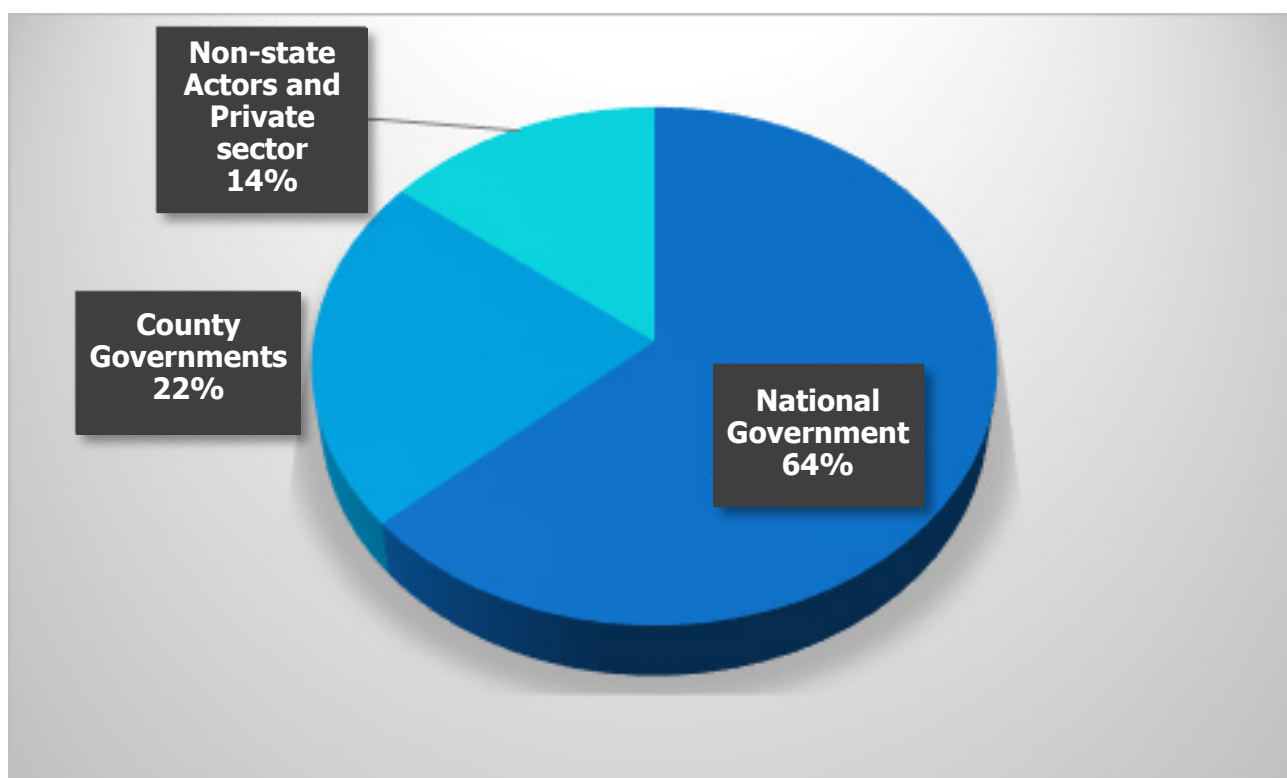


Figure 3.4. Proportion of tree growing targets by entities



Plate 3.6: Tree growing activities

Table 3.8: Tree growing targets by national government institutions, county governments and non-state actors

No.	Entity	State Department	Annual target	10-year target
1	Office of the President		50,000,000	500,000,000
2	Office of the Deputy President		20,000,000	200,000,000
3	Prime Cabinet Secretary		10,000,000	100,000,000
4	Interior & National Administration	Internal Security and National Administration,	100,000,000	1,000,000,000
		Correctional Services	20,000,000	200,000,000
		Immigration and Citizen Services	5,000,000	50,000,000
5	National Treasury & Planning	The National Treasury	10,000,000	100,000,000
		Economic Planning	5,000,000	50,000,000
6	Water, Sanitation & Irrigation	Water and Sanitation	50,000,000	500,000,000
		Irrigation	20,000,000	200,000,000
7	East Africa Community (EAC), ASALs & Regional Development	East African Community Affairs	5,000,000	50,000,000
		ASALs and Regional Development	20,000,000	200,000,000
8	Defence		50,000,000	500,000,000
9	Foreign & Diaspora Affairs	Foreign Affairs	5,000,000	50,000,000
		Diaspora Services	5,000,000	50,000,000
10	Public Service, Gender, & Affirmative Action	Public Service	5,000,000	50,000,000
		Gender and Affirmative Action	5,000,000	50,000,000
11	Trade, Investment & Industry	Trade	5,000,000	50,000,000
		Investments Promotion	5,000,000	50,000,000
		Industry	5,000,000	50,000,000
12	Environment, Climate Change & Forestry	Environment and Climate Change	50,000,000	500,000,000
		Forestry (Other than KFS)	10,000,000	100,000,000
13	Roads and Transport	Roads	20,000,000	200,000,000
		Transport	10,000,000	100,000,000
14	Tourism and Wildlife	Tourism	50,000,000	500,000,000
		Wildlife (Other than KWS)	10,000,000	100,000,000
15	Lands, Housing, Public Works & Urban Development	Lands and Physical Planning	10,000,000	100,000,000
		Housing and Urban Development	20,000,000	200,000,000
		Public Works	20,000,000	200,000,000
16	Health	Medical Services	5,000,000	50,000,000
		Public Health and Professional Standards	5,000,000	50,000,000
17	Agriculture & Livestock Development	Crop Development	50,000,000	500,000,000
		Livestock Development	50,000,000	500,000,000

No.	Entity	State Department	Annual target	10-year target
18	Information, Technology, & Digital Economy	Broadcasting and Telecommunications	5,000,000	50,000,000
		ICT and Digital Economy	5,000,000	50,000,000
19	Education	Higher Education and Research	10,000,000	100,000,000
		Technical, Vocational Education and Training	5,000,000	50,000,000
		Basic Education	20,000,000	200,000,000
20	Energy & Petroleum	Energy	100,000,000	1,000,000,000
		Petroleum	5,000,000	50,000,000
21	Youth Affairs, Sports, Arts	Youth Affairs	5,000,000	50,000,000
		Sports and The Arts	5,000,000	50,000,000
22	Cooperatives & Micro, Small & Medium Enterprises (MSMEs) Development	Micro, Small, and Medium Enterprises Development	5,000,000	50,000,000
		Cooperatives	10,000,000	100,000,000
23	Mining, Blue Economy, & Maritime Affairs	Blue Economy and Fisheries	20,000,000	200,000,000
		Mining	20,000,000	200,000,000
		Shipping and Maritime Affairs	50,000,000	500,000,000
24	Labour & Social Protection	Labour and Skills Development	5,000,000	50,000,000
		Social Protection and Senior Citizen Affairs	5,000,000	50,000,000
25	The State Law Office		5,000,000	50,000,000
26	County Governments		350,000,000	3,500,000,000
27	Non-State Actors		226,799,517	2,267,995,175
Total			1,576,799,517.5	15,767,995,175

3.6 Tree Growing and Seedling Production Targets by County Governments

The set tree growing targets and seedling production are distributed across counties depending on the available sites for the restoration initiatives and current tree cover (Table 3.5)



Plate 3.7: Eden Reforestation Projects - Seedlings being transported to the planting site in Mau

Table 3.9: Tree growing targets by County and seedling production

No.	County	Current 12.13% Tree Cover		Target to achieve 30% Tree cover 2032		Tree growing targets at the County		County government seedlings propagation targets			County government tree growing targets	
		Area (Ha)	(%)	Area (Ha)	(%)	Cumulative Trees grown in 10 Years	Annual Trees grown	County 10 year seedlings propagation target	County annual seedlings propagation target	County tree growing target (10 yrs)	County annual tree growing target	
1	Mombasa	5,130.93	23.75	5,000	23.14	7,452,454	745,245	1,199,537	1,19,954	1,654,211	165,421	
2	Kwale	115,108.09	13.99	200,000	24.3	298,098,157	29,809,816	47,981,476	4,798,148	66,168,434	6,616,843	
3	Kilifi	347,015.57	27.75	200,000	15.99	298,098,157	29,809,816	47,981,476	4,798,148	66,168,434	6,616,843	
4	Tana River	407,195.78	10.4	467,407	11.94	696,666,469	69,666,647	112,134,389	11,213,439	154,637,946	15,463,795	
5	Lamu	270,498.95	44.06	100,000	16.29	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422	
6	Taita Taveta	117,556.69	6.87	395,791	23.12	589,923,287	58,992,329	94,953,182	9,495,318	130,944,353	13,094,435	
7	Garissa	552,300.21	12.67	550,000	12.62	819,769,932	81,976,993	131,949,060	13,194,906	181,963,194	18,196,319	
8	Wajir	251,845.41	4.45	945,989	16.7	1,409,987,611	140,998,761	226,949,743	22,694,974	312,973,054	31,297,305	
9	Mandera	93,847.63	3.61	486,050	18.7	724,452,408	72,445,241	116,606,983	11,660,698	160,805,837	16,080,584	
10	Marsabit	156,361.49	2.06	1,373,218	18.06	2,046,768,218	204,676,822	329,445,134	32,944,513	454,318,423	45,431,842	
11	Isiolo	170,057.58	6.7	391,394	15.42	583,369,554	58,336,955	93,898,309	9,389,831	129,489,640	12,948,964	
12	Meru	209,069.50	29.63	250,000	35.43	372,622,696	37,262,270	59,976,845	5,997,685	82,710,543	8,271,054	
13	Tharaka Nithi	67,815.31	26.98	90,000	35.8	134,144,171	13,414,417	21,591,664	2,159,166	29,775,795	2,977,580	
14	Embu	82,812.90	29.28	100,000	35.36	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422	
15	Kitui	610,503.05	20.06	302,512	9.94	450,892,061	45,089,206	72,574,862	7,257,486	100,083,727	10,008,373	
16	Machakos	36,261.03	6.03	200,000	33.24	298,098,157	29,809,816	47,981,476	4,798,148	66,168,434	6,616,843	
17	Makueni	101,915.00	12.47	230,000	28.14	342,812,880	34,281,288	55,178,698	5,517,870	76,093,699	7,609,370	
18	Nyandarua	90,130.52	27.56	120,000	36.69	178,858,894	17,885,889	28,788,886	2,878,889	39,701,060	3,970,106	
19	Nyeri	150,683.72	45.17	70,000	20.98	104,334,355	10,433,435	16,793,517	1,679,352	23,158,952	2,315,895	
20	Kirinyaga	44,836.05	30.39	50,000	33.89	74,524,539	7,452,454	11,995,369	1,199,537	16,542,109	1,654,211	
21	Muranga	70,237.19	27.8	90,000	35.62	134,144,171	13,414,417	21,591,664	2,159,166	29,775,795	2,977,580	
22	Kiambu	50,700.03	19.74	110,000	42.82	163,953,986	16,395,399	26,389,812	2,638,981	36,392,639	3,639,264	
23	Turkana	767,208.24	10.87	800,202	11.34	1,192,693,418	119,269,342	191,974,366	19,197,437	264,740,566	26,474,057	
24	West Pokot	183,266.29	20.12	100,000	10.98	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422	
25	Samburu	537,576.36	25.57	170,000	8.09	253,383,433	25,338,343	40,784,255	4,078,425	56,243,169	5,624,317	
26	TransNzoia	37,831.22	15.16	80,000	32.05	119,239,263	11,923,926	19,192,590	1,919,259	26,467,374	2,646,737	
27	Uasin Gishu	27,384.11	8.04	100,000	29.35	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422	
28	Elgeyo Marakwet	90,393.01	29.95	100,000	33.13	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422	

No.	County	Current 12.13% Tree Cover		Target to achieve 30% Tree cover 2032		Tree growing targets at the County		County government seedlings propagation targets		County government tree growing targets	
		Area (Ha)	(%)	Area (Ha)	(%)	Cumulative Trees grown in 10 Years	Annual Trees grown	County 10 year seedlings propagation target	County annual seedlings propagation target	County tree growing target (10 yrs)	County annual tree growing target
29	Nandi	74,471.41	26.16	115,000	40.4	171,406,440	17,140,644	27,589,349	2,758,935	38,046,850	3,804,685
30	Baringo	170,721.97	15.65	230,000	21.08	342,812,880	34,281,288	55,178,698	5,517,870	76,093,699	7,609,370
31	Laikipia	106,891.22	11.2	250,000	26.19	372,622,696	37,262,270	59,976,845	5,997,685	82,710,543	8,271,054
32	Nakuru	115,815.13	15.46	200,000	26.71	298,098,157	29,809,816	47,981,476	4,798,148	66,168,434	6,616,843
33	Narok	360,442.47	20.09	300,000	16.72	447,147,235	44,714,724	71,972,214	7,197,221	99,252,651	3,308,422
34	Kejiado	239,575.29	10.94	418,000	19.09	623,025,148	62,302,515	100,281,285	10,028,129	138,292,027	13,829,203
35	Kericho	60,796.89	23.23	110,000	42.04	163,953,986	16,395,399	26,389,812	2,638,981	36,392,639	3,639,264
36	Bomet	63,059.49	26.78	90,000	38.22	134,144,171	13,414,417	21,591,664	2,159,166	29,775,795	2,977,580
37	Kakamega	55,044.96	18.21	140,000	46.31	208,668,710	20,866,871	33,587,033	3,358,703	46,317,904	4,631,790
38	Vihiga	20,224.53	35.92	15,872	28.19	23,656,474	2,365,647	3,807,810	380,781	5,251,127	525,113
39	Bungoma	60,766.01	20.04	130,000	42.87	193,763,802	19,376,380	31,187,960	3,118,796	43,009,482	4,300,948
40	Busia	15,342.71	8.39	50,000	27.33	74,524,539	7,452,454	11,995,369	1,199,537	16,542,109	1,654,211
41	Siaya	18,676.37	5.27	100,000	28.23	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422
42	Kisumu	23,695.24	8.85	61,628	23.02	91,855,381	9,185,538	14,785,012	1,478,501	20,389,141	2,038,914
43	Homabay	49,518.36	10.4	100,000	21.01	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422
44	Migori	34,045.69	10.76	100,000	31.59	149,049,078	14,904,908	23,990,738	2,399,074	33,084,217	3,308,422
45	Kisii	35,142.35	26.6	50,000	37.85	74,524,539	7,452,454	11,995,369	1,199,537	16,542,109	1,654,211
46	Nyamira	20,498.30	22.75	35,000	38.85	52,167,177	5,216,718	8,396,758	839,676	11,579,476	1,157,948
47	Nairobi	9,730.40	13.77	6,000	8.49	8,942,945	894,294	1,439,444	143,944	1,985,053	198,505
Total		7,180,000.66	12.13	10,579,062.51	17.87	15,767,995,180	1,576,799,518	2,537,995,180	253,799,518	3,500,000,000	350,000,000

TREE GROWING TARGETS BY COUNTY

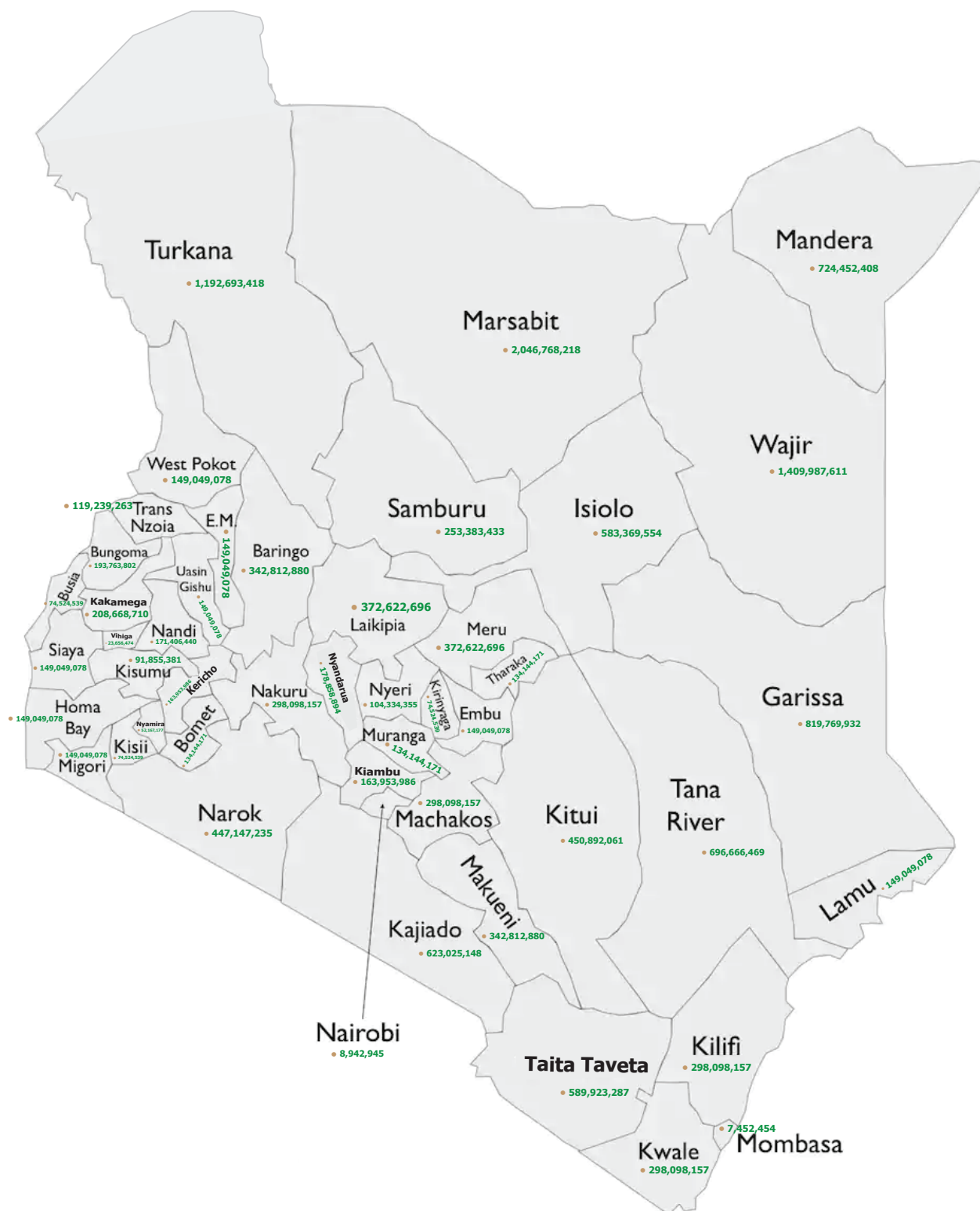


Plate 3.8: Targets of Tree Growing by County



CHAPTER 4: COORDINATION AND IMPLEMENTATION OF THE STRATEGY

4.1 Coordination and Implementation Flow

The coordination and implementation of this strategy is based on the principle of “everyone, everywhere, every time”. It has adopted a whole of government and a whole of society approach that calls for the participation and contribution of all Kenyans, from individuals to institutions, from public to private sectors, from urban to rural areas, and from young to old. This is key to ensuring effective coordination and implementation of the strategic interventions so as to realize the set targets and objectives of this strategy.

4.1.1 Decision Support Information flow

The implementation structure outlines a streamlined flow of decision-making and oversight, ensuring participatory and objective governance across national, county, and community levels. It allows seamless flow of information regarding decisions made from the highest-level cascading down to county governments and eventually reaching communities at the ward level. This approach ensures inclusivity and fairness in decision-making processes, aligning with the overarching strategy nationwide.

It leverages on Key Government implementation tools key being the Public Service framework, comprising Ministries, State Departments, and Agencies. Agencies who are spread across the various ecosystems established mechanisms to engage with communities at the ward level, through organized groups such as CFAs, Water User Groups, and Community Scouts among others. These entities serve as effective channels for information and decisions and for coordinating joint implementation efforts with communities. Further the strategy recognizes the vital role of National Government Administrative Officers (NGAOs) under the Ministry of Interior and Coordination of National Government, who serve as the Government’s first point of contact with the grassroots and will be involved in various aspects including seedlings production and distribution to exploit this proximity to communities for enhanced efficiency, decision making and information flow at implementation.

At the county level, committees at various tiers (County, Sub- County, and Ward) will ensure seamless and participatory interaction between county governments and communities. These committees serve as forums for proposing, decision making, approving, and implementing Inter governmental initiatives such as this strategy on landscape and ecosystems restoration among others.

4.1.2 Financial Decisions and Flow

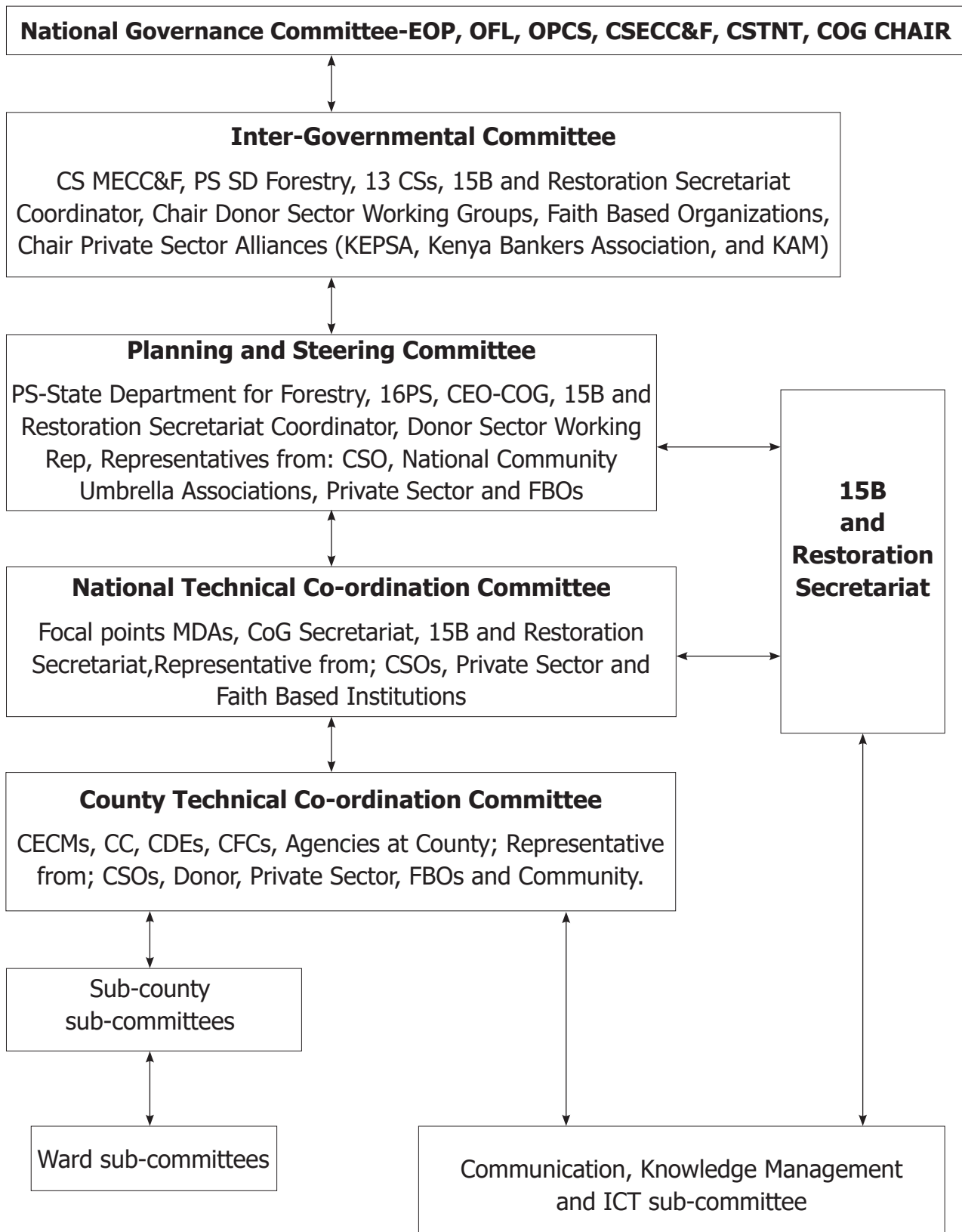
In Kenya, revenue sharing between the national government and counties is governed by the principles outlined in the Constitution of Kenya, particularly under Articles 202 to 207. The constitution mandates the equitable sharing of national revenue between the two levels of government. The national government retains a significant portion of the revenue collected, which it allocates to various functions. The Division of Revenue Act, passed annually, further stipulates the specific percentages and criteria for revenue allocation between the national government and counties. This structure has therefore taken factored inclusion of The National Treasury (TNT) at the highest level of the committees to enhance decision support and ease

of flow of finances from the national government to the grassroot. The constitution and the division of the revenue ensures to promote balanced development, enhance service delivery at the grassroots level, and foster fiscal responsibility and accountability both at the national and county levels.

It is in this regard that the coordination of this strategy is based on the following structure towards realization of the 15 Billion tree growing initiatives and ecosystem restoration.

1. The National Governance Committee
2. Inter-Governmental Committee
3. Planning and Steering Committee
4. 15B and Restoration Secretariat
5. National Technical Co-ordination Committee
6. County Technical Co-ordination Committee
7. Sub-county sub-committees
8. Ward sub-committees
9. Communication and Knowledge Management and Information Communication Technology Sub-Committee

Coordination framework for National Landscape and Ecosystem Restoration



Abbreviations:

EOP-Executive Office of the President, **OPCS**-Office of the Prime Cabinet Secretary, **OFL**-Office of the First Lady, **Agencies**-SAGAs, **CSECC&F**-Cabinet Secretary, Ministry of Environment, Climate Change and Forestry, **CSTNT**-Cabinet Secretary, The National Treasury, **COG**-Council of Governors, **PS**-Principal Secretary, **HOPS**-Head of Public Service, **ICT**-Information Communication and Technology, **KEPSA**-Kenya Private Sector Alliance, **KAM**-Kenya Association of Manufacturers, **CDEs**-County Director of Environment, **CECMs**-County Environment Committee Members, **CFCs**-County Forest Conservator, **CC**-County Commissioner

4.2 Composition and Terms of Reference for Committees and Secretariat

4.2.1. The National Governance Committee

This is the highest coordination committee that guides and provides a framework for implementation of presidential directives under which 15B tree growing targets and landscape and ecosystem restoration initiative were conceptualized. It also involves providing policy direction, resource allocation as well as receiving regular briefs on progress and status on the implementation of this strategy. The Office of the First Lady compliments and provides synergy towards achievement of the presidential directives. This office leverages on the national coordination that is embedded in the Ministry of Environment, Climate Change and Forestry.

The composition of this committee includes the following.

1. Executive office of the President
2. Head of Public Service
3. Office of the Prime Cabinet Secretary,
4. Cabinet Secretary, Ministry of Environment, Climate Change and Forestry
5. Cabinet Secretary, The National Treasury
6. Chair Council of Governors
7. Office of the First Lady

Operations of the committee:

- This Committee will be Chaired by the **Head of Public Service**.
- The Cabinet Secretary, Ministry of Environment, Climate Change and Forestry will be the **Secretary**.
- The Committee will be at liberty to coopt members from high level strategic partners to support in realization of set targets and resource mobilization.
- Meet semiannually.

The terms of reference for this Committee are as follows:

- i. Provide a coordination framework for the strategy;
- ii. Provide policy direction on the realization of set targets;
- iii. Ensure adequate Resource allocation for the implementation of the strategy;
- iv. Provide for a dedicated bank account for resource mobilization to implement the strategy domiciled at the State Department for Forestry;
- v. Guide on systematic flow of resources from the national government to county government and other relevant implementing entities;
- vi. Provide policy and political leadership;
- vii. Approve budgetary allocation and distribution from national government to counties;
- viii. Approve high level correspondences in regard to this strategy;
- ix. Create enabling environment for public private partnership and development partners engagements;
- x. Conduct and authorize periodic M&E; and
- xi. Any other duties assigned.

4.2.2. Inter-Governmental Committee

This committee links the national government and county government towards implementation of this strategy based on the Intergovernmental relations Act 2012. The Act establishes mechanisms for interconnected and intergovernmental resolution that includes land arrangements. This Committee consists of thirteen (13) Cabinet Secretaries drawn from the following ministries with critical mandates to achieve the goal of the strategy. This committee leverages on the Public Private Partnership Act of 2013 to draw further membership from the private sector and development partners to accelerate realization of the strategic objectives. They include the following:

1. Ministry of Environment, Climate Change and Forestry;
2. Ministry of Public Service Performance and Delivery Management;
3. Ministry of Agriculture and Livestock Development;
4. Ministry of Education;
5. Ministry of Tourism and Wildlife;
6. Ministry of Roads and Transport;
7. Ministry of Defence;
8. Ministry East African Community (EAC), The ASALs and Regional Development;
9. Ministry of Mining, Blue Economy and Maritime Affairs;
10. Ministry of Interior and National Administration;
11. Ministry of Energy and Petroleum;
12. Ministry of Water Sanitation and Irrigation;
13. Ministry of land Public works Housing and Urban Development;
14. Chair Council of Governors (COG);
15. Chair Environment and Climate Change Committee of the COG;
16. Chair Donor Sector Working Groups; and
17. Chair Private Sector Alliances - KEPSA, Kenya Bankers Association, Faith Based Organizations and KAM.

Operations of the committee:

- This Committee will be **Chaired by the Cabinet Secretary, Ministry of Environment, Climate Change and Forestry;**
- The **Principal Secretary**, State Department for Forestry will be the **Secretary;**
- The Committee will be at liberty to coopt members from high level strategic partners to support in realization of set targets and resource mobilization; and
- Meet quarterly.

The terms of reference for this Committee are as follows:

- i. Report to the National Governance Committee on the progress and achievement;
- ii. Provide policy and political leadership;
- iii. Initiate and lead resource mobilization to support implementation of the strategy;
- iv. Approve high level correspondences in regard to this strategy;
- v. Approve budgets and expenditure;

- vi. Dispute resolution as per the Intergovernmental relations Act 2012;
- vii. Promote public private partnership initiatives towards implementation of this strategy;
- viii. Conduct and authorize periodic M&E;
- ix. Profile 15 Billion Tree Growing Initiative and landscape and ecosystem restoration at international fora; and
- x. Any other duties assigned by the National Governance Committee.

4.2.3 Planning and Steering Committee

This is the planning and steering committee on the implementation of this strategy. It coordinates the key functions of seeds, seedling production and tree growing, landscape and restoration targets. This Committee consists of sixteen (16) Principal Secretaries from the State Departments, Chief Executive Officer of COG and three members co-opted from Donor Sector Working Groups, Private Sector Alliances, National Community Umbrella Associations and Faith Based Organizations as follows:

1. State Department for Forestry;
2. State Department for Environment and Climate Change;
3. State Department for Basic Education;
4. State Department for Technical, Vocational Education and Training (TVET);
5. State Department for Higher Education and Research;
6. State Department for Internal Security and National Administration;
7. State Department for Correctional Services;
8. Kenya Defence Forces;
9. State Department for the ASALs and Regional Development;
10. State Department for Tourism and Wildlife;
11. State Department for Performance and Delivery Management;
12. State Department for Crop Development;
13. State Department for Economic Planning;
14. State Department for Roads;
15. State Department for Transport; and
16. State Department for Housing and Urban Development.

Operations of the committee:

- This Committee will be **Chaired** by **Principal Secretary, State Department for Forestry**;
- The **Coordinator** of 15B and Restoration Secretariat will be the **Secretary**;
- The Committee will be at liberty to coopt members from high level strategic partners to support in realization of set targets and resource mobilization; and
- Meet on a monthly basis.

The terms of reference for this committee are as follows:

- i. Develop work plans and Budgets;
- ii. Seek approval and resource allocation for the workplans and budgets;
- iii. Initiate resource mobilization and fundraising for the strategy;

- iv. Map out and develop a fundraising strategy for execution;
- v. Give the necessary approvals, decisions and technical guidance on implementation;
- vi. Design and operationalize a dispute resolution mechanism;
- vii. Authorize and Conduct periodic M&E;
- viii. Report to the Inter-Governmental Committee on the progress, achievement;
- ix. Provide resources to the Secretariat to coordinate the strategy; and
- x. Undertake any other duties from time to time as directed by the Inter-governmental committee.

4.2.4. The National Technical Co-ordination Committee

This committee is responsible for coordinating implementation of set targets on seed and seedling production, tree growing, landscape and ecosystem restoration initiatives in the MDAs, County Governments Private sector, Civil Society Organizations and Faith Based Institutions. The MDAs and all the other entities nominate national focal points who will constitute the membership of this committee. Considering that the set targets are cascaded to the ministries, State Department, Agencies, County Governments and to Private sector, then these focal points will coordinate implementation and reporting of all set targets within their structure of operations. It's recommended that the national focal points will also operationalize formation of sub-committees based on the composition of their MDAs and organizations to promote ownership, efficiency, accountability and reporting on set targets. This internal coordination structure should be documented and deposited to the secretariat as an instrument for governance and Monitoring and Evaluation. Members will be as follows; Focal points Ministries, State Departments and Agencies (MDAs), CoG Secretariat, 15B and restoration secretariat and Representatives from: CSO, National Community Umbrella Associations, Private Sector and Faith Based Institutions.

Operations of the committee:

- This Committee will be **Chaired** by Coordinator of **15B and restoration Secretariat**, State Department for Forestry;
- The **15B and Restoration Secretariat** will provide **secretarial** services;
- The Committee will be at liberty to coopt members from high level strategic partners to support in realization of set targets and resource mobilization; and
- Meet on a monthly basis.

The terms of reference for this committee are as follows:

- i. Develop a coordination framework and ensure its operationalization in meeting the set targets within MDAs, County Governments and Private sector;
- ii. Coordinate the implementation of work plans on set targets within MDAs, County Governments and Private sector;
- iii. Coordinate planning, and reporting meetings on set targets within MDAs, County Governments and Private sector;
- iv. Present progress reports on from MDAs, County Governments and Private sector to the technical committee;
- v. Advise on inclusion of budgets to meet set targets during budget preparations within MDASs, County Government and Private sector;

- vi. Explore and recommend pathways of engaging various stakeholders from grass root level to the national level in meeting the set targets;
- vii. Participate in the tree growing and ecosystem restoration campaigns;
- viii. Recommend to secretariat on redesign measures where necessary in coordinating the achievement of set targets and resource mobilization; and
- ix. Authorize and conduct periodic M&E.

4.2.5. The County Technical Coordination Committees

This committee is responsible for coordinating implementation of set targets on seedling production and tree growing, landscape and ecosystem restoration initiatives in each of the 47 Counties. Each of the 47 Counties will nominate a County focal point within the existing County Environment Committees.

Considering that the set targets are cascaded to the Counties, Sub-counties and wards then these focal points will coordinate implementation and reporting of all set targets within sub counties and wards.

It's recommended that County focal focal points will also operationalize formation of Subcounty and Ward Sub-committees to promote ownership, efficiency, accountability and reporting on set targets. This County coordination structure should be documented and deposited to the CoG Secretariat and 15B Restoration secretariat as an instrument for governance, monitoring, and evaluation.

It shall constitute County Environment Committee Members, County Commissioner, County Director of Environment, County Forest Conservator, representatives from CSO, donor sector working group, Community representatives, private sector and FBO.

Operations of the committee:

- This Committee will be **Chaired** by **Chair of the County Environment Committee;**
- The **County Forest Conservator** will be the secretary;
- The Committee will be at liberty to coopt members from high level strategic partners to support in realization of set targets and resource mobilization; and
- Meet on a monthly basis.

The terms of reference for this committee are as follows:

- i. Develop a coordination framework and ensure its operationalization in County, Sub-Counties and Wards;
- ii. Liaise and collaborate with the county commissioner on restoration;
- iii. Coordinate the implementation of work plans on set targets in County, Sub-Counties and Wards;
- iv. Develop work plans and Budgets;
- v. Coordinate planning, and reporting meetings on set targets in County, Sub-Counties and Wards;
- vi. Liaise with Chiefs and Assistant Chiefs in mobilizing community for restoration interventions.
- vii. Present progress reports from in County, Sub-Counties and Wards;
- viii. Advise on inclusion of budgets to meet set targets during budget preparations in County, Sub-Counties and Wards;

- ix. Explore and recommend pathways of engaging various stakeholders from grass root level to the national level in meeting the set targets;
- x. Participate in the tree growing and ecosystem restoration campaigns;
- xi. Recommend to county technical committee on redesign measures where necessary in coordinating the achievement of set targets and resource mobilization; and
- xii. Authorize and conduct periodic M&E.

4.2.6. Communication, Knowledge Management and ICT Sub-Committee

This Committee will be responsible for raising the profile of the tree growing, landscape and ecosystem restoration initiatives in line with the strategic objectives. It will be domiciled at the State Department for Forestry and membership drawn from communication, knowledge management and ICT technical staff of all MDAs, Council of Governors Secretariat, Private Sector, Faith Based organizations and CSOs.

Operations of the Sub-committee:

- This Sub-Committee will be **Chaired** by the **Head of Public Communication in the Ministry of Environment, Climate Change and Forestry;**
- The **15B and Restoration Secretariat** will provide **secretarial** services;
- The Committee will be at liberty to coopt members from other levels; and
- Meet on a quarterly basis.

The terms of reference for this Sub-committee are as follows:

- i. Design and recommend targeted campaigns in promoting tree growing, landscape and ecosystem restoration;
- ii. Design and disseminated various communication and knowledge materials;
- iii. Engage strategic partners on communication and media campaigns;
- iv. Participate in the restoration campaigns;
- v. Design and recommend robust and ICT based innovative ways of promoting restoration campaigns;
- vi. Design and implement decisions support systems on restoration;
- vii. Build capacity of stakeholders on Jaza Miti App and other ICT based technologies for restoration;
- viii. Revamp the Jaza miti for efficiency tracking and reporting of restoration activities; and
- ix. Develop dashboards for communication.

4.2.7. 15B and Restoration Secretariat

This is the technical and operational arm mandated for coordinating the implementation of this strategy. The 15B and Restoration Secretariat will provide day to day support to all the structures and committees for implementation.

It will also ensure availability of seedlings for planting as per the set targets.

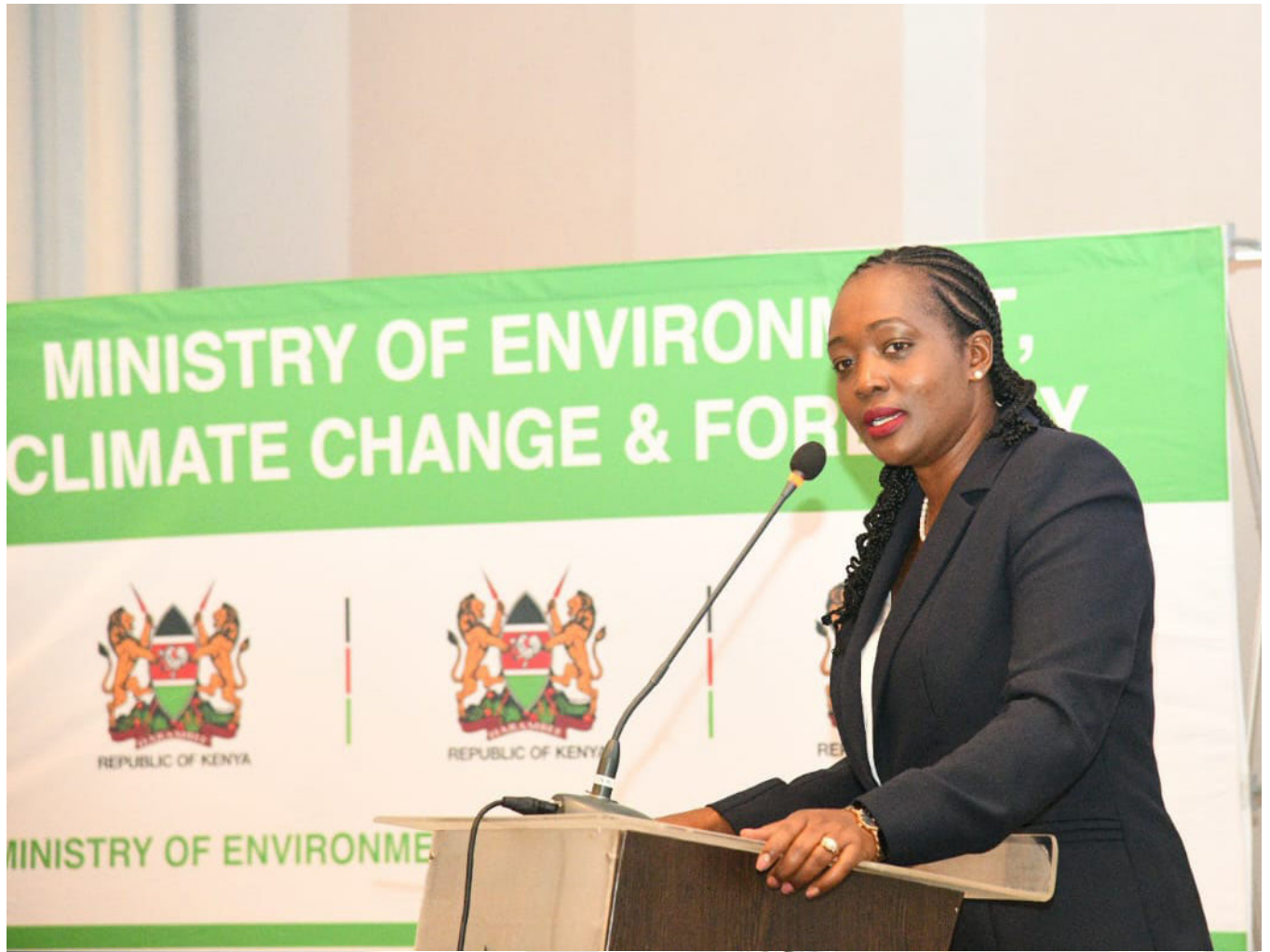
Operations of the 15B and Restoration Secretariat:

- The Secretariat will be headed by the Coordinator who will be reporting to the Principal Secretary, State Department for Forestry;

- The MECC&F will recruit or officially draw Secretariat members from Ministries, Departments and Agencies;
- The membership of the Secretariat will consist of maximum of 15 full time staff based at MECC&F, State Department for Forestry;
- The MECC&F, State Department for Forestry will set aside a dedicated budget line/ vote to facilitate the operations of the Secretariat; and
- The life of the Secretariat will be in line with implementation period of the strategy.

The terms of reference for 15B and restoration Secretariat:

- i. Coordinate and oversee effective implementation;
- ii. Undertake day to day operations, correspondences and feedback;
- iii. Consult, cooperate and coordinate stakeholders;
- iv. Organize and hold scheduled meetings for committees;
- v. Advise CS-MECC&F and PS on key issues regarding implementation of strategy;
- vi. Develop and advise on best bet catalytic interventions to enhance efficiency;
- vii. Undertake resource mobilization and fundraising;
- viii. Generate and share periodical reports on the progress and achievements;
- ix. Conduct capacity building and talent acquisition for stakeholders;
- x. Create awareness and undertake sensitization campaigns;
- xi. Promote public-private partnership in the implementation;
- xii. Design incentive framework for tree growing, landscape and ecosystem restoration initiatives;
- xiii. Strengthen linkages among institutions for better governance and management of landscape and ecosystems restored;
- xiv. Prepare annual work plans and budgets;
- xv. Support operations of the various committees;
- xvi. Commission studies relevant to implementation of this strategy;
- xvii. Ensure effective decisions and information flow between committees;
- xviii. Act as the central data repository;
- xix. Ensure effective communication, knowledge management and learning;
- xx. Authorize and conduct periodic M&E;
- xxi. Participate in relevant national, regional and international meetings; and
- xxii. Undertake any other duties from time to time as directed.



CHAPTER 5: RESOURCE MOBILIZATION FOR IMPLEMENTATION OF THE STRATEGY

5.0 Introduction

The implementation of this strategy requires significant mobilization of resources to achieve growing of 15 billion trees, landscape and ecosystem restoration initiatives to restore 10.6 million ha. The resources will be primarily used to achieve the set objectives, planning, coordination, administration, capital investments, communication and publicity. The resources are expected to be mobilized from national government, county governments, development partners and non-government actors. This will also require stakeholders' collaboration at all levels for implementing the strategy, including decision-making. These stakeholders include policymakers, technical staff, communities, the private sector, academia, Civil Society Organisation (CSOs), Community Based Organisation (CBOs) and Faith Based Organisation (FBOs).

5.1 Resource Mobilization

This involves sourcing financial resources for tree growing initiatives towards ecosystem restoration activities. Relevant national MDAs and counties are expected to explore global, regional, national and county financial options to meet the strategy budget. This shall be done from partners, community contributions, the private sector, government allocations, and other financial mechanisms, e.g. Public Private Partnerships (PPPs). It also entails in-kind contributions such as tools, labour and pro bono professional services.

5.2 Resource Mobilization at National and County Governments

National and County governments will employ different arrangements of the sectoral Departments that will guide their allocation of resources to implement this strategy. Both levels of government will also fundraise from bilateral and multilateral development partners.

The national and county governments are expected to enforce legislation levying environmental taxes that will be used to restore ecosystems, especially from polluting industries, agrochemical suppliers, timber companies, water packaging companies, and mining companies.

5.3 Resource Mobilization from Development Partners

Development partners with key strategic focus on seed and seedling production, tree growing, landscape and ecosystem restoration initiatives are expected to support this strategy. These partners include the World Bank, European Union, GIZ, UNDP, UK AID, and Dutch AID, among others. The CS Ministry of Environment, Climate Change and Forestry, in collaboration with the Prime Cabinet Secretary in charge of foreign affairs, in partnership with CS Treasury, are expected to engage development partners to seek their financial commitment to implementing this strategy.

5.4 Tapping on Global Funds

Opportunities exist within global funds such as the Land Neutrality Degradation Fund, Green Climate Fund, the Global Environment Facility (GEF), Climate Investment Funds (CIF), The National Appropriate Mitigation Actions (NAMA), AFR100 framework, and the Adaptation Fund, among others. Such funds are expected to be mobilized from global facilities to support the implementation of this strategy.

5.5 Resources from Private Sector Capital, Diaspora and Foundations

The institutional framework for implementing this strategy is expected to design mechanisms for engagement with the private sector, foundations, diaspora communities, and religious institutions to support this strategy. For instance, through KAM and KEPSA, industrial stakeholders will control point source pollution and landscape pollution to institute corporate social responsibility and environmental programs for ecosystem restoration and reduction of degradation.

5.6 Exploring Innovative Carbon Financing Mechanisms

This strategy is expected to tap into Carbon Trading, Green Bonds and Payment for Ecosystem Services. This will be done through capacity building of SAGAs and site restoration committees, which will collect the carbon data and initiate the carbon trading schemes for specific sites.

5.7 Estimated Budget

The total budget for implementation of this Strategy is **KES 1.294 Trillion**. This is to be implemented for a period of 10 Years. The budget anticipates a midterm review after the 5th year which could influence the budget allocations of the rest 5 years depending on the review findings.

The following will be the benefits of investing in the proposed budget:

1. Create 3.5 Million direct green jobs in tree nurseries, distribution and planting of seedlings, management and watering as well as other related sectors that will support livelihoods, through sustainable nature-based enterprises;
2. Increase the national landscape value by KES 75 trillion assuming total value of a mature tree is as low as KES 5,000;
3. Increase of tree cover to 30% will double current GDP contribution by forestry to USD 730 million (7.2%) annually; and
4. Growing of 15B trees will contribute KES 40B to other productive sectors of the economy, such as; agriculture, fisheries, livestock, energy, wildlife, water, tourism, recreation, trade and industry.

Table 5.1: Estimated budget for implementation of the strategy

		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)													
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032			
SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands	Outputs	Strategic Actions													
	1.1.1.1.	Establish and maintain 400 Ha of seed sources.	4.00	4.00	3.17	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.17	
	1,000 tons	Refurbish existing seeds processing facilities.													
	of tree seeds collected,	Construct and equip 18 seed centres.													
	processed and distributed	Recruit staff for seed centres.													
		Acquire cold storage for seeds.													
		Establish tree breeding programs.													
		Construct a National Tree Seed Gene Bank													
		Facilitate collection, processing and distribution of 1,000 tons of seeds.													
		ICT Infrastructure and maintenance to connect seed centres.													
1.1.1.2.	Map infrastructural gaps for MDAs supporting for seedling production.	10.00	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	
15 Billion	Refurbish and expand the existing 3,000 tree Nurseries.														
seedlings produced	Map and certify tree nurseries.														
	Construct 500 new Tree Nurseries.														
	Drill and equip boreholes in 200 Tree Nurseries in areas of need.														
	Improve water harvesting and reticulation system for tree nurseries.														
	Provide technical support to MDAs, CSOs and private sector with seedling production target.														
		93.23	10.00	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
1.1.3. 5,190,556 Ha of degraded landscapes in ASALS, rehabilitated.	Outputs													
	Strategic Actions													
	Develop partnership framework between State Department Forestry and the MDAs on seedlings production													
	Establish partnership framework contractual seedlings production.													
	Recruit 5,000 green army to enhance production capacity.													
	Develop guidelines for establishing model tree nurseries.													
	Procure and distribute 16 Billion biodegradable tubes													
	Identify and map out degraded rangelands.													
	Acquire high resolution satellite images/ data for mapping rangelands.													
	Map areas with invasive species.													
Support implements invasive species management plans.														
Support development of holistic grazing plans'														
Rehabilitate and restore 800,000 Ha of degraded areas in protected game reserves and national parks.														
Rehabilitate 1,200,000 Ha of degraded areas in community, group and private conservancies.														
Reseed grasslands.														
	128.91	16.17	16.23	15.12	14.23	13.12	12.34	11.13	10.44	10.12	10.01			

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	Strategic Actions													
	Promote sustainable natural regeneration initiatives (enclosure, aided natural regeneration and fencing).													
	Establish 1,557,167 Ha of fruit trees.													
	Support tree growing initiatives for restoration													
	Establish 200,000 Ha of dryland forestry plantations on community lands (including Gums and Resins, <i>Melia volkensii</i> , <i>Acacia tortilis</i> , <i>Acacia seyal</i> , sandal wood)													
	Support 2000 NBEs (bio-enterprises development, e.g. beekeeping, gums & resins production, game farming, wildlife conservancies)													
	Put up 1,000 water harvesting and reticulation systems.													
	Desilting of dams and water pans													
	Pilot seedball and broadcasting technologies for restoring rangelands.													
	1.1.4. 350,507 Ha of degraded public natural forests and water towers rehabilitated and protect 2.6M hectares of natural forests.		62.95	10.40	9.45	8.10	6.98	5.34	4.34	4.23	4.76	4.23	5.12	

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	Strategic Actions													
	Recruit 2000 more rangers and foresters.													
	Maintain 5,240 Km of fire breaks.													
	Support tree growing initiatives for restoration													
	Acquire appropriate seeds for broadcasting.													
	Pilot seed, seedball and broadcasting technologies.													
	Provide advisory services for quality production of seedlings.													
1.1.5.														
54,000 Ha of public forest plantations restocked and sustainably manage stocked plantations.														
Identify and map out plantations for restocking.	25.98	3.12	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54
Acquire high resolution satellite images/ data for forest plantations.														
Review and update forest plantations management plans.														
Establish 54,000 new plantation in the un-stocked areas														
Maintain 8,236 Km of forest roads														
Facilitate application of silvicultural treatments (pruning and thinning)														
Establish public private partnerships and concession models in forest plantations.														
1.1.6.														
3,000,000 Ha of agroforestry established														
Identify and map out cropland for agroforestry areas.	115.91	14.12	13.11	13.24	12.32	11.54	10.65	10.32	10.76	9.87	9.98			
Acquire high resolution satellite images/ data for suitable sites for agroforestry practices.														
Mapped land on invasive species														

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	Strategic Actions													
	Support preparation and implementation of county forestry development programs.													
	Develop incentives for farm and private forest development.													
	Implement 4 renewable/green energy options.													
	Implement agroforestry strategy.													
	Support tree growing initiatives in crop lands.													
	Facilitate control and management of invasive species.													
	Promote sustainable land management technologies and practices.													
	Enhance capacity on soil and water management.													
	Enforce Implementation of the Agriculture (Farm Forestry) Rules, 2009.													
	Conduct public participation and gazette the draft Private Forest Registration Rules.		3.42	3.42	2.56	2.98	2.12	1.98	2.00	1.50	1.30	2.10		
	1.1.7. 750,000 Ha of private commercial forest plantations established		23.38											
	Establish and Strengthen 10 Private Tree Growers Associations													
Technical support to the Tree Growers Associations and farmers.														
Provide incentives to commercial private forest plantations,														
Build capacity on commercial forestry dynamics.														

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	Strategic Actions													
	Support commercial forestry establishment Support silvicultural and forest health extension initiatives.													
1.1.8. 150,000 Ha of Bamboo established	Identify and map out sites for establishment of bamboo woodlots and plantations.	27.01	4.11	3.56	3.89	3.78	2.54	2.23	2.12	2.11	1.11	1.56		
	Acquire high resolution satellite images/data for suitable sites for establishment of bamboo woodlots and plantations.													
	Scale technology and innovations in production of bamboo seedlings.													
	Strengthen bamboo association of Kenya.													
	Support bamboo growing initiatives .													
	Enhance knowledge and research on bamboo manufacturing technology.													
	Support cottage value addition towards creation of bamboo enterprises													
	Identify and map out degraded water towers, wetlands and riparian areas outside gazetted forests.	45.54	7.12	5.12	5.11	5.23	4.89	3.67	3.74	3.54	3.34	3.78		
	Acquire high resolution satellite images/data for mapping degraded wetland ecosystem outside gazetted ones.													
	Establish nationwide knowledge management system on wetlands.													
Support protection and conservation of wetlands on community and private lands.														

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	Strategic Actions													
	Fence 2000km of selected wetlands and springs rehabilitated gazetted forests and water towers.													
	Develop wetlands training modules.													
	Hold national awareness and capacity building fora on sustainable management of wetland.													
	Support tree growing initiatives													
	Develop incentives for sustainable management for wetlands.													
	Support nature-based solutions to incentivize wetlands and riparian protection.													
	Conduct regular nationwide monitoring and reporting.													
	Develop and strengthen enforcement mechanisms for wetlands protection													
	Mapping and identification of targeted areas.													
1.1.10. 450,000 Ha of infrastructure (Roads, railway lines, dams) greened by growing trees	Acquire high resolution satellite images/ data for mapping infrastructure.													
	Enforce EMCA 2019 on implementation of ES) Reports on capital projects.													
	Implementation of physical planning rules that require 5% of the residential premises be put under tree cover with appropriate tree species.													
	Build technical capacity on tree growing along selected infrastructures.													
		41.58	8.23	7.23	6.34	5.43	4.23	3.23	2.21	1.89	1.56	1.23		

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)											
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Outputs	Strategic Actions	Support tree growing initiatives.											
		Identify and map out appropriate areas for growing fruit trees and woodlots.											
		Acquire high resolution satellite images/ data for mapping institutions to grow fruit trees and woodlots.											
		Support establishment of 5,000 new tree nurseries in various wards											
		Fence 2,000Km for protection of schools											
		Establish woodlots and fruit trees.											
		Provide technical support and awareness.											
		Strengthen coordination of learning institutions in greening initiatives.											
		Support tree planting and management.											
		Environmental Conservation Clubs formed and strengthened in schools, colleges and universities.											
1.1.11. 70,000 Ha of fruit trees and woodlots in schools, colleges, universities and other institutions grown		5.21	4.23	4.23	3.12	3.23	3.23	2.32	1.89	1.67	1.23		
1.1.12. 50,000 Ha of urban forests, arboretum, green spaces & road-side plantings in wards & sub-counties established		54.07	9.45	7.45	6.45	5.34	6.11	5.32	4.11	3.51	4.22	2.11	
Identify and map out appropriate areas for growing establishing urban forests, arboretum, green spaces.													
Acquire high resolution satellite images/ data for mapping targeted areas for greening.													
Implement the physical planning rules that require 5% of all residential premises are covered by appropriate tree species.													
Support tree growing initiatives.													
Provide technical support and capacity.													

SO1: Increase national tree cover by 17.8% through selected ecosystem interventions on public, community, and private lands		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
1.1.1.13. 14,000 Ha of degraded mangrove rehabilitated, and marine ecosystem restored	Strategic Actions													
	Promote knowledge exchange programs													
	Identify and map out degraded mangrove ecosystem.	12.90	11.12	9.23	9.56	9.23	9.43	8.43	7.11	6.23	5.11			
	Acquire high resolution satellite images/ data for mapping degraded mangrove ecosystem.													
	Support community livelihood improvement for the blue economy.													
	Support communities to develop mangrove tree nurseries.													
	Rehabilitate the degraded 14,000 Ha.													
	Collection, transplanting of seagrass seedlings/shoots)													
	Zonation for seagrass natural regeneration													
	Undertake Hydrological restoration.													
	Establish underwater Coral nurseries (colony)													
	Transplanting of established coral colonies													
	Zonation of designated area for coral natural regeneration													
Recruit 1000 community scouts and rangers to increase surveillance.														
Promote agroforestry activities along coastal terrestrial belt.														
SUB TOTAL OBJECTIVE 1		735.59												

SO2: Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)										
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Outputs	Total Budget	131.59	15.34	15.23	13.56	10.45	14.34	12.67	10.34	12.11	12.23	15.32
2.1.1. Inclusive sustainable value chains enterprises identified and promoted across all ecosystems.	Identify sustainable nature-based enterprises (fruit trees, bee farms, foders/hay, mushroom, gums and resins, aloe farms. wild fruits, berries and herbs) for communities living adjacent to ecosystems.											
	Support eco-tourism enterprises.											
	Promote privatization of nurseries enterprises.											
	Promote circular economy enterprises.											
	Promote sustainable charcoal enterprises.											
	Develop appropriate value chain for the identified nature-based enterprises.											
	Train communities on nature-based enterprises opportunities.											
	Develop and support carbon credit schemes for restoration of selected ecosystems.											
	Conduct public participation and gazette the draft Charcoal Regulations.											
	Sensitize law enforcement agencies on implementation of charcoal regulations.											
	Capacity build 300 charcoal producers associations (CPAs).											
	Map and promote utilization invasive species for charcoal production.											

SO2: Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	Total Budget													
	Develop and implement 200 charcoal production and management plans (CPMPs)													
	Support 500 youth groups in briquette charcoal production enterprise													
	Increase participation in national and international fora for promoting nature-based enterprises													
2.1.2. Market and market access for nature-based enterprise chain products identified and promoted	Undertake market analysis of the identified nature-based enterprises across all selected ecosystems.	30.11	5.72	4.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71
	Organize communities into nature-based enterprise groups and associations.													
	Identify and upscale best nature-based enterprise value chain products to promising ecosystems.													
	Support value addition initiatives.													
	Establish and strengthen 100 marketing cooperatives.													
2.1.3. Sustainable land and soil conservation practices promoted	Design ecosystem land use based on County Spatial Plans.	51.69	9.23	8.23	7.11	6.23	5.12	4.32	3.23	3.56	2.43	2.23		
	Establish the level and type of soil erosion in ecosystems.													
	Establish appropriate soil erosion control structures.													
	Promote soil health interventions (crop rotation, mulching, fodder and use of inorganic fertilizers).													

SO2: Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)																						
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032												
Outputs	Total Budget																							
	Promote climate smart agriculture.																							
	Support efficient irrigation systems.																							
	Integrate land use conflict management mechanisms in ecosystem-based restoration.																							
	Fill up and restore mines and quarries.																							
	Promote adoption of 6 renewable energy options.																							
	Establish water harvesting and reticulation systems to collect run off.																							
	Establish water quality and quantity monitoring systems along water catchment zones and wetlands.																							
	Enforce the existing water quality and quantity monitoring systems.																							
	Maintenance of the soil and water conservation structure.																							
2.1.4.		15.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50		
Reduced and controlled pollution	Map out pollution sources from selected ecosystems. Establish appropriate waste management structures. Strengthen enforcement mechanisms on pollution prevention. Create awareness on pollution and control.																							
SUB TOTAL OBJECTIVE 2		228.39																						

S03: Improve landscape and ecosystem governance by strengthening policy, regulatory and institutional frameworks		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)										
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
3.1.1. Ecosystem restoration policies, regulatory frameworks developed and implemented.	2026	23.51	3.67	3.54	3.00	2.34	2.98	1.78	1.87	1.56	1.43	1.34
	Develop and review ecosystem restoration policies, regulatory frameworks and management plans. Support implementation of ecosystem restoration policies, regulatory frameworks and management plans. Conduct strategic environmental impact assessments for ecosystem-wide projects. Gazettement of all ecosystem restoration and management plans Establish governance committees to steer implementation of the restoration and management plans. Support enforcement of ecosystem restoration policies, regulatory frameworks, and management plans.											
3.1.2. Establish and operationalize the 15b and restoration secretariat.	2026	12.65	2.15	2.00	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Recruit and acquire staff for secretariat to coordinate ecosystem restoration. Develop and operationalize organizational and salary structure for the secretariat. Implement remuneration and allowances to facilitate the secretariat. Streamline and mainstream the performance contracting process for the secretariat. Support acquisition of office and operational equipment and infrastructure.											

S03: Improve landscape and ecosystem governance by strengthening policy, regulatory and institutional frameworks		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	2026													
	Conduct capacity building training on various ecosystems and landscape restoration.													
	Support coordination of the strategy implementation.													
	Support monitoring activities for the strategy.													
	Acquisition of 10 vehicles for coordination.													
	Participate in national and international for a on ecosystem restoration.													
	3.1.3.		1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
	Committees for coordination of landscape and ecosystem restoration strategy strengthened		15.10											
Build capacity for various committees on the implementation of the strategy.														
Facilitate committees in the coordination of the strategy.														
Conduct periodic monitoring and evaluation missions.														
Undertake benchmarking on best practices on landscape and ecosystem restoration.														
Promote public private linkages on ecosystem restorations.														
Support resource mobilization activities														
SUB TOTAL OBJECTIVE 3		51.26												

TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
SO4: Promote sustainable financing mechanisms and private sector investment for restoration of degraded landscapes and ecosystems		2028	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Outputs		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
4.1.1. Financial resource mobilization initiatives for restoration of ecosystems identified and implemented	Conduct capacity needs assessment on resource mobilization at national, county and non-government actors.	25.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
	Enhance capacity on resource mobilization and proposal development.											
	Support stakeholders to develop a bankable investment projects and business plans.											
	Promote community-based innovative financing mechanisms to support ecosystem restoration.											
	Advocate for development of a public-private partnership (PPP) framework on ecosystem restoration financing.											
	Advocate for additional budgetary allocations by national and county governments towards ecosystem restoration.											
	Promote linkages to optimize bilateral and multilateral funding opportunities.											
	Develop and strengthen forest conservation fund and other funds.											
	Develop and strengthen fund structure and governance procedures.											
	Strengthen existing governance structures for 15B resources mobilization and disbursement.											
Advocate and champion the use of existing funding schemes.												
4.1.2. Restoration fund schemes developed and strengthened		10.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SUB TOTAL OBJECTIVE 4		35.00										

SO5: Strengthen capacity, research, monitoring, evaluation, and knowledge management for the implementation of the strategy.		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)											
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
5.1.1. Capacity and skills of stakeholders built.	Strategic Actions												
	Undertake capacity needs assessment among stakeholders. Develop training modules and programmes based on identified capacity gaps. Undertake training for trainer of trainers. Strengthen traditional institutions in capacity building for ecosystems. Support short and long-term courses Improve the country human development index on restoration through postgraduate trainings	3.45	3.23	3.12	2.98	2.50	2.25	2.11	2.00	1.98	1.80		
5.1.2. Institutional capacity for implementation of the strategy strengthened	Recruit and capacity build 5,000 green army. Build 21 ecosystem-based resource centres. Procure 50 vehicles for institutions implementing the strategy. Construct rangers and forester facilities. Employ other staff Strengthen Jaza miti App and other national monitoring platforms for use. Enhance capacity of communities on use of Jaza miti app	15.23	13.23	13.00	12.98	12.56	12.40	11.23	10.50	9.45	8.34		
		118.92											

S05: Strengthen capacity, research, monitoring, evaluation, and knowledge management for the implementation of the strategy.		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
5.1.3. National tree and ecosystem restoration campaigns conducted.	Strategic Actions													
	Support annual national and county level tree planting campaign launches.	4.11	3.90	3.51	3.00	2.89	2.78	2.51	2.34	2.23	2.00			
	Conduct monitoring and evaluation on the tree landscape and restoration program.													
	Develop and implement a national award mechanism on tree growing.													
	Promote national and international tree growing ecosystem restoration events.													
	Support participation in relevant forums on rehabilitation and restoration.													
	Support publicity and visibility of green holiday activities and other national tree growing events													
	5.1.4. Studies on ecosystem restoration undertaken	6.15	0.91	0.81	0.72	0.62	0.54	0.53	0.52	0.51	0.50	0.49		
	Conduct studies on:													
	Quantification of emissions reductions from ecosystems restored.													
Best ecosystem-based practices for climate change mitigation and adaptation														
Viability of emission reduction practices to aid development of carbon offset projects														
Seed phenology														
Market systems of ecosystem based products.														
Invasive species and control														
Identify and document ecosystem restoration technology gaps.														

SO5: Strengthen capacity, research, monitoring, evaluation, and knowledge management for the implementation of the strategy.		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Outputs	Strategic Actions													
	Study on use of hydrogels for tree nurseries.													
5.1.5. Scale up adoption of restoration technologies	Demonstrate successful ecosystem-based mitigation and adaptation practices across landscapes.	11.08	1.30	1.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Support adoption of emerging technology and innovations for ecosystem restoration.													
	Support technology partnerships and networks on ecosystem restoration.													
	Enhance north-south and south-south cooperation on ecosystem restoration.													
	Strengthen research innovations and technology for surveillance.													
5.1.6. Monitoring and Evaluation landscape and ecosystem strategy strengthened	Develop a national monitoring, evaluation, reporting and learning framework for tree growing and ecosystem restoration.	20.54	3.11	2.50	1.99	1.98	1.97	1.96	1.95	1.93	1.65	1.50		
	Improve efficiency and robustness of Jaza Miti App.													
	Develop a communication and digitization strategy to facilitate information and knowledge sharing across all stakeholders.													
	Evaluate, select and implement technologies that support digitization, communication and knowledge management.													

S05: Strengthen capacity, research, monitoring, evaluation, and knowledge management for the implementation of the strategy.		TOTAL & ANNUAL BUDGET PER OUTPUT IN KES (BILLIONS)												
		TOTAL BUDGET	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
5.1.7. Periodic Monitoring and Evaluation on tree growing and ecosystem restoration undertaken	Strategic Actions													
	Undertake planning fora with stakeholders	20.33	2.11	2.11	2.11	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	Conduct quarterly monitoring and evaluation of seed and seedlings production.													
	Hold monitoring and evaluation, meetings write shops, workshops and conferences.													
	Conduct mid and end term evaluations for the strategy.													
5.1.8. Landscape and Ecosystem knowledge acquired and managed	Strategic Actions	12.05	1.72	1.51	2.25	2.25	1.82	1.00	0.50	0.50	0.50	0.50	0.50	
	Integrate 15B and ecosystem restoration knowledge and information into a central repository portal.													
	Publications													
	Reports generation													
	Update website and knowledge repository.													
	Participation in meetings, workshops, conferences, conventions and treaty meetings on restoration.													
	Capacity enhancement on knowledge management for the program.													
SUB TOTAL OBJECTIVE 4		243.76												
TOTAL STRATEGY BUDGET		1,294.00												



CHAPTER 6: MONITORING AND EVALUATION

This strategy employs a robust monitoring, evaluation and reporting framework that considers various input processes, outputs and outcomes in each of the strategic objectives (Figure 6.1). This monitoring framework will aid in tracking the progress on the implementation of the various activities and performance against set targets. This will enable timely progress monitoring against plans, capturing results and learning, and taking timely corrective actions as they arise.

The M&E framework in this strategy gives a list of results and indicators of each strategic objective across ecosystem that will be continuously and periodically tracked. Best practices, innovations, cases and unique experiences shall be documented for subsequent sharing.

Progress review of the implementation of the strategy will be conducted at midterm before scaling up for the next 5 years and end term to determine the extent to which the action plan's objectives are met. A national conference shall be held to present the mid-term review report, where best practices and lessons learned will be adopted. Regular progress reviews will be conducted annually and presented to the steering committees during annual forums (Table 6.1).

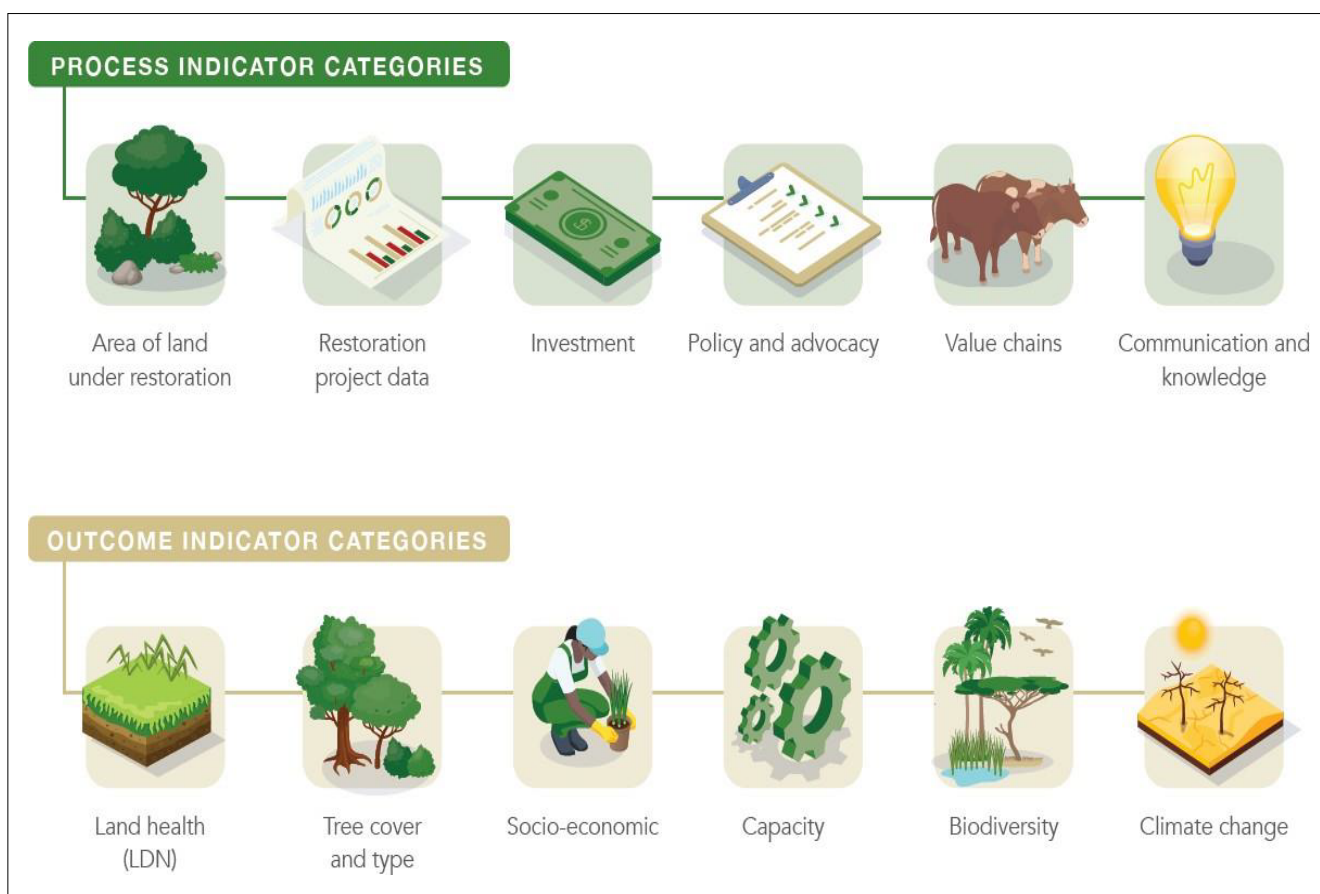


Figure 6.1. Monitoring and evaluation framework process and outcome indicator categories for 15 billion tree growing initiative towards landscape and ecosystem restoration

This M&E Framework will use JazaMiti App where the data captured in the App will be verified and reported on quarterly basis for decision making.



Table 6.1: Monitoring and Evaluation Framework

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
Strategic Objective 1. Increase national tree cover by 17.87% through selected ecosystem interventions on public, community and private lands																			
Outcome 1.1 Increased production of tree seeds and seedlings																			
Outputs 1.1.1 1,000 tons of tree seeds collected, processed and distributed																			
S.A.1.1.1.1 Establish and maintain 400 Ha of seed sources.	Area in (Ha)	400	TBD	40	40	40	40	40	40	40	40	40	40	40	40	20	Reports	Semi-Annual	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.2 Refurbish existing seeds processing facilities.	No of Facilities	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	Reports	Annual	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.3 Construct and equip 18 seed centers.	No of facilities	18	18	3	3	3	3	3	3	3	3	3	3	3	3	0	Reports	Annual	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.4 Recruit staff for seed centers.	No of Staff	160	80	100	0	0	0	0	0	0	0	0	0	0	0	0	Reports	quarterly	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.5 Acquire cold storage for seeds.	No of Cold storage	18	0	3	3	3	3	3	3	3	3	3	3	3	0	0	Reports	Annual	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.6 Establish tree breeding programs.	No of Tree breeding program	4	TBD	1	1	1	1	1	1	0	0	0	0	0	0	0	Reports	Annual	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.7 Construct a National Tree Seed Gene Bank	No of seed bank	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	Survey report	Annual	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.8 Facilitate collection, processing and distribution of 1,000 tons of seeds.	Tonnes of seeds	1000	TBD	200	100	100	100	100	100	100	100	100	100	100	100	0	Report	Quarterly	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
S.A.1.1.1.9 ICT infrastructure and maintenance to connect seed centers.	No of ICT Infrastructure	18	TBD	3	3	3	3	3	3	3	3	3	3	3	0	0	Survey Report	Annual	KEFRI, KFS, KALRO, MDAs, Private Sector, County Government
Output 1.1.2. 15 billion seedlings produced																			
S.A.1.1.2.1 Map infrastructural gaps for MDAs supporting seedling production.	No of survey reports	2	TBD	1													Reports	Once 5 Years	MECS&KFS, KEFRI, County Government, Relevant MDAs

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
S.A. 1.1.2.2 Refurbish and expand the existing 3,000 tree Nurseries.	No of Nurseries	3000	300	700	600	500	400	300	200	150	150	0	0	0	0	Survey Reports	Quarterly	MEC&FKFS, KEFRI, County Government, Relevant MDAs
S.A. 1.1.2.3 Map and certify tree nurseries.	No of survey reports	3000	TBD	600	500	500	400	300	200	200	200	0	0	0	0	Certificate	Annual	MEC&FKFS, KEFRI, County Government, Relevant MDA
S.A. 1.1.2.4 Construct 500 new Tree Nurseries.	No of Nurseries	500	TBD	200	200	100	0	0	0	0	0	0	0	0	0	Reports	quarterly	MEC&FKFS, KEFRI, County Government, Relevant MDA
S.A. 1.1.2.5 Drill and equip boreholes in 200 Tree Nurseries in areas of need.	No of Boreholes	200	TBD	50	50	50	50	0	0	0	0	0	0	0	0	Reports	quarterly	MEC&FKFS, KEFRI, County Government, Relevant MDAs, KDF
S.A. 1.1.2.6 Improve water harvesting and reticulation system for tree nurseries.	No of trees nurseries	200	TBD	50	50	50	50	0	0	0	0	0	0	0	0	Reports	quarterly	MEC&FKFS, KEFRI, County Government, Relevant MDAs, KDF, CSOs, Community Groups
S.A. 1.1.2.7 Provide technical support to MDAs, CSOs and private sector with seedling production target.	No of technical support	18	TBD	5	5	5	3	0	0	0	0	0	0	0	0	Reports	quarterly	MEC&FKFS, KEFRI, County Government, Relevant MDAs, KDF, CSOs, Community Groups
S.A. 1.1.2.8 Develop partnership framework between State Department Forestry and the MDAs on seedlings production	No of MoUs	18	TBD	5	5	5	3	0	0	0	0	0	0	0	0	MoUs	Annual	MEC&FKFS, KEFRI, County Government, Relevant MDAs, KDF, CSOs, Community Groups
S.A. 1.1.2.9 Establish partnership framework contractual seedlings production.	No of framework	18	TBD	5	5	5	3	0	0	0	0	0	0	0	0	Reports	Quarterly	MEC&FKFS, KEFRI, County Government, Relevant MDAs, KDF, CSOs, Community Groups
S.A. 1.1.2.10 Recruit 5,000 green army to enhance production capacity.	No of Green Army	5000	0	0	4000	1000	0	0	0	0	0	0	0	0	0	Reports	Annual	MEC&FKFS, KEFRI, County Government, Relevant MDAs, KDF, CSOs, Community Groups

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
S.A. 1.1.2. 11 Develop guidelines for establishing model tree nurseries.	No of Guidelines	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	Reports	Annual	MEC&K&F&S, KEFRI, County Government, Relevant MDAs, KDF, CSOs, Community Groups
S.A. 1.1.2. 12 Procure and distribute 1.6 billion biodegradable tubes	No of tubes	16B	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	Reports	Quarterly	MEC&K&F&S, KEFRI, County Government, Relevant MDAs, KDF, CSOs, Community Groups
Outcome 1.2. Increased productivity and ecological functions of 10.6M hectares of restored ecosystems																			
Output 1.2.1. 5,190,556 million Ha of degraded landscapes in ASALs, rehabilitated.																			
S.A.1.2.1. 1 Identify and map out degraded rangelands.	Area to be mapped in ha	5,190,556	25.7m	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	519,055.6	Assessment reports GIS Maps	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners
S.A.1.2.1.2 Acquire high resolution satellite images/data for mapping rangelands.	No of images	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Assessment reports GIS Maps	Annually	MECCF, KFS, DRSRs, Survey of Kenya, Private Sector
S.A. 1.2.1. 3 Map areas with invasive species and control removal.	Area in ha controlled	1,000,000	2,000,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	Assessment reports	Quarterly	MDAs, County Governments and non- government actors, Development partners
S.A. 1.2.1. 4 Support implements invasive species.	No of plans implemented	All	23	1	3	3	3	3	3	3	3	3	3	3	3	3	Assessment reports, GIS Maps	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners management plans.
S.A. 1.2.1. 5 Support development of holistic grazing plans'	No of plans	50	TBD	5	5	5	5	5	5	5	5	5	5	5	5	5	Assessment reports	Semi-annually	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A. 1.2.1. 6 Rehabilitate and restore 800,000 Ha or degraded areas in protected game reserves and national parks.	No of seedlings	800,000	TBD	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	Tree nursery assessment reports	Quarterly	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors
S.A. 1.2.1. 7 Rehabilitate 1,200,000 Ha of degraded areas in community group and private conservancies.	No of seedlings	1,200,000	TBD	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	Tree nursery assessment reports	Quarterly	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS	
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032				
S.A. 1.2.1.1.8 Reseed grasslands.	Area in ha	2,000,000	TBD	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	MDAs, County Governments and non-government actors, Development partners
S.A. 1.2.1.1.9 Promote sustainable natural regeneration, (enclosure, aided natural regeneration and fencing)	No of enclosures	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	MDAs, County Governments and non-government actors, Development partners initiatives.
S.A. 1.2.1.1.10 Establish 1,557,167 Ha of fruit trees.	No of seedlings	1,557,167	TBD	155,717	155,717	155,717	155,717	155,717	155,717	155,717	155,717	155,717	155,717	155,717	155,717	155,717	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors
S.A. 1.2.1.1.11 Support tree growing initiatives for restoration	Support to grow trees	5,190,556	TBD	519,056	519,056	519,056	519,056	519,056	519,056	519,056	519,056	519,056	519,056	519,056	519,056	519,056	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors
S.A. 1.2.1.1.12 Establish 200,000 Ha of dryland forestry plantations on community lands (including Gums and Resins, <i>Melia volkensii</i> , <i>Acacia tortilis</i> , <i>Acacia seyal</i> , sandal wood)	Cost per seedlings	2,000,000	TBD	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors
S.A. 1.2.1.1.13 Support 2000 NBES (bio-enterprises development, e.g. beekeeping, gums & resins production, game farming, wildlife conservancies)	Support to NBES	2,000	TBD	50	2250	200	200	200	200	200	200	200	200	200	250	250	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors
S.A. 1.2.1.1.14 Put up 1,000 waters harvesting and reticulation systems.	Systems	1,000	TBD	20	180	100	100	100	100	100	100	100	100	100	100	100	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
S.A. 1.2.1.15 Desilting of dams and water pans	Desilting reports	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Quarterly	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors
S.A. 1.2.1.16 Pilot seedball and broadcasting technologies to restore rangelands.	Broadcasting report	1000	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Quarterly	KFS, KDF, RDAs, NYS, KEFRI, KWS, WRTI, NPS, Correctional Services, SD Basic Education, TVET, SD Higher Education & Research, County governments, Non-State Actors
Output 1.2.2. 350,507Ha of degraded public natural forests and water towers rehabilitated and protect 2.6M hectares of natural forests.																		
S.A 1.2.2.1 Identify and map out degraded natural forests and water towers for rehabilitation.	No of maps	350.507	TBD	62.95	10.40	9.45	8.10	6.98	5.34	4.34	4.23	4.23	4.76	4.23	4.23	4.23	Annual	MEC&KFFS, KEFRI, County Government, Relevant MDAs, KDF, DRSRS, CSOs, Community Groups
S.A 1.2.2.2 Acquire high resolution satellite images/data for suitable sites.	No of images	2	TBD	0	1	0	0	0	1	0	0	0	0	0	0	0	5 years	MEC&KFFS, KEFRI, County Government, Relevant MDAs, KDF, DRSRS, CSOs, Community Groups
S.A. 1.2.2.3 Fence 9,600 Kms around public (gazetted) Forests.	No of Kfms	9,600	TBD	3000	3000	2000	1000	600	0	0	0	0	0	0	0	0	Annual	MEC&KFFS, KEFRI, County Government, Relevant MDAs, KDF, DRSRS, CSOs, Community Groups
S.A 1.2.2.4 Strengthen CFAs and community groups	No of CFAs	500	250	0	100	200	100	150	50	0	0	0	0	0	0	0	Annual	MDAs County Governments, Private Sector, CSOs, Community Groups
S.A 1.2.2.5 Enhance surveillance using remote sensing and drones' technologies,	No of Surveillance	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Annual	MDAs County Governments, Private Sector, CSOs, Community Groups
S.A 1.2.2.6 Recruit 2000 more rangers and foresters.	No of Forest Rangers	2000	TBD	1	1000	1000	0	0	0	0	0	0	0	0	0	0	Annual	MDAs County Governments, Private Sector, CSOs, Community Groups
S.A 1.2.2.7 Maintain 5,240 Km of fire breaks.	No of Kfms	5240	TBD	2000	2000	1000	240	0	0	0	0	0	0	0	0	0	Quarterly	MDAs County Governments, Private Sector, CSOs, Community Groups
S.A. 1.2.2.8 Support tree growing initiatives for restoration	No of Initiatives	25	TBD	5	5	5	5	5	0	0	0	0	0	0	0	0	Quarterly	MDAs County Governments, Private Sector, CSOs, Community Groups

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES											DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
S.A. 1.2.2.9 Acquire appropriate seeds for broadcasting.	No of seeds	400	TBD	40	40	40	40	40	40	40	40	40	40	40	40	40	Reports	Quarterly	MDAs County Governments, Private Sector, CSOs, Community Groups
S.A. 1.2.2.10 Pilot seed, seedball and broadcasting technologies.	Area in Ha	100	TBD	0	40	40	20	0	0	0	0	0	0	0	0	0	Reports	Quarterly	MDAs County governments, Private Sector, CSOs, Community Groups
S.A. 1.2.2.11 Provide advisory services for quality production of seedlings.	No of Advisory	180	TBD	18	18	18	18	18	18	18	18	18	18	18	18	18	Reports	Quarterly	MDAs County governments, Private Sector, CSOs, Community Groups
Output 1.2.3. 54,000 Ha of public forest plantations restocked and sustainably manage stocked plantations.																			
S.A. 1.2.3.1 Identify and map out plantations for restocking.	Area mapped (in Ha)	54,000	TBD	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	Assessment reports GIS Maps	Semi-annually and annually	MDAs, County Governments and non-government actors, Development partners
S.A. 1.2.3.2 Acquire high resolution satellite images/data for forest plantations.	No of images	2	TBD	0	1	0	0	0	0	1	0	0	0	0	0	0	Survey reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Groups
S.A. 1.2.3.3 Review and update forest plantations management plans.	No of plans	150	TBD	0	50	50	50	0	0	0	0	0	0	0	0	0	Survey reports	Annual	MDAs County governments, Private Sector, CSOs, Community Groups
S.A. 1.2.3.4 Establish 54,000 new plantation in the un-stocked areas	Area in Ha	54,000	TBD	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	4000	0	0	0	0	Survey reports	Annual	MDAs County governments, Private Sector, CSOs, Community Groups
S.A. 1.2.3.5 Maintain 8,236 Km of forest roads	No of KMs	8,236	TBD	2000	2000	2000	2000	236	0	0	0	0	0	0	0	0	Survey reports	Annual	MDAs County governments, Private Sector, CSOs, Community Groups
S.A. 1.2.3.6 Facilitate application of silvicultural.	Area in Ha	54000	TBD	0	4000	10,000	10,000	10,000	10000	10000	10000	10000	0	0	0	0	Survey reports	Annual	MDAs County governments, Private Sector, CSOs, Community Groups treatments (pruning and thinning)
S.A. 1.2.3.7 Establish public private partnerships and concession models in forest plantations.	No of Concession	10	TBD	0	2	1	1	1	1	1	1	1	1	1	1	1	reports	Annual	MDAs County governments, Private Sector, CSOs, Community Groups

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
Output 1.2.4 3,000,000Ha of Agroforestry established Output 1.2.4 3,000,000Ha of Agroforestry established																			
S.A.1.2.4.1 Identify and map out cropland for agroforestry areas.	Ha of private and community lands suitable for agroforestry	3,000,000		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	Assessment reports GIS Maps	Annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.2 Acquire high resolution satellite images/data for suitable sites for agroforestry practices.	Satellite Imagery Data on recommended sites for agroforestry	2	Nil	1	1	0	0	0	0	0	0	0	0	0	0	0	Assessment reports GIS Maps	Annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.3 Mapped land on invasive species	Ha of land mapped	500,000		200,000	200,000	100,000	0	0	0	0	0	0	0	0	0	0	Assessment reports GIS Maps	Quarterly	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.4 Support preparation and implementation of county forestry development programs.	County Forestry Development Programmes	47		5	5	5	5	5	5	5	5	5	5	5	5	2	Assessment reports GIS Maps	Semi-annually and annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.5 Develop incentives for farm and private forest development.	Incentives for farm and private forest development.	10		1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment reports GIS Maps	Semi-annually and annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.6 Implement 4 renewable/green energy options.	Renewable/Green Energy Options Implemented	4		1	1	1	1	0	0	0	0	0	0	0	0	0	Assessment reports GIS Maps	Semi-annually and annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.7 Implement agroforestry strategy.	Agroforestry strategy launched	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	Assessment reports GIS Maps	Annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.8 Support tree growing initiatives in crop lands.	No of trees grown	3M	TBD	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	Assessment reports GIS Maps	Annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.9 Facilitate control and management of invasive species.	Ha Rehabilitated	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	Assessment reports GIS Maps	Annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.10 Promote sustainable land management technologies and practices.	Sustainable land management technologies and practices	100	100	10	10	10	10	10	10	10	10	10	10	10	10	10	Assessment reports GIS Maps	Annually	MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
S.A.1.2.4.11 Enhance capacity on soil and water management.	Ha restored	500,000	500,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	Assessment reports GIS Maps	Semi-annually and annually	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.4.12 Enforce Implementation of the Agriculture of the Agriculture (Farm Forestry) Rules, 2009.	No	47	47	5	5	5	5	5	5	5	5	5	5	5	2	2	Assessment reports GIS Maps	Semi-annually and annually	MDAs, County Governments and non-government actors, Development partners
Output 1.2.5. 750,000Ha of private commercial forest plantations established																			
S.A.1.2.5.1 Conduct public participation and gazette the draft Private Forest Registration Rules.	Public participation	1	-	1	0	0	0	0	0	0	0	0	0	0	0	0	Gazetted private forest rules	Once	KFS, County Governments and non-government actors, Development partners
S.A.1.2.5.2 Establish and Strengthen 10 Private Tree Growers Associations	Growers' association	10	-	1	1	1	1	1	1	1	1	1	1	1	1	1	Operational associations	Annually	KFS, MDAs, County Governments and non-government actors, Development partners
S.A.1.2.5.3 Technical supports to the Tree Growers Associations and farmers.	Supported TGA	20	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	Support reports on TGAs	Annually	KFS, MDAs, County Governments and non-government actors, Development partners
S.A.1.2.5.4 Provide incentives to commercial private forest plantations,	Incentive reports	10	0	1	1	1	1	1	1	1	1	1	1	1	1	1	Develop incentive mechanism Annual implementation report	Annually	MECCF, MDAs, County Governments and non-government actors, Development partners
S.A.1.2.5.5 Build capacity on commercial forestry dynamics.	Reports	200	0	1	20	20	20	20	20	20	20	20	20	20	20	20	Training reports	Annually	MECCF, MDAs, County Governments and non-government actors, Development partners
S.A.1.2.5.6 Support commercial forestry establishment	Supported groups	100	0	5	8	7	10	10	10	10	10	10	10	10	5	5	Training reports	Annually	MECCF, MDAs, County Governments and non-government actors, Development partners
S.A.1.2.5.7 Support silvicultural and forest health extension initiatives.	Supported groups	100	0	5	8	7	10	10	10	10	10	10	10	10	5	5	Training reports	Annually	MECCF, MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS	
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032				
Output 1.2.6 150,000 Ha of Bamboo established																	
S.A 1.2.6.1 Identify and map out sites for establishment of bamboo woodlots and plantations.	No of maps	25	TBD	0	5	5	5	5	5	5	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group
S.A 1.2.6.2 Acquire high resolution satellite images/data for suitable sites for establishment of bamboo woodlots and plantations.	No of images	2	TBD	0	1	0	0	0	0	0	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group
S.A 1.2.6.3 Scale technology and innovations in production of bamboo seedlings.	No of innovations	5	TBD	0	1	1	1	1	1	1	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group
S.A 1.2.6.4 Strengthen bamboo association of Kenya.	No of Associations	100	TBD	0	20	20	20	20	20	20	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group
S.A 1.2.6.5 Support bamboo growing initiatives.	No of Initiatives	47	TBD	0	10	10	10	10	10	7	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group
S.A 1.2.6.6 Enhance knowledge and research on bamboo manufacturing technology.	No of technologies	5	TBD	1	1	1	1	1	1	0	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group
S.A 1.2.6.7 Enhance knowledge and research on bamboo manufacturing technology.	No of technologies	5	TBD	1	1	1	1	1	1	0	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group
Output 1.2.7 500,000 ha of degraded water towers, wetlands, and riparian areas outside gazetted forests rehabilitated																	
S.A 1.2.7.1 Identify and map out degraded water towers, wetlands and riparian areas outside gazetted forests.	No of maps	47	TBD	0	20	20	7	0	0	0	0	0	0	0	0	0	MDAs County Governments, Private Sector, CSOs, Community Group

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
S.A.1.2.7.2 Acquire high resolution satellite images/data for mapping degraded wetland ecosystem outside gazetted ones.	No of images	2	TBD	0	1	0	0	0	1	1	1	1	1	1	1	1	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.3 Establish nationwide knowledge management system on wetlands.	No of system	5	TBD	0	1	1	1	1	1	1	1	1	1	1	1	1	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.4 Support protection and conservation of wetlands on community and private lands.	No of support	47	TBD	0	7	5	5	5	5	5	5	5	5	5	5	5	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.5 Fence 2000km of selected wetlands and springs rehabilitated gazetted forests and water towers.	No of KMs	2000	TBD	0	1000	500	400	100	0	0	0	0	0	0	0	0	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.6 Develop wetlands training modules.	No of training modules	1	TBD	0	1	0	0	0	0	0	0	0	0	0	0	0	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.7 Hold national awareness and capacity building fora on sustainable management of wetland.	No of Fora	10	TBD	0	2	1	1	1	1	1	1	1	1	1	1	1	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.8 Support tree growing initiatives	No of initiatives	47	TBD	0	5	5	5	5	5	5	5	5	5	5	5	7	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.9 Develop incentives for sustainable management for wetlands.	No incentives	47	TBD	0	5	5	5	5	5	5	5	5	5	5	5	7	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
S.A.1.2.7.10 Support nature-based solutions to incentivize wetlands and riparian protection.	No of NBS	47	TBD	0	5	5	5	5	5	5	5	5	5	5	5	7	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES											DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
S.A 1.2.7. 11 Conduct regular monitoring and reporting.	No of monitoring report	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	4	Reports	Annual	MDAs County Governments,Private Sector, CSOs, Community Group
S.A 1.2.7. 12 Develop and strengthen enforcement mechanisms for wetlands protection	No of Mechanism	23	TBD	0	5	5	5	5	5	5	3	0	0	0	0	0	Reports	Annual	MDAs County Governments, Private Sector, CSOs, Community Group
Output 1.2.8 450,000 ha of infrastructure (Roads, railway lines, dams) greened by growing trees																			
S.A 1.2.8. 1 Mapping and identification of targeted areas.	Area mapped ha	450,000	TBD	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	Assessment reports, GIS Maps	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners
S.A 1.2.8. 2 Acquire high resolution satellite images/data for mapping infrastructure.	No of images	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Assessment reports, GIS Maps	Annually	MECCF, KFS, DRSRs, NEMA, KWITA, KEMFRI, Survey of Kenya, Private Sector
S.A 1.2.8. 3 Enforce EMCA 2019 on implementation of ES Reports on capital projects.	No of policy frameworks implemented	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Reports	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners
S.A 1.2.8. 4 Implementation of physical planning rules that require 5% of the residential premises be put under tree cover with appropriate tree species.	Implementation reports	10	0	1	1	1	1	1	1	1	1	1	1	1	1	1	Reports	Annually	MDAs, County Governments and non- government actors, Development partners
S.A 1.2.8. 5 Build technical capacity on tree growing along selected infrastructures.	Capacity building forums	30	0	3	3	3	3	3	3	3	3	3	3	3	3	3	Reports	Quarterly	MDAs, County Governments and non- government actors, Development partners
S.A 1.2.8. 6 Support tree growing initiatives.	Trees grown	450M seedlings	TBD	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	Reports	Quarterly	MDAs, County Governments and non- government actors, Development partners
Output 1.2.9 70,000 ha of fruit trees and woodlots in schools, colleges, universities and other institutions grown																			
S.A 1.2.9. 1 Identify and map out appropriate areas for growing fruit trees and woodlots.	Area mapped ha	70,000	TBD	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	Assessment reports, GIS Maps	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
SA 1.2.9. 1 Identify and map out appropriate areas for growing fruit trees and woodlots.	Area mapped ha	70,000	TBD	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	Assessment reports, GIS Maps	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.9. 2 Acquire high resolution satellite images/data for mapping institutions to grow fruit trees and woodlots.	No of images	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Assessment reports, GIS Maps	Annually	MECCF, KFS, DKSRS, NEMA, KWITA, KEMFRI, Survey of Kenya, Private Sector
SA 1.2.9. 3 Support establishment of 5,000 new tree nurseries in various wards	New nurseries in schools	5,000	TBD	50	500	500	500	500	500	500	500	500	500	500	500	500	Assessment reports	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.9. 4 Fence 2,000Km for protection of schools	Protection and fence in schools	2,000	TBD	0	200	300	200	400	500	400	500	400	500	400	0	0	Report	Annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.9. 5 Establish woodlots and fruit trees.	Woodlots and fruit trees	75M Ha	TBD	5	14	7	7	7	7	7	7	7	7	7	7	7	Reports, GIS Maps	Annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.9. 6 Provide technical support and awareness.	Technical support sessions	10,000	TBD	1000	1000	10000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Reports and maps	Annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.9. 7 Strengthen coordination of learning institutions in greening initiatives.	Coordination framework developed and implemented	20	0	2	2	2	2	2	2	2	2	2	2	2	2	2	Reports and maps	Annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.9. 8 Support tree planting and management.	No of seedlings	75,000,000	TBD	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	7,500000	Tree nursery assessment reports	Quarterly	MDAs, County Governments and non- government actors, Development partners
SA 1.2.9. 9 Environmental Conservation Clubs formed and strengthened in schools, colleges and universities.																			

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
Output 1.2.10. 50,000 ha of urban forests, arboretum, green spaces & road-side plantings in wards & sub-counties established																			
SA 1.2.10.1 Identify and map out appropriate areas for growing urban forests, arboretum, green spaces.	Area mapped ha	50,000	TBD	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	Assessment reports, GIS Maps	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.10.2 Acquire high resolution satellite images/data for mapping targeted areas for greening.	No of images	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Assessment reports, GIS Maps	Annually	MECCF, KFS, DRSRs, NEMA, KWITA, KEMFRI, Survey of Kenya, Private Sector
SA 1.2.10.3 Implement the physical planning rules that require 5% of all residential premises are covered by appropriate tree species.	Implementation reports	10	0	1	1	1	1	1	1	1	1	1	1	1	1	1	Reports	Annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.10.4 Support tree growing initiatives.	Trees grown	50M seedlings	TBD	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	Reports	Quarterly	MDAs, County Governments and non- government actors, Development partners
SA 1.2.10.5 Provide technical support and capacity.	Technical support sessions	10,000	TBD	1000	1000	10000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Reports and maps	Annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.10.6 Promote knowledge exchange programs	Exchange programs	1000	0	100	100	100	100	100	100	100	90	80	120	100	200	200	Reports	Quarterly	MDAs, County Governments and non- government actors, Development partners
Output 1.2.11 14,000 ha of degraded mangrove rehabilitated, and marine ecosystem restored																			
SA 1.2.11.1 Identify and map out degraded mangrove ecosystem.	Area mapped ha	50,000	TBD	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	Assessment reports, GIS Maps	Semi-annually and annually	MDAs, County Governments and non- government actors, Development partners
SA 1.2.11.2 Acquire high resolution satellite images/data for mapping degraded mangrove ecosystem.	No of images	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Assessment reports, GIS Maps	Annually	MECCF, KFS, DRSRs, NEMA, KWITA, KEMFRI, Survey of Kenya, Private Sector

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS	
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032				
S.A.1.2.11.3 Support community livelihood improvement for the blue economy.	No. of communities supported	1M	TBD	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.4 Support communities to develop mangrove tree nurseries.	Tree nurseries	500	TBD	20	50	50	50	50	50	50	50	50	50	50	50	50	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.5 Rehabilitate the degraded 14,000 Ha.	Hectares rehabilitated	14,000	TBD	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.6 Collection, transplanting of seagrass seedlings/shoots)	Area in Ha	5,000	TBD	500	500	500	500	500	500	500	500	500	500	500	500	500	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.7 Zonation for seagrass natural regeneration	Area zoned in Ha	2,000	TBD	200	200	200	200	200	200	200	200	200	200	200	200	200	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.8 Undertake Hydrological restoration.	Support	1	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.9 Establish underwater Coral nurseries(colony)	Area in Ha	3,000	TBD	300	300	300	300	300	300	300	300	300	300	300	300	300	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.10 Transplanting of established coral colonies	Transplanting to areas in Ha	3,000	TBD	300	300	300	300	300	300	300	300	300	300	300	300	300	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.11 Zonation of designated area for coral natural regeneration	Zoning in Kms	3,000	TBD	300	300	300	300	300	300	300	300	300	300	300	300	300	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.12 Recruit 1000 community scouts and rangers to increase surveillance.	No. Recruited	1,000	TBD	20	500	400	100	-	-	-	-	-	-	-	-	-	MDAs, County Governments and non-government actors, Development partners
S.A.1.2.11.13 Promote agroforestry activities along coastal terrestrial belt.	Area in Ha	1,000	TBD	100	100	100	100	100	100	100	100	100	100	100	100	100	MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS	
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032				
Strategic Outcome 2: Promote community climate resilient livelihoods through nature-based solutions and enhance land management practices for sustainability																	
Outcome 2.1. Improved livelihoods and incomes through sustainable nature-based enterprises.																	
Output 2.1.1. Inclusive sustainable value chains enterprises identified and promoted across all ecosystems.																	
S.A 2.1.1.1 Identify sustainable nature-based enterprise (fruit trees, bee farms, fodders/hay, mushroom, gums and resins, aloe farms, wild fruits, berries and herbs) for communities living adjacent to ecosystems.	No. of enterprises	200	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A 2.1.1.2 Support eco-tourism enterprises.	No of enterprises	300	TBD	30	30	30	30	30	30	30	30	30	30	30	30	30	MDAs, County Governments, and non- government actors, Private Sector, Development partners
S.A 2.1.1.3 Promote privatization of nurseries enterprises.	No of nurseries	200	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	MDAs, County Governments and non- government actors, Private sector, Development partners
S.A 2.1.1.4 Promote circular economy enterprises.	No of enterprises	30	TBD	3	3	3	3	3	3	3	3	3	3	3	3	3	MDAs, County Governments, and non- government actors, Private Sector, Development partners
S.A 2.1.1.5 Promote sustainable charcoal enterprises.	No of enterprises	100	10	10	10	10	10	10	10	10	10	10	10	10	10	10	MDAs, County Governments, and non- government actors, Private Sector, Development partners
S.A 2.1.1.6 Develop appropriate value chain for the identified nature-based enterprises.	No of value chain	300	TBD	30	30	30	30	30	30	30	30	30	30	30	30	30	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A 2.1.1.7 Train communities on nature-based enterprises opportunities.	No of trainings	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	MDAs, County Government, Private Sector, NGOs and development partners.
S.A 2.1.1.8 Develop and support carbon credit schemes for restoration of selected ecosystems.	No. of carbon credit schemes	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	4	MDAs, County Government, NGOs and development partners.

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES											DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
SA 2.1.1.9 Conduct public participation and gazette the draft Charcoal Regulations.	No. of forums	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment report	Quarterly	MDAs, County Government, NGOs and development partners.
SA 2.1.1.10 Sensitize law enforcement agencies on implementation of charcoal regulations.	Sensitization forums	5	TBD	1	0	1	0	1	0	1	0	1	0	1	0	0	Assessment report	Quarterly	MDAs, County Government, NGOs and development partners.
SA 2.1.1.11 Capacity build for 300 CPAs	Capacity forums for 300 CPAs	300	TBD	30	30	30	30	30	30	30	30	30	30	30	30	30	Training reports	Quarterly	MDAs, County Government, NGOs and development partners.
SA 2.1.1.12 Map and promote utilization invasive species for charcoal production.	Report	1	TBD	1	0	0	0	0	0	0	0	0	0	0	0	0	Assessment report	Quarterly	MDAs, County Government, NGOs and development partners.
SA 2.1.1.13 Develop and implement 200 charcoal production and management plans (CPMPs)	CPMPs	200	TBD	20	20	20	20	20	20	20	20	20	20	20	20	20	Assessment report	Quarterly	MDAs, County Government, NGOs and development partners.
SA 2.1.1.14 Support 500 youth groups in briquette charcoal production enterprise	Reports	500	50	50	50	50	50	50	50	50	50	50	50	50	50	50	Training reports	Quarterly	MDAs, County Government, NGOs and development partners.
SA 2.1.1.15 Increase participation in national and international fora for promoting nature- based enterprises	No of trainings	50	5	5	5	5	5	5	5	5	5	5	5	5	5	5	Participation report	Quarterly	MDAs, County Government, Private sector NGOs and development partners.
Output 2.1.2. Market and market access for nature-based enterprise chain products identified and promoted																			
SA 2.1.2.1 Undertake market analysis of the identified nature-based enterprises across all selected ecosystems.	Analysis report	300	TBD	30	30	30	30	30	30	30	30	30	30	30	30	30	Assessment reports	Quarterly	MDAs, County Government, Private sector NGOs and development partners.

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES											DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
SA 2.1.2.2 Organize communities into nature-based enterprise groups and associations.	Groups	4700	TBD	470	470	470	470	470	470	470	470	470	470	470	470	470	Reports	Quarterly	MDAs, County Government, Private sector NGOs and development partners.
SA 2.1.2.3 Identify and upscale best nature-based enterprise value chain products within various ecosystems.	NBE	220	TBD	11	11	11	11	11	11	11	11	11	11	11	11	11	Reports	Quarterly	MDAs, County Government, Private sector NGOs and development partners.
SA 2.1.2.4 Support value addition initiatives.	Businesses supported	220	TBD	11	11	11	11	11	11	11	11	11	11	11	11	11	Reports	Quarterly	MDAs, County Government, Private sector NGOs and development partners.
SA 2.1.2.5 Establish and strengthen 100 marketing cooperatives.	Cooperatives	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Reports	Quarterly	MDAs, County Government, Private sector NGOs and development partners.

Outcome 2.2. Enhanced Land management practices For Sustainability in restored ecosystems

Output 2.2.1. Sustainable land and soil conservation practices promoted

SA 2.2.1.1 Design ecosystem land use based on County Spatial Plans.	Spatial plans	47	TBD	5	5	5	5	5	5	5	5	5	5	5	5	5	2	Reports	Annually	MDAs, County Government, Private sector NGOs and development partners.	
SA 2.2.1.2 Establish the level and type of soil erosion in ecosystems.	Report	1	TBD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Reports	Annually	MDAs, County Government, Private sector NGOs and development partners.
SA 2.2.1.3 Establish appropriate soil erosion control structures.	Structures	500	TBD	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	Reports	Annually	MDAs, County Government, Private sector NGOs and development partners.
SA 2.2.1.4 Promote soil health interventions (crop rotation, mulching, fodder and use of inorganic fertilizers).	Interventions	100	TBD	5	10	10	10	10	10	10	10	10	10	10	10	10	15	15	Reports	Annually	MDAs, County Government, Private sector NGOs and development partners.
SA 2.2.1.5 Promote climate smart agriculture.	Climate Smart systems	20	TBD	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	Reports	Annually	MDAs, County Government, Private sector NGOs and development partners.
SA 2.2.1.6 Support efficient irrigation systems.	Irrigation options	23	TBD	0	2	1	2	3	3	3	3	3	3	3	3	3	3	3	Reports	Annually	MDAs, County Government, Private sector NGOs and development partners.

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
S.A 2.2.1.7 Integrate land use conflict management mechanisms in ecosystem-based restoration.	Mechanisms	5	TBD	5	5	5	5	5	5	5	5	5	5	5	5	5	Annually	MDAs, County Government, Private sector NGOs and development partners.
S.A 2.2.1.8 Fill up and restore mines and quarries.	Quarries & mines	150	TBD	5	20	23	22	20	15	10	10	10	10	10	10	10	Annually	MDAs, County Government, Private sector NGOs and development partners.
S.A 2.2.1.9 Promote adoption of 6 renewable energy options.	Options	6	TBD	6	6	6	6	6	6	6	6	6	6	6	6	6	Annually	MDAs, County Government, Private sector NGOs and development partners.
S.A 2.2.1.10 Establish water harvesting and reticulation systems to collect run off.	Water harvesting systems	470	TBD	7	47	47	47	48	57	77	67	40	40	40	40	40	Annually	MDAs, County Government, Private sector NGOs and development partners.
S.A 2.2.1.11 Establish water quality and quantity monitoring systems along water catchment zones and wetlands.	Monitoring systems	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Annually	MDAs, County Government, Private sector NGOs and development partners.
S.A 2.2.1.12 Enforce the existing water quality and quantity monitoring systems.	Enforcement	20	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	Annually	MDAs, County Government, Private sector NGOs and development partners.
S.A 2.2.1.13 Maintenance of the soil and water conservation structure.	Structures	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Annually	MDAs, County Government, Private sector NGOs and development partners.
Output 2.2.2. Reduced and controlled pollution																		
S.A 2.2.2.1 Map out pollution sources from selected ecosystems.	Report	88	TBD	7	9	9	9	9	9	9	9	9	9	9	9	9	Annually	MDAs, County Government, Private sector NGOs and development partners.
S.A 2.2.2.2 Establish appropriate waste management structures.	Report	50	TBD	4	6	4	5	5	5	5	5	5	5	5	5	5		
S.A 2.2.2.3 Strengthen enforcement mechanisms on pollution prevention.																		

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES											DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032							
S.A 2.2.2. 4 Create awareness on pollution and control.	Number	20	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Assessment report	Annually	MDAs, County Government, Private sector NGOs and development partners.
Strategic Outcome 3: Improve landscape and ecosystem governance by strengthening policy, regulatory and institutional frameworks																				
Outcome 3.1. Strengthened policy, regulatory And Coordination for the Restoration strategy.																				
Outputs 3.1.1. Ecosystem restoration policies, regulatory frameworks developed and implemented																				
S.A 3.1.1. 1 Develop and review ecosystem restoration policies, regulatory frameworks and management plans.	No of policies, regulatory frameworks, and plans	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	10	Training reports	10	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A 3.1.1. 2 Support implementation of ecosystem restoration policies, regulatory frameworks and management plans.	No. of policies regulatory frameworks and plans	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	10	Training reports	10	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A 3.1.1. 3 Conduct strategic environmental impact assessments for ecosystem- wide projects.	No. of EIAs Conducted	12	-	6	-	-	-	-	6	-	-	-	-	-	-	-	-	Training reports	Twice	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A 3.1.1. 4 Gazettement of all ecosystem restoration and management plans	No. of Ecosystem, Restoration and management plans Gazetted	12	-	1	2	1	1	2	1	2	1	1	1	1	1	1	1	Training reports	Annually	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A 3.1.1. 5 Establish governance committees to steer implementation of the restoration and management plans.	No. of Committees established	80	TBD	8	8	8	8	8	8	8	8	8	8	8	8	8	8	Training reports	Quarterly	MDAs, County Governments and non- government actors, Private Sector, Development partners
S.A 3.1.1. 6 Support enforcement of ecosystem restoration policies, regulatory frameworks, and management plans.	No. of Policies, regulatory frameworks and management plans	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Training reports	10	MDAs, County Governments and non- government actors, Private Sector, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
Outputs 3.1.2: Establish and operationalize the 15b and restoration secretariat.																		
S.A 3.1.2.1 Recruit and acquire staff for secretariat to coordinate ecosystem restoration.	No. of Staff	15	0	15	-	-	-	-	-	-	-	-	-	-	-	Recruitment report	1	MDAs, County Governments and non-government actors, Private Sector, Development partners
S.A 3.1.2.2 Develop and operationalize organizational and salary structure for the secretariat.	NO. of structures	2	0	2	-	-	-	-	-	-	-	-	-	-	-	Report	1	MDAs, County Governments and non-government actors, Private Sector, Development partners
S.A 3.1.2.3 Implement remuneration and allowances to facilitate the secretariat.	Develop and implement a structure	1	TBD	1	1	1	1	1	1	1	1	1	1	1	1	HR remuneration	10	MDAs, County Governments and non-government actors, Private Sector, Development partners
S.A 3.1.2.4 Streamline and mainstream the performance contracting process for the secretariat.	No. of Performance Contracts	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	PC reports	10	MDAs, County Governments and non-government actors, Private Sector, Development partners
S.A 3.1.2.5 Support acquisition of office and operational equipment and infrastructure.	No of various equipments and support	120	TBD	20	60	10	10	10	10	0	0	10	10	5	5	Asset register		MDAs, County Governments and non-government actors, Private Sector, Development partners
S.A 3.1.2.6 Conduct capacity building training on various ecosystems and landscape restoration.	No. of stakeholder's capacity built	1000	TBD	100	100	100	100	100	100	100	100	100	100	100	100		10	MDAs, County Governments and non-government actors, Private Sector, Development partners
S.A 3.1.2.7 Support coordination of the strategy implementation.	Support accorded annually	10	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment reports	Semi-annually	MDAs, County Governments, and non-government actors, Private Sector, Development partners
S.A 3.1.2.8 Support monitoring activities for the strategy.	No. of M&E Activities	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	Reports	Quarterly	MDAs, County Governments and non-government actors, Private Sector, Development partners
S.A 3.1.2.9 Acquisition of 10 vehicles for coordination.	No. of vehicles acquired	10	TBD	-	3	3	2	-	-	1	1	-	-	1	-	Assets register	5	MDAs, County Governments and non-government actors, Private Sector, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES											DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
S.A 3.1.2. 10 Participate in national and international for a on ecosystem restoration.	Forums	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Assessment reports	Semi-annually	MIDAs, County Governments, and non-government actors, Private Sector, Development partners
Output 3.1.3 Committees for coordination and ecosystem restoration strategy strengthened																			
S.A 3.1.3. 1 Build capacity for various committees on the implementation of the strategy.	Capacity forums	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	4	Training report	Quarterly	MIDAs, County Governments, and non-government actors, Private Sector, Development partners
S.A 3.1.3. 2 Facilitate committees in the coordination of the strategy.	No. of Committees facilitated	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	4	Report	Quarterly	MIDAs, County Governments, and non-government actors, Private Sector, Development partners
S.A 3.1.3. 3 Conduct periodic monitoring and evaluation missions.	No. of M&E Missions Conducted	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	4	Report	Quarterly	MIDAs, County Governments, and non-government actors, Private Sector, Development partners
S.A 3.1.3. 4 Undertake benchmarking on best practices on landscape and ecosystem restoration.	No. of Benchmarks	20	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	Report	Quarterly	MIDAs, County Governments, and non-government actors, Private Sector, Development partners
S.A 3.1.3. 5 Promote public private linkages on ecosystem restorations.	No. of public-private linkages promoted	60	TBD	6	6	6	6	6	6	6	6	6	6	6	6	6	Report	Quarterly	MIDAs, County Governments, and non-government actors, Private Sector, Development partners
S.A 3.1.3. 6 Support resource mobilization activities	No. of Concepts developed	60	5	6	6	6	6	6	6	6	6	6	6	6	6	6	Concepts	Quarterly	MIDAs, County Governments, and non-government actors, Private Sector, Development partners
SO4: Promote sustainable financing mechanisms and private sector investment for restoration of degraded landscapes and ecosystems																			
Outcome 4.1: Increased resources for the program operation																			
Output 4.1.1: Financial resource mobilization initiatives for restoration of ecosystems identified and implemented																			
S.A 4.1.1. 1 Conduct capacity needs assessment on resource mobilization at national, county and non-government actors.	Annual assessment	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Annual assessment report	Annual	MIDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
SA 4.1.1.2 Enhance capacity on resource mobilization and proposal development.	Training	20	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	Assessment report	Annually	MDAs, County Governments and non-government actors, Development partners
SA 4.1.1.3 Support stakeholders to develop a bankable investment projects and business plans.	No of stakeholders	1000	TBD	50	100	100	100	100	200	150	100	100	100	100	100	100	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 4.1.1.4 Promote financing mechanisms to support ecosystem restoration.	financing mechanisms to support ecosystem restoration.	Report	10	TBD	1	1	1	1	2	2	1	2	2	2	2	2	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 4.1.1.5 Advocate for development of a public- private partnership (PPP) framework on ecosystem restoration financing.	Report	5	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment reports	Every two years	MDAs, County Governments and non-government actors, Development partners
SA 4.1.1.6 Advocate for additional budgetary allocations by national and county governments towards ecosystem restoration.	Report	20	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	Reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 4.1.1.7 Promote linkages to optimize bilateral and multilateral funding opportunities.	Report	30	TBD	1	3	3	3	3	4	3	3	3	3	3	3	3	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners
Output 4.1.2 Restoration fund schemes developed and strengthened																			
SA 4.1.2.1 Develop and strengthen forest conservation fund and other funds.	Annual report	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
SA 4.1.2.2 Develop and strengthen fund structure and governance procedures.	Report	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 4.1.2.3 Strengthen existing governance structures for 15B resources mobilization and disbursement.	Report	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 4.1.2.4 Advocate and champion the use of existing funding schemes.	Report	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners
S05: Strengthen capacity, research, monitoring, evaluation, and knowledge management for the implementation of the strategy.																			
Outcome 5.1 Improved capacity and skills for implementation of ecosystem interventions.																			
Output 5.1.1. Capacity and skills of stakeholders built.																			
SA 5.1.1.1 Undertake capacity needs assessment among stakeholders.	Assessment Reports	10	-	1	1	1	1	1	1	1	1	1	1	1	1	1	Assessment Reports	Annually	MECC&F, KFS, KEFRI, MDAs, County Governments and non-government actors, Development partners
SA 5.1.1.2 Develop training modules and programmes based on identified capacity gaps.	Modules developed	10	-	1	1	1	1	1	1	1	1	1	1	1	1	1	Reports	Annually	MECC&F, KFS, KEFRI, MDAs, County Governments and non-government actors, Development partners
SA 5.1.1.3 Undertake training for trainer of trainers.	No. of trainers trained	50	-	5	5	5	5	5	5	5	5	5	5	5	5	5	Reports	Annually	MECC&F, KFS, KEFRI, MDAs, County Governments and non-government actors, Development partners
SA 5.1.1.4 Strengthen traditional institutions in capacity building for ecosystems.	No. of institutions strengthened	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Reports	Annually	MECC&F, KFS, KEFRI, MDAs, County Governments and non-government actors, Development partners
SA 5.1.1.5 Support short and long-term courses	No. of courses supported	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	Reports	Once	MECC&F, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
SA 5.1.1. 6 Improve the country human development index on restoration through postgraduate trainings	No. of trainings	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Reports	Annually	MECC&F, County Governments and non-government actors, Development partners
Output 5.1.2. Institutional capacity for implementation of the strategy strengthened																			
SA 5.1.2. 1 Recruit and capacity build 5,000 green army.	No. recruited	0	5,000	-	5,000	-	-	-	-	-	-	-	-	-	-	-	Reports	-	MECC&F
SA 5.1.2. 2 Build 21 ecosystem-based resource centres.	Centres Build	0	21	-	6	5	5	5	5	5	5	5	5	5	5	5	Reports	-	MECC&F
SA 5.1.2. 3 Procure 50 vehicles for institutions implementing the strategy.	No. of vehicles Procured	50	0	-	5	5	5	5	5	5	5	5	5	5	5	5	Procurement Plans	-	MDAs, County Governments and non-government actors, Development partners
SA 5.1.2. 4 Construct rangers and forester facilities.	Ranger camps constructed	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Reports	Annually	MECC&F
SA 5.1.2. 5 Employ other staff	No. of staff employed	20	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	Reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 5.1.2. 6 Strengthen Jaza mti App and other national monitoring platforms for use.	M&E tools developed and updated	2	TBD	2	2	2	2	2	2	2	2	2	2	2	2	2	Reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 5.1.2. 7 Enhance capacity of communities on use of Jaza mti app	No. of Trainings	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Training meetings	Annually	MDAs, County Governments and non-government actors, Development partners
Output 5.1.3. National tree and ecosystem restoration campaigns were conducted.																			
SA 5.1.3. 1 Support annual national and county level tree planting campaign launches.	No. of launches	960	TBD	96	96	96	96	96	96	96	96	96	96	96	96	96	Short & long Rains Reports	Semi-Annual	MECC&F/KFS, County Government
SA 5.1.3. 2 Conduct monitoring and evaluation on the tree landscape and restoration program.	No. of M&E activities	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	4	M&E Reports	Quarterly	MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS			
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
SA 5.1.3.3 Develop and implement a national award mechanism on tree growing.	No. of award mechanisms developed	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 5.1.3.4 Promote national and international tree growing ecosystem restoration events.	Events Promoted	50	TBD	5	5	5	5	5	5	5	5	5	5	5	5	5	Reports	Annually	MDAs, County Governments and non-government actors, Development partners
SA 5.1.3.5 Support participation in relevant forums on rehabilitation and restoration.	Forums supported	100	TBD	10	10	10	10	10	10	10	10	10	10	10	10	10	Reports	Quarterly	MDAs, County Governments and non-government actors, Development partners
SA 5.1.3.6 Support publicity and visibility of green holiday activities and other national tree growing events	Media plan developed	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	Media Plan	Annually	MDAs, County Governments and non-government actors, Development partners

Outcome 5.2. strengthened research and innovation for ecosystem restoration

Output 5.2.1. Studies on ecosystem restoration undertaken

SA 5.2.1.1 Conduct studies on: Quantification of emissions reductions from ecosystems restored.	No. of studies conducted	2	TBD	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners
Best ecosystem-based practices for climate change mitigation and adaptation	No. of studies conducted	2	TBD	-	1	-	-	-	-	-	-	1	-	-	-	-	1	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners
Viability of emission reduction practices to aid development of carbon offset projects	No. of studies conducted	2	TBD	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners
Seed phenology	No. of studies conducted	2	TBD	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners
Market systems of ecosystem-based products.	No. of studies conducted	2	TBD	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS	
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032				
Invasive species and control	No. of studies conducted	2	TBD	-	1	-	-	-	-	1	-	-	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners
Technology gaps.	No. of studies conducted	2	TBD	-	-	1	-	-	-	-	-	1	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners
Study on use of hydrogels for tree nurseries.	No. of studies conducted	2	TBD	-	1	-	-	-	-	1	-	-	-	-	Reports	Twice	MDAs, County Governments and non-government actors, Development partners
Output 5.2.2 Scale up adoption of restoration technologies																	
S.A.5.2.2.1 Demonstrate successful ecosystem- based mitigation and adaptation practices across landscapes.	Reports	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	4	MDAs, County Governments and non-government actors, Development partners
S.A.5.2.2.2 Support adoption of emerging technology and innovations for ecosystem restoration.	Reports	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	MDAs, County Governments and non-government actors, Development partners
S.A.5.2.2.3 Support technology partnerships and networks on ecosystem restoration.	Reports	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	MDAs, County Governments and non-government actors, Development partners
S.A.5.2.2.4 Establish water management structures for nursery establishment	Report	3	TBD			1				1					1		MDAs, County Governments and non-government actors, Development partners
S.A.5.2.2.5 Strengthen research innovations and technology for surveillance.	Reports	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	1	MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
Outcome 5.3. Enhanced program monitoring and evaluation																		
Output 5.3.1. Monitoring and Evaluation landscape and ecosystem strategy strengthened																		
SA 5.3.1.1 Develop a national monitoring, evaluation, reporting and learning framework for tree growing and ecosystem restoration.	M&E tools developed	1	TBD	1	-	-	-	-	-	-	-	-	-	-	-	Reports	Once	MECC&F, KFS, KEFRI
SA 5.3.1.2 Improve efficiency and robustness of Jaza Miti App.	Updated App	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Jaz Miti App Reports	Annually	MECC&F, KFS, KEFRI
SA 5.3.1.3 Develop a communication and digitization strategy to facilitate information and knowledge sharing across all stakeholders.	Strategy Developed	1	TBD	1	-	-	-	-	-	-	-	-	-	-	-	Strategy	Once	MECC&F,
SA 5.3.1.4 Evaluate, select and implement technologies that support digitization, communication and knowledge management.	Reports	10	TBD	1	1	1	1	1	1	1	1	1	1	1	1	Evaluation reports	Annually	MECC&F, County Governments and non-government actors, Development partners
Output 5.3.2. Periodic Monitoring and Evaluation on tree growing and ecosystem restoration undertaken.																		
SA 5.3.2.1 Undertake planning fora with stakeholders	No. of fora	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	Reports	Quarterly	MDAs, County Governments and non-government actors, Development partners
SA 5.3.2.2 Conduct quarterly monitoring and evaluation of seed and seedlings production.	No. of M&E Reports	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	Reports	Quarterly	MDAs, County Governments and non-government actors, Development partners
SA 5.3.2.3 Hold monitoring and evaluation meetings write shops, workshops and conferences.	Reports	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	Reports	Quarterly	MDAs, County Governments and non-government actors, Development partners
SA 5.3.2.4 Conduct mid and end term evaluations for the strategy.	No. of Evaluation Reports	2	-	-	-	-	-	1	-	-	-	-	-	-	1	Reports	-	MECC&F,SDF, KFS, KEFRI, MDAs, County Governments and non-government actors, Development partners

DESCRIPTION	VERIFIABLE INDICATORS	TARGETS	BASELINE	MILESTONES										DATA SOURCES	FREQUENCY	IMPLEMENTING ACTORS		
				2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
Outcome 5.4. Increased access to knowledge on landscape and ecosystem restoration																		
Output 5.4.1. Landscape and Ecosystem knowledge acquired and managed																		
S.A 5.4.1.1 Integrate 158 and ecosystem restoration knowledge and information into a central repository portal.	Reports	1	TBD	-	-	1	-	-	-	-	-	-	-	-	-	Reports	Once	MDAs, County Governments and non-government actors, Development partners
S.A 5.4.1.2 Publications	No. of publications	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	Reports	Quarterly	MDAs, County Governments and non-government actors, Development partners
S.A 5.4.1.3 Reports generation	No. of Reports	40	TBD	4	4	4	4	4	4	4	4	4	4	4	4	Reports	Quarterly	MDAs, County Governments and non-government actors, Development partners
S.A 5.4.1.4 Update website and knowledge repository.	Percentage Update	100%	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	Reports	Annually	MDAs, County Governments and non-government actors, Development partners
S.A 5.4.1.5 Capacity enhancement on knowledge management for the program.	Stakeholders capacity/build	900	TBD	-	100	100	100	100	100	100	100	100	100	100	100	Assessment reports	Annually	MDAs, County Governments and non-government actors, Development partners

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