



MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY

FOREST AND LANDSCAPE RESTORATION IMPLEMENTATION PLAN (FOLAREP) 2023-2027



Version: Final FOLAREP



Food and Agriculture
Organization of the
United Nations



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ACRONYMS

AFR100	African Forest Landscape Restoration Initiative
ASAL	Arid and Semi-Arid Lands
ASTGS	Agriculture Strategy for Growth and Transformation
AWP&B	Annual Work Plan and Budget
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CBS	Chief of the Order of the Burning Spear
CCAPs	County Climate Action Plans
CCF	Chief Conservator of Forests
CEAP	County Environment Action Plan
CEC	County Environment Committee
CECM	County Environment Committee Member
CFA _s	Community Forest Associations
CIDPs	County Integrated Development Plans
CIFOR	Center for International Forestry Research
CO ₂	Carbon dioxide
COG	Council of Governors
CRSR	Country Restoration Status Report
CS	Cabinet Secretary
EAC	East African Community
EMCA	Environmental Management and Coordination Act
EU	European Union
ERS	Economic Recovery Strategy
FAO	Food and Agriculture Organization of the United Nations
FBO _s	Faith Based Organizations
FGDs	Focus Group Discussions
FLLoCA	Financing Locally Led Climate Action
FLR	Forest and Landscape Restoration
FOLAREP	Forest and landscape Restoration Action Plan
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GESI	Gender equity and social inclusion
GHG _s	Green House Gases
GOK	Government of Kenya
HRBA	Human Rights Based Approach
ICRAF	The World Agroforestry Centre
ICT	Information and Communication Technology
ICTA	Information and Communication Technology Authority
IGAs	Inter-Governmental Agencies
IKI	The International Climate Initiative
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
KALRO	Kenya Agricultural and Livestock Research Organization
KCSAS	Kenya Climate Smart Agriculture Strategy

KEFRI	Kenya Forestry Research Institute
KEPHIS	Kenya Plant Health Inspectorate Service
KEPSA	Kenya Private Sector Association
KFS	Kenya Forest Service
KIIs	Key Informant Interviews
KRCS	Kenya Red Cross Society
Kshs	Kenya Shillings
KWS	Kenya Wildlife Service
KWTA	Kenya Water Towers Agency
LUC	Land-Use Change
MDAs	Ministries, Departments and Agencies
MEAs	Multilateral Environmental Agreements
MENR	Ministry of Environment and Natural Resources
MERL	Monitoring, Evaluation, Reporting and Learning
MOA	Ministry of Agriculture
MoALF	Ministry of Agriculture, livestock and Fisheries
MoALF&C	Ministry of Agriculture, livestock, Fisheries and Cooperatives
MoECCF	Ministry of Environment, Climate Change and Forestry
MoH	Ministry of Health
MoT&I	Ministry of Transport and Infrastructure
NACOFA	National Alliance of Community Forest Associations
NDMA	National Drought Management Authority
NEMA	National Environment Management Authority
NETFUND	National Environment Trust Fund
NGOs	Non-Governmental Organizations
NMK	National Museums of Kenya
NORAD	Norwegian Agency for Development Cooperation
NRF	National Research Fund
NRM	Natural Resource Management
NRT	Northern Rangelands Trust
NTFPs	Non-Timber Forest products
PBOs	Public Benefit Organizations
PES	Payment for Ecosystem Services
PESTLEG	Political, Economic, Social, Technological, Legal, Environment and Governance
PFMPs	Participatory Forests Management Plans
PS	Permanent Secretary
REDD+	Reduction of Emissions through Deforestation and Degradation
ROAM	Restoration Opportunities Assessment Methodology
SDC	Swiss Agency for Development and Cooperation
SDGs	Sustainable Development Goals
SIDA	Swedish International Development Cooperation Agency
SLM	Sustainable Land Management
SWOT	Strengths Weaknesses Opportunities and Threats
TIPS	Transition Implementation Plan
ToT	Training of Trainers
TWG	Technical Working Group

UK-PACT	United Kingdom-Partnering for Accelerated Climate Transitions
UN	United Nations
UNCBD	United Nation Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification.
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNSPF	United Nations Strategic Plan for Forests
USAID	United States Agency for International Development
USAID/KEA	US Agency for International Development Kenya/East Africa
USD	United States Dollar
WRA	Water Resources Authority
WRI	World Resources Institute
WSTF	Water Sector Trust Fund
WWF	World Wide Fund for Nature

DEFINITIONS OF TERMS

Adaptive capacity: The ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.

Afforestation: Planting of new forests on lands that historically have not contained forests.

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 services: Ecological processes or functions having monetary or non-monetary value to individuals or society at large.

Ecosystem: An ecosystem is a functional unit consisting of living organisms, their non-living environment and the interactions within, between and among them.

Forest and Landscape Restoration: An active long-term process to regain ecological integrity and enhance human wellbeing across deforested, degraded forests and landscapes

Forest: Land spanning more than 0.5 hectares with trees of at least 2 metres 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

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.

Rangelands: Vast undisturbed natural resources and landscapes in the form of grasslands, bushland, woodlands, wetlands and deserts. They grow primarily indigenous vegetation, rather than plants established by humans.

Reforestation: Planting of forests on lands that have previously contained forests but that have been converted to some other use.

Rehabilitation: Restoration of the capacity of 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: Area covered by tree patches of less than 0.5 hectares outside recorded forest areas.

FOREWORD



Forest and Landscape Restoration Implementation Plan (FOLAREP)-2023-2027 is a five-year cross-sectoral and multi-stakeholder' coordination framework to accelerate actions to restore deforested and degraded landscapes. The plan seeks to enhance resilient socio-economic development, improve ecological functioning and contribute to achieving national and international aspirations and obligations, respectively.

Restoration is of high priority to the National and County Governments, as outlined in various national policies, legislation, and strategies. They include Vision 2030, Forest Conservation and Management Act (2016), Climate Change Act (2016), the National Forest Programme (2016-2030), National Climate Change Action Plan (2018-2022), and Updated Nationally Determined Contributions (2020). Implementing FOLAREP will contribute to achieving 30% national tree cover by 2050, up from the current 12.38%. Further, it will contribute to the fulfilment of international obligations, including the Convention on Biological Diversity (CBD), the United Nations Framework Convention for Climate Change (UNFCCC), the United Nations Forum on Forests (UNFF), the Bonn Challenge, and the African Forest Landscape Restoration Initiative (AFR100). It will also be a critical instrument in supporting the aspirations of the UN Decade for Ecosystem restoration, 2021-2030.

The Ministry of Environment, Climate Change and Forestry (MoEF) will set up the requisite structures to address the gaps in Forest and Landscape Restoration (FLR), FLR legislation, regulation, research, incentives, and capacity building as stipulated in this plan, both at the National and County levels. The plan will ensure the sustainable restoration of targeted landscapes for improved ecological functionality and livelihoods in the country. The FOLAREP 2023-2027 has outlined the resources required and provided sustainable financing approaches. This plan has also incorporated a robust monitoring and evaluation framework to promote an effective, efficient and inclusive FLR programme in the country.

I, therefore, invite all stakeholders, including development partners, the private sector, civil society organizations, faith-based organizations, and local communities, to collaborate with the National and County Governments to support the implementation of this plan.

Hon. Siopan Tuya, CBS

Cabinet Secretary,

Ministry of Environment, Climate Change and Forestry

PREFACE



The Kenyan economy heavily depends on its ecosystems, including forests, rangelands, wetlands, and agroecosystems. Unfortunately, these ecosystems have continued to be degraded due to various drivers associated with unsustainable land management and the utilization of land resources. Ecosystem degradation results in accelerated soil erosion, biodiversity loss, and reduced water flow, among other manifestations. Ultimately, degraded ecosystems have reduced the capacity of the land to provide goods and services supporting the national and local economies.

Several policies, strategies, and programmes to mitigate the pressures on the ecosystems exist in the country but have not yielded maximum outputs. Furthermore, even though many State actors, Non-State actors, and development partners have been supporting or carrying out restoration activities in different parts of the country. These are attributed to inadequate coordination across Ministries, Departments, and Authorities (MDAs), various levels of government, and other stakeholders.

Informed of these gaps, the Ministry of Environment, Climate Change and Forestry (MoECCCF) established a technical working group (TWG) in 2019 to develop the Forest and Landscape Restoration Implementation Plan (FOLAREP) - 2023-2027. Drawing from their own experiences and referring to the global best practices, the TWG developed this plan to help accelerate and catalyze ecosystem restoration in the country by various state and non-state actors in a harmonized and integrated manner.

The draft FOLAREP was subjected to public consultations involving critical stakeholders from the 47 counties in Kenya before being validated in a National stakeholders' forum. The MoEF shall spearhead the implementation of FOLAREP to address drivers of the ecosystem and landscape degradation and restore degraded forests, rangelands, wetlands, and agricultural landscapes in a harmonized approach.

Ephantus Kimotho

Principal Secretary

Ministry of Environment, Climate Change and Forestry

ACKNOWLEDGEMENTS



Forest and Landscape Restoration Implementation Plan (FOLAREP) - 2023-2027 has been formulated through a multi-stakeholder consultation process engaging experts from national institutions, the Council of Governors, County Governments, and non-state actors.

Sincere appreciation to the Cabinet Secretary, Ministry of Environment, Climate Change and Forestry, Hon. Soipan Tuya and Cabinet Secretary, Ministry of Agriculture and Livestock Development, Hon. Franklin Mithika Linturi, the Principal Secretary of the State Department of Forestry, Mr Ephantus Kimotho, and the Principal Secretary of the State Department for Crops Development Philip Kello Harsama, for their immense support and policy guidance throughout the development of this implementation plan.

We recognize and appreciate the support provided by the Governors of the County governments and the critical role played by the Council of Governors in the county consultation forum held across all counties as part of this plan. Special thanks go to the Senior Management of Kenya Forest Service for their continuous technical input. The FOLAREP Secretariat and field staff involved in the plan development are also applauded.

The development of this plan was supported by the Global Environment Facility (GEF), The United Nations Food and Agriculture Organization (FAO)-Kenya, and co-financed by the United Kingdom-Partnering for Accelerated Climate Transitions(UK-PACT), The Center for International Forestry Research(CIFOR)-The World Agroforestry Centre (ICRAF), World Wildlife Fund (WWF), National Alliance of Community Forest Associations(NACOFA), The United Nations Environment Programme (UNEP), Nature Kenya (TRI-Tana), European Union (EU)-Regreening Africa.), Kenya Forest Service, Kenya Forestry Research Institute (KEFRI) and National Environment Trust Fund (NETFUND) to whom we are very grateful.

To the Forest and Landscape Restoration Technical Working Group members with the leadership of the Ministry of Environment, Climate Change and Forestry (MoECCF) and key contributors during the development of the FOLAREP, you have delivered a wonderful plan for the country, and I thank you.

Lastly, the contribution of the local communities and individuals who participated in the process by providing information, review, and logistical support in developing this plan is highly appreciated.

Julius Kamau, EBS

Chief Conservator of Forests

Kenya Forest Service

EXECUTIVE SUMMARY

Kenya is endowed with diverse ecosystems that include: forests, rangelands, wetlands and agricultural land that provide vital goods and services sustaining human well-being and social-economic development. Kenya's forests provide a multitude of benefits to humans in terms of climate regulation, water supply and regulation, timber and non-timber products, bio-energy, habitat for fauna and flora, clean air, erosion control, cultural and religious values/services among others. Rangelands support livestock production and diverse wildlife species, many of which are globally threatened. The agro-ecosystem is the backbone of Kenya's economy, producing food and raw materials for industries. Wetlands are biodiversity hotspots that supply water, food and other goods and services. These critical landscapes are threatened by degradation due to unsustainable utilization of resources, poor land use practices, biodiversity loss, invasive species and diseases, pollution and climate change. This has resulted in 38.8 million hectares of degraded land in the country.

Degradation is estimated to cost the Kenyan economy at least 3% of GDP annually (IMF, 2010). The country has committed to restore 5.1 million hectares by 2030, however, it has not been possible to realize steady progress due to inadequate incentives, insufficient resources and un-coordinated implementation of policies and efforts on Forest and Landscape Restoration (FLR). This has necessitated the formulation of FOLAREP. The plan has been developed in a consultative manner and is expected to augment the existing policy and legal frameworks in accelerating actions to restore deforested and degraded landscapes for sustainable livelihoods and enhanced ecological functioning of targeted forests and landscapes.

The goal of FOLAREP is to accelerate actions towards restoring 5.1 million hectares of deforested and degraded landscapes by 2030 and contribute to the achievement of national aspirations and international obligations. The overall objective of FOLAREP is to restore 3.5 million hectares of degraded landscapes through integrated forest and landscape restoration approaches for improved ecological functionality and social economic benefits by 2027. FOLAREP has five specific objectives that focus on: strengthening policy and legal frameworks and enhancing coordination of FLR; restoration of 3.5 million ha of degraded forests and landscapes; resource mobilization for FLR; promotion of inclusive nature-based value chains for improved livelihoods and strengthening FLR research, monitoring, evaluation and knowledge management.

The development of FOLAREP was spearheaded by a diverse technical working group (TWG) established by the Ministry of Environment, Climate Change and Forestry (MoECCF) in 2019. The draft FOLAREP was subjected to public consultations involving key stakeholders from the 47 counties in the country before being validated in a National stakeholders' forum. It is estimated that the implementation of this plan will cost about 58.2 billion Kenya Shillings (approx. USD 489 million) over a five-year period. These resources will be mobilized from the National and County government's budgetary allocations, other National Government Financing Mechanisms such as FLLoCA and NETFUND, development partners, the private sector, local and international NGOs and CBOs. A monitoring, evaluation, reporting and learning (MERL) framework has also been developed to track the impact, outcomes and processes across FLR related sectors in a systematic, inclusive and participatory manner.

FOLAREP will leverage on the existing structures and institutional frameworks both at the local, county and national levels. It will have: a National FLR Advisory Committee (Chaired by CS-MoECCF and Co-Chaired by Chair NRM-COG), National FLR Steering Committee (Chaired by PS-

MoECCF), a National Technical Committee (Chaired by a representative of PS- MoECCF), County Environment Committee (CECM-Environment) and a Secretariat (hosted by KFS).

The National Government will liaise with the County Governments to facilitate FLR priority setting, action planning, mainstreaming the plans in the county planning processes including the County Integrated Development Plans (CIDPs), implementation and monitoring. Collaboration between the County governments with National Government Ministries, Departments and Agencies with mandates on forests and landscapes restoration as well as non-state actors implementing FLR actions is encouraged for the successful implementation of this plan. Furthermore, FOLAREP encourages formulation, enactment and implementation of requisite legislations and policies by County governments to create a conducive environment for FLR interventions.

1. CHAPTER 1: INTRODUCTION

Kenyan landscapes including forests, wetlands, coastal areas, rangelands and croplands are threatened by severe degradation due to agricultural expansion, over-exploitation and unsustainable use of land resources, overgrazing, climate change, urbanization, infrastructural developments and population increase. Land and forests degradation adversely affect and deplete resources that form the basis for livelihoods to millions of people worldwide, including Kenyans. Degradation results in severe negative impacts on essential ecosystem goods and services such as water, food, fuel, fodder, timber, non-wood forest products, carbon sequestration, cultural values, tourism and recreation sites. Furthermore, it causes increased soil erosion, and diminishes livelihood opportunities (Mulinge et al, 2016).

In Kenya, 21.6% of the land is degraded (Gichenje and Godinho, 2018) with about 12,000 hectares of forest land converted to other uses or lost through natural causes every year (MoEF, 2019b) (Figure 1). Between 2000 and 2010, the country lost 50,000 hectares of forestland leading to a decline in water availability (MoEF, 2019b). Degradation is estimated to cost the Kenyan economy at least 3% (Mulinge et al, 2016) of her GDP annually from soil and nutrient depletion on cropland.



Figure 1: A degraded landscape in Wote area of Makueni County (Source: KEFRI, site visit in May 2022)

Across the various ecosystems and landscapes, different drivers to degradation are manifested through various dynamics such as the geophysical aspects, land use practices, socio-cultural activities, political and governance mechanisms. A study conducted on forest and landscape restoration (FLR) across the 47 Counties, identified key drivers of degradation including: increase in population, poverty, encroachment, overgrazing, overstocking, land tenure, limited resources both financial and human, inadequate information, limited awareness creation and socio-cultural barriers among others.

At the international level, there are various processes and initiatives towards restoration of degraded forests and landscapes. Over the past decade, countries including Kenya through various

Multilateral Environmental Agreements (MEAs), have pledged significant commitments and support to Forest and Landscape Restoration by the year 2030. These include the Bonn Challenge, the New York Declaration on Forests, Convention on Biological Diversity (CBD), Sustainable Development Goals (SDGs), the UN Decade for Ecosystem Restoration (2021-2030) and Glasgow Declaration on Forests and Land use.

At the national level, Kenya has embarked on the restoration of 5.1 million hectares of deforested and degraded landscapes. The Government has set a goal of enhancing forest and tree cover to a minimum of 30 % of the total land area by 2050. This is to be actualized through the implementation of various national and county plans, strategies and programmes. However, there has been inadequate coordination in the implementation of the various restoration efforts being undertaken by both state and non-state actors. It is in this context that the Government of Kenya through the MoEF, has developed the five-year Forest and Landscape Restoration Implementation Plan (FOLAREP) 2023-2027. FOLAREP focuses on the restoration opportunities in forests, croplands, rangelands and buffer zones along wetlands as well as strengthening the coordination framework and resource mobilization for its implementation.

1.1 Justification and rationale for FOLAREP

Forests and landscapes in Kenya are under pressure from anthropogenic factors and climate change resulting in 38.8 million hectares of degraded land. Kenya committed herself to the Bonn Challenge and AFR 100 in 2016 to restore 5.1 million hectares of deforested and degraded lands in order to address the associated challenges identified in the country. However, minimal progress has been registered towards this commitment due to insufficient resources, weak coordination in formulation and implementation of policies, limited synergies amongst actors, inadequate investments and incentives, limited market access, research, knowledge and monitoring gaps on FLR. It is also recognized that implementation of strategic activities through cross-sectoral and multi-stakeholder's coordination framework, entrepreneurship, business innovation, gender equity and social inclusion (GESI) considerations will accelerate FLR.

It is against this background that this Forest and Landscape Restoration Implementation Plan (FOLAREP) is developed. This framework will operationalize Forest and Landscape Restoration (FLR) through structured engagement of stakeholders to coordinate FLR efforts in Kenya.

1.2 Goal

Accelerate actions towards restoring 5.1 million hectares of deforested and degraded landscapes by 2030 and contribute to achieving national aspirations and international obligations.

1.3 Overall Objective

To restore 3.5 million hectares of degraded landscapes through integrated forest and landscape restoration approaches for improved ecological functionality and social, economic benefits by 2027.

Specific Objectives:

1. To strengthen policy, regulatory frameworks and institutional coordination for enhanced FLR implementation.
2. To put 3.5 million ha of degraded forests and landscapes under restoration for improved biodiversity and climate change resilience.
3. To mobilize resources from public and private partnerships for FLR implementation-
4. To promote inclusive nature-based value chains for improved livelihoods for communities.

5. To strengthen FLR research, monitoring, evaluation and knowledge management.

1.4 The FOLAREP formulation process

FOLAREP was developed and validated through a rigorous multi-stakeholder consultation process informed by the findings of the National Restoration Opportunities Assessment Technical Report (MENR, 2016b) and relevant global, regional, national and county level policies, legal frameworks and strategies. The process was spearheaded by a Technical Working Group (TWG) established by the Ministry of Environment, Climate Change and Forestry (MoECCF) in 2019. The formulation process was based on a roadmap jointly developed and validated by stakeholders (Figure 2). The first draft of FOLAREP was produced by a consultant and then reviewed by the TWG through several meetings. Consultations on the improved draft FOLAREP were held with relevant stakeholders from all the counties. The key stakeholders included: relevant Ministries, Departments and Agencies, County governments, development partners, private sector, PBOs and Community Based Associations' representatives. Emerging issues from these consultations were incorporated in the final draft. The final draft FOLAREP was validated in a stakeholders' forum.

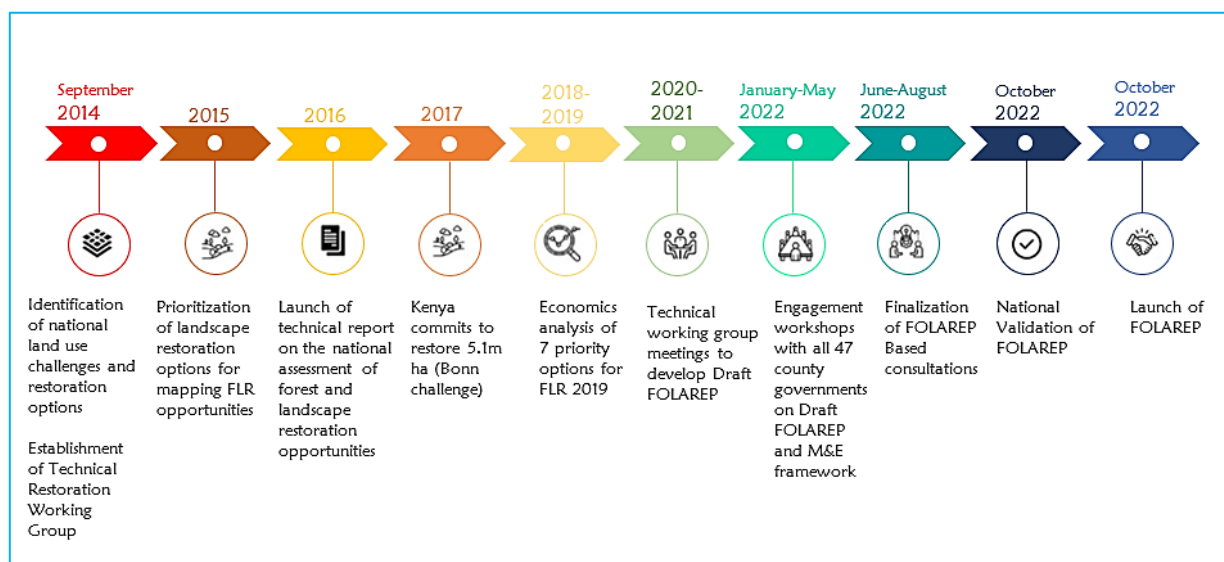


Figure 2: FOLAREP formulation process

1.5 Guiding principles

The Forest and Landscape Restoration Implementation Plan (FOLAREP) has adopted IUCN (2020) principles on FLR and the national forest programme which include:

Focus on landscapes -FLR takes place within and across entire landscapes in order to balance ecological, social and economic priorities.

Maintain and enhance natural ecosystems within landscapes -FLR aims at enhancing the conservation, recovery, and sustainable management of forests and other ecosystems.

Tailor to the local context using a variety of approaches – This plan will draw on scientific knowledge, best practices and indigenous knowledge and its implementation will leverage local capacities, existing and/or new governance structures including the national and county government structures.

Restore multiple functions for multiple benefits -FLR interventions in this plan aim to restore multiple ecological, social and economic functions across the landscape. This is expected to generate a range of ecosystem goods and services that benefit multiple stakeholder groups.

Manage adaptively for long-term resilience –FLR implementation action plan will be based on current approaches and scientific knowledge and will accommodate emerging environmental challenges such as climate change while addressing knowledge and capacity gaps, stakeholder needs, and changes in societal values. To facilitate this process, information from monitoring activities, research, and stakeholder guidance will be integrated into annual plans.

In addition to the IUCN (2020) guiding principles on FLR, the plan will apply Human Rights Based Approach (HRBA) to ensure that all forms of discrimination in the realization of rights must be prohibited, prevented and eliminated during the Implementation of the plan.

2 CHAPTER 2: SITUATIONAL ANALYSIS

A situational analysis was carried out through literature review, Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs). The analysis included review of the enabling legal frameworks and strategic underpinnings for FLR implementation, priority landscapes in Kenya (Forest lands, croplands, rangelands and wetlands) and the restoration opportunities in Kenya (ROAM Assessment, 2016). Further, the analysis reviewed the economics for scaling up FLR in Kenya, barriers to Forest and Landscape Restoration, Political, Economic, Social, Technological, Legal, Environmental and Governance (PESTLEG) and Strengths Weaknesses Opportunities and Threats (SWOT) for FLR, Risk and stakeholder analysis and COVID-19 Pandemic.

2.1 Enabling Legal frameworks policies and strategic underpinnings for FLR Implementation

The implementation of the proposed Forest and Landscape Restoration (FLR) interventions is supported by an enabling progressive legislative, policy and strategic frameworks at global, regional, national and sub-national levels.

At global level, Kenya has ratified and domesticated several Multilateral Environmental Agreements (MEAs), treaties, strategies and commitments relevant to FLR including; the Bonn Challenge, United Nations Framework Convention on Climate Change (UNFCCC) - Paris Agreement, United Nations Convention on Biological Diversity (UNCBD), United Nations Strategic Plan for Forests 2017-2030, New York Declaration on Forests, Glasgow Declaration on Forests and Land use, UN Decade of Ecosystem Restoration 2021 – 2030, 2030 Agenda for Sustainable Development (SDG), the United Nations Convention to Combat Desertification (UNCCD) and RAMSAR Convention on Wetlands .

At the continental level, Kenya is party to African Union's Agenda 2063 that focuses on building climate resilient economies and communities, and the African Forest Landscape Restoration Initiative (AFR100) that aims to restore 100 million hectares of deforested and degraded land in Africa by 2030. Within the East African Community, Kenya is party to East African Community (EAC) Climate Change 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 (Annex 2).

Kenya has developed several policies, legislations and strategies in land-based sectors such as environment, forest, agriculture, land, wildlife and water that support scaling up FLR efforts at the national, county and landscape levels. The key policy frameworks and strategies addressing deforestation and forest degradation in the Country include; the Draft National Forest Policy 2021, National Forestry Programme (2016-2030), Draft Agroforestry Strategy, the National Strategy for Increasing Tree Cover to 10% by 2022, County Integrated Development Plans (CIDPs) and the Model Policy and Law on County Sustainable Forest Management and Tree Growing 2021.

The sectoral legal framework includes; the Kenya Constitution 2010, Environmental Management and Coordination Act Cap. 387 of the Laws of Kenya, Forest Conservation and Management Act, 2016, Climate Change Act, 2016, 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 among others.

Underpinning the national aspirations, County Governments are at various stages of domesticating national policies and developing necessary legislations that will augment the forest and landscape restoration activities at county level. These legal frameworks present the establishment of relevant governance and coordinating structures such as the County Environment Committees, Climate

Change Planning Committees to facilitate accelerated implementation of forest and landscapes restoration actions.

The commitment by the Kenya Government to develop these policies and legal framework underscores the unique role of forests and landscapes socio-economic development, green growth, biodiversity conservation and climate change mitigation and adaptation.

2.2 Priority landscapes in Kenya

The Restoration Opportunities Assessment study (MENR, 2016a) identified the following priority landscapes for restoration; forest and agricultural landscapes, rangelands, wetlands and riparian areas.

2.2.1. Forest landscapes

Kenya's forests range from montane, western rainforest, savannah woodlands, dryland forests, plantations and coastal forests including mangroves. (MENR, 2016b). The country has a low forest cover of 5,226,191.79 ha and a tree cover of 7,180,000.66 representing 8.83% and 12.13% of the total national area respectively (KFS, 2021). This indicates that the forest cover increased by approximately 50% from 2018 (5.9%) due to enhanced FLR activities by different stakeholders. Forest ecosystems support various sectors of the economy including agriculture, tourism, horticulture, trade, water and energy. It is estimated that forestry accounts for 3.6% of the country's GDP, excluding charcoal and direct subsistence (Mulinge et al., 2016; MoEF, 2019b). The forests ecosystems provide good and services which can be broadly categorized as; provisioning, supporting, regulatory and cultural. In this regard, maintaining forest biodiversity ensures that sustainable economic opportunities for people are in place (MoEF, 2021).

Notwithstanding the fundamental role of forests to the economy and human wellbeing, they are threatened by competing land uses such as agriculture, industry, human settlement and development of infrastructure (MoEF, 2019b). Unsustainable extraction of forest products, illegal logging, charcoal production and grazing have also contributed to the degradation of forests. As a result, the country loses approximately 12,000 ha of forest cover annually which has adverse long-term environmental effects on sustainability of forest ecosystems (MoEF, 2019b).

Long-term economic benefits from forest ecosystems exceed short-term gains from deforestation and forest degradation. This justifies the need to conserve the forests and deliberate efforts to restore and sustainably manage degraded forest areas throughout the country (Cheboiwo et al., 2018).

2.2.2. Agricultural landscapes

The agriculture sector remains the largest contributor to Kenya's Gross Domestic Product (GDP), directly contributing about 33% and another 27% indirectly through linkages to agro-based industries and the service sector (GOK 2018a). The sector employs more than 40% of the total population and about 70% of the rural population (GOK 2018b). The agricultural sector contributes significantly to Kenya's food security, income generation, employment creation and poverty reduction. The sector contributes 60% of the country's income, accounts for over 65% of total exports, provides 60% of total employment, 18% of which is formal (UNEP 2015).

The performance of the sector is hampered by land degradation due to unsustainable production practices. These practices lead to soil erosion, loss of soil fertility, salinity, reduced vegetation cover, reduced biodiversity and ecosystem services and reduced livestock carrying capacity. Climate change impacts that manifests in unpredictable and unreliable rainfall, increased frequency

of droughts, and increased pest infestations are other challenges that are experienced in the agricultural landscapes (GOK 2018b).

The country has developed supportive policies, strategies and measures including the Agricultural Sector Growth and Transformation Strategy (ASTGS) with objectives to address the sectoral goal of enhancing food and nutrition security. Furthermore, the Ministry of Agriculture has developed the Kenya Climate Smart Agriculture Strategy (KCSAS) (MoALF, 2017) and Climate Smart Agriculture Strategy Implementation Framework (MoALF, 2019), which have proposed FLR actions to increase productivity, enhance resilience and reduce GHG emissions from the sector. In addition, the sector is in the process of developing a National Agroforestry Strategy (2021-2030) to mitigate effects of deforestation and land degradation, address climate change and increase farm productivity, enhance households' access to diverse wood and non-wood products at different times of the year, diversify household's livelihood sources and increase income and food security.

2.2.3. Rangelands

Rangelands are vast natural landscapes occurring in Arid and Semi-Arid areas of the country and comprise of woodlands, bush-lands, grasslands, wetlands and bare land. They constitute about 89% of Kenya's total land area (MoALF&C, 2021). They provide diverse ecosystem goods and services (wood and non-wood products as well as habitats for wildlife). Grasslands are well known as the habitats for the greatest assemblages of large wild mammals worldwide and support rich diverse bird species. The grasslands are important for nature-based tourism, extensive livestock production and recreation activities as well as for water conservation and land degradation and erosion control. They support about 20% of Kenya's human population, 70% of the country's livestock herd, and are home to 85% of the total wildlife population (MoALF&C, 2021). The integrity of rangelands and the benefits that they provide are increasingly under threat by agricultural expansion, unsustainable charcoal production and firewood collection, uncontrolled fires, human settlement, rapid infrastructural developments, land degradation, overgrazing and spread of invasive species (MoALF&C, 2021). Land use changes and agricultural expansion have been major factors in the massive decline of wildlife population (Ogutu et al., 2016). Kenya lost more than 68% of its wildlife between 1977 and 2016 in the rangelands (Ministry of Tourism and Wildlife, 2018).

In addition to the anthropogenic degradation pressures, there are natural drivers responsible for rangeland degradation which include climate change, aridity, desertification and drought among others. The impact of drought in rangeland ecosystems results to water scarcity which hampers FLR activities.

The evolution of community conservancies in the rangelands particularly in Laikipia, Samburu, Isiolo, Kajiado, Narok and Tana River counties presents a viable option for sustainable management of Rangelands. Many of these conservancies have developed natural resources management plans and grass-reseeding programmes that are contributing to rangeland recovery (NRT, 2013). FLR is anchored on the Session Paper No. 8 of 2012 on National policy for Sustainable Development of Northern Kenya (GOK 2018) and Rangelands and Pastoralism Strategy 2021 – 2031. In addition, Vision 2030, the National Climate Change Response Strategy, the National Climate Change Action Plan 2018-2022 and County Integrated Development Plans (CIDPs) of counties whose land cover is dominated by rangelands make reference to the

restoration of rangelands. In addition, rangelands have the largest restoration potential of 1.9 million ha of the total land area.

2.2.4. Wetlands and riparian areas

Wetlands and riparian landscapes constitute an important part of Kenya's natural resources performing provisioning, regulating, cultural and supporting services. Their provisioning services include storing and retaining water for domestic, agricultural and industrial use while regulating services include modifying water flows, recharging and discharging groundwater resources and diluting or removing pollutants. Wetlands are also net carbon sinks and are, therefore important in climate change mitigation. Their supporting services are important for soil formation, nutrient cycling and providing habitats for diverse plant and animal species.

These ecosystems face numerous threats from climate change, human population pressure and land use changes. Some of them have been drained for agricultural expansion, settlements and commercial developments. Other threats include pollution, sedimentation, over-exploitation of wetland resources, introduction of alien species, encroachment of riparian reserves, and adverse effects of climate variability. These have caused extensive degradation, reduced water quality and quantity and loss of freshwater and wetland ecosystem goods and services.

Wetlands Regulations, 2009 provides for mapping of all wetlands at risk from degradation and proposed measures to rehabilitate them (GoK, 2009). The Kenya Wetland Atlas highlights the need for their restoration: *"Identify wetland sites and systems where restoration or rehabilitation would be beneficial and yield long-term environmental, social, or economic benefits and implement the necessary measures to recover them"* (GoK, 2012). The government, after that developed the National Wetland Policy (MENR, 2014) that gives guidance on sustainable management and use of wetlands in the country.

2.3 Restoration opportunities in Kenya

A national assessment of potential restoration opportunities conducted in 2016 identified the most pressing land use challenges, restoration options and opportunities (MENR, 2016b). From the assessment seven priority restoration options were identified namely; afforestation or reforestation of natural forests, rehabilitation of degraded natural forests, agroforestry in cropland, commercial tree and bamboo growing on potentially marginal cropland and un-stocked forest plantation forests, tree-based buffer zones along water bodies, wetlands, roads and restoration of degraded rangelands. The current restoration potential is at 38.8 million hectares of which the country has committed to restore 5.1 million hectares by 2030 (Table 1 and Figure 3).

Table 1: Restoration opportunities in various Land Uses (Source: MENR,2016b)

Restoration Opportunity	Total Area (Million ha)	Restoration potential (Million ha)	Total restoration target for 2030 (million ha) in different scenarios
Forest lands	4.0	5.2*	1.0
Croplands	9.9	7.6	2.1
Rangelands	42.6	25.7	1.9
Roads		0.3	0.2
Others (Wetlands, Settlements, Bare lands)	2.7	n/a	n/a
Total	59.2	38.8	5.1

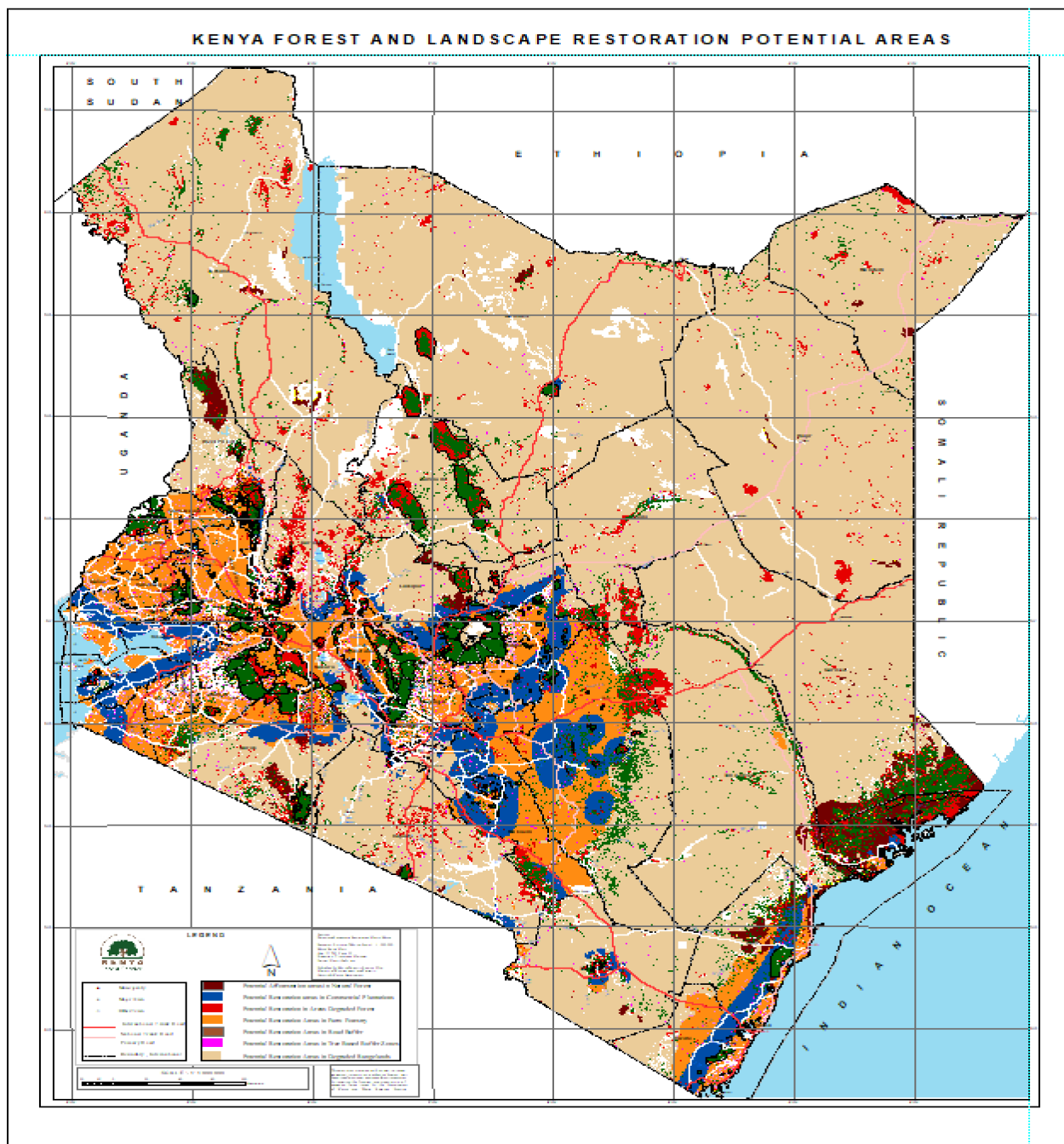


Figure 3: Potential for all seven priority restoration options in Kenya (MENR, 2016b) (KFS to add clear legend)

2.4 On-going FLR initiatives in Kenya

The implementation of FOLAREP will occur against a backdrop of several ongoing FLR initiatives. A survey conducted in 2021 (Restoration Monitoring Readiness in Kenya, 2021) documented 32 ongoing restoration initiatives across the country supported by different partners. Turkana had the highest number of projects (10), followed by Laikipia (8) and Isiolo (7) while the others were distributed across the country. Most of the restoration initiatives were in the Arid and Semi-Arid Lands (ASALs), where land degradation is most prevalent. Counties have also been actively involved in planning and implementation of forest landscape restoration initiatives. For instance, the County Government of Nyandarua has prepared and launched a County Forest Landscape Restoration Strategy 2021-2030 supported by World Wide Fund for Nature (WWF) while Lamu and Tana River Counties are in the process of finalizing their FLR plans. Further, the National Government through Kenya Forest Service and county governments have been implementing National Tree Planting Campaigns Programme, scaling up school greening programme and enhanced collaborative partnership through ‘adopt-a-forest initiative’ among others. The National Government through the Ministry of Environment, Climate Change and Forestry is financing KEFRI to supply quality tree seeds and other nursery inputs to schools, prisons and CBOs. KEFRI has also established site demonstration plots on FLR activities across various landscapes in different parts of the country (Figure 4). Private sector players such as Equity Bank, the Kenya Commercial Bank and Safaricom among others are carrying out tree planting as part of their Corporate Social Responsibility in collaboration with the national and county governments.



Figure 4: FLR activities (forest restoration) in Maasai Mau Forest (Source: KEFRI, site visit in August 2022).

Non-state actors have been instrumental in supporting the restoration efforts at the national, county and landscape levels. 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) and is currently developing GEF 8. 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. 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.

The World Resources Institute (WRI) supported KFS to carry out the national Restoration Opportunities Assessment Methodology (ROAM) and both KEFRI and KFS to conduct a study on the cost of restoring 5.1 Million ha of degraded forests and landscapes in Kenya. The Institute has further supported Makueni County to carry out a county level ROAM and its FOLAREP and develop an investment plan to finance restoration activities. It is piloting and strengthening a multi-stakeholder platform to coordinate FLR work in the County and supporting the formulation of policies that will support FLR work focusing on equity, social inclusivity and benefit-sharing mechanisms. In addition, WRI is experimenting with a blended financing mechanism to accelerate restoration in Makueni County by identifying and supporting nature-based value chains. It has further identified communities and NGOs engaged in FLR activities and conducted their capacity needs assessment to enhance targeted support.

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 Australian Government mainly finances the projects with co-financiers, including the German Government through GIZ and BMZ, European Union through CIFOR-ICRAF and Swedish International Development Cooperation Agency (SIDA).

Agroforestry VI is conducting FLR activities in Kenya by boosting milk value chains and carbon trading in Narok, Bomet, Kisumu, and Kitale regions. The FLR initiatives include Kenya Agriculture Carbon Project, Shrubs for Change, The Alive Project, and Livelihoods Mount Elgon, supported by the German development organization-GIZ and CIFOR-ICRAF.

The Japanese International Development Agency (JICA) has also supported restoration through social forestry, training on nursery practices and producing quality seeds for dryland species in Kenya in collaboration with KEFRI and KFS.

Further, with financing from the Global Environment Facility and the oversight of the Ministry of Environment and Forestry, UN Environment supports the implementation of a five-year restoration project referred to as “The Restoration Initiative Tana”. The implementation by Nature Kenya aims to strengthen integrated natural resource management and restoration of degraded landscapes in the Tana Delta and systemically scale up best practices and lessons learned to other priority landscapes in Kenya. The project has facilitated Lamu and Tana River Counties to develop Forest and Landscape Restoration Action Plans, among others. Additionally, Nature Kenya is working with various partners to implement FLR activities across the nation, particularly in regions designated as Key Biodiversity Areas.

2.5 Economics for scaling up FLR in Kenya

Effective forest and landscape restoration implementation can lead to increased economic benefits, enhanced livelihood and strengthened community resilience. An economic analysis for restoration of 5.1 million hectares of degraded areas in Kenya based on the estimated costs for all restoration options at the national level for a 30-year period would cost Kshs 1.9 trillion and result in accruing benefits of Kshs 7.6 trillion (Cheboiwo et al.,2018)

2.6 Barriers to Forest and Landscape Restoration

There are several barriers to implementation and scaling up of FLR in Kenya (Table 2).

Table 2: Barriers to Forest and Landscape Restoration in Kenya

Key area	Barriers
Governance and related issues	<ul style="list-style-type: none">• Disharmony among various government policies, laws and related strategies and initiatives• Weak structures to implement relevant policies, laws and regulations• Lack of some sectors specific policies
Information barriers	<ul style="list-style-type: none">• Inadequate information on FLR• Ineffective knowledge management systems and information sharing mechanism on FLR associated benefits
Land tenure issues	<ul style="list-style-type: none">• Irresponsive land tenure systems.• Unsustainable communal land use.• Ineffective implementation of land use plans• Insecure land tenure rights
Land use planning	<ul style="list-style-type: none">• Competing land uses• Land fragmentation
Social barriers	<ul style="list-style-type: none">• Demographic pressures on land.• Resource use conflicts and insecurity• Negative cultural norms and practices (malpractice).• Gender disparity
Economic barriers	<ul style="list-style-type: none">• Inadequate financing.• Inadequate benefit sharing mechanisms.• Inflexible programming for public and donor funded projects.• Inadequate prioritization and allocations of FLR budgets
Biophysical barriers	<ul style="list-style-type: none">• Climate change (Drought, floods and disease infestations)• Invasive species explosion• Extreme land degradation• Declining soil fertility
Technology	<ul style="list-style-type: none">• Inadequate technological capacity (Know-how and infrastructure)

2.7 Post Covid-19 Economic Recovery Strategy for Kenya (2020-2022)

Covid-19 pandemic was first reported in Kenya in March 2020. The pandemic led to unprecedented impacts on the health sector, livelihoods and environment. During the pandemic, many people concentrated on their health and safety resulting in low prioritization of tree growing and FLR activities. Consequently, there was a drastic decline in demand for tree seedlings leading to losses and collapse of nurseries. Furthermore, the loss of life and livelihoods led to over-reliance on forest resources for income and source of energy.

In recognition of the impact of Covid 19 on the Kenyan economy the government has developed the Post Covid-19 Economic Recovery Strategy (ERS) 2020-2022. The Strategy places emphasis on climate change adaptation and mitigation measures that will exploit green economic activities to put the economy on a green and climate resilient recovery-build back path. A green recovery will significantly enhance the resilience of the economy and local communities in the face of both economic and environmental challenges. The Strategy focuses on measures that will drive sustainability while boosting green jobs, income and growth while at the same time reducing drivers of climate change and environmentally damaging activities. To facilitate a sustainable green recovery, the government is undertaking the following activities: increasing support for Financing Locally led Climate Action (FLLoCA) as a pillar of a green and inclusive recovery for all, Fast-tracking the finalization of the National Policy Framework on Green Fiscal Incentives to provide fiscal and other necessary incentives for green investment including renewable and green energy projects, clean transport, climate smart agriculture, green water infrastructure, nature-based ecosystem solutions, employ youth under the Green Kenya Initiative in countrywide tree planting programmes, mobilize private sector finance for investment in green and resilient projects and programmes and issuance of Sovereign Green and Social Bonds from private sector sources to finance conservation green investments in key climate affected sectors among other activities. Through the National Research Fund (NRF), the government funded research proposals geared towards combating covid-19 as one way of being proactive on future pandemics and epidemics.

These measures are consistent with the objectives of FOLAREP which seek to enhance bio-diversity protection, reduce the vulnerabilities of communities to pandemics and improve resilience to the negative impacts of climate change, boost economic activity, generate income, create jobs, promote social inclusion and reduce inequalities.

2.8 PESTLEG AND SWOT Analysis for FLR

Table 3: PESTLEG and SWOT Analysis for FLR

PESTLEG	SWOT			
	Strengths	Weaknesses	Opportunities	Threats
Political	<ul style="list-style-type: none"> • Transition Implementation Plan (TIPS) in place in most counties. • Goodwill towards addressing degradation and restoration. • Supportive Policy and legislative instruments emphasis in the new constitution 2010. • Strong national and international support on landscape restoration. • Political goodwill for restoration programs and initiatives. • Community land adjudication process on-going. 	<ul style="list-style-type: none"> • Low prioritization of forestry and land restoration in programs ranking. • Inadequate knowledge management that can influence accurate decision making. 	<ul style="list-style-type: none"> • Enabling political environment for private sector and development partners engaged in restoration initiatives. • Favorable national, regional global political agenda on land-based issues 	<ul style="list-style-type: none"> • Bureaucracy in governance. • Slowed project implementation during political transition.
Economic	<ul style="list-style-type: none"> • Increased interest on trading of certified timber and NTFP 	<ul style="list-style-type: none"> • Unstable Global economic performance cycles. 	<ul style="list-style-type: none"> • Increasing global demand of forest products from sustainably managed 	<ul style="list-style-type: none"> • Unpredictable exchange rates. • Inflation.

PESTLEG	SWOT			
	Strengths	Weaknesses	Opportunities	Threats
	<p>products and ecosystem services.</p> <ul style="list-style-type: none"> Enhanced financial support from development partners in forestry, agriculture and other land-based sectors. Growing bio-enterprise development and entrepreneurial culture on NTFPS. Increased awareness of ecosystem benefit sharing models. 	<ul style="list-style-type: none"> Inadequate financial resources for restoration of degraded lands Competition for forest and land resources for development. Weak linkages of forest and land-based products to markets in order to spur development in sustainably managed environment. 	<p>landscapes including nature-based solutions.</p> <ul style="list-style-type: none"> Emergency of green, blue and circular economies to incentive stakeholders on environmental activities. 	<ul style="list-style-type: none"> Uncertain monetary and fiscal policies (i.e., Reduction of exchequer funding to government entities). High demand of forest goods and services driving degradation. Global recession adversely affecting resources available for restoration. Pandemics and epidemics
Social	<ul style="list-style-type: none"> Favorable cultural practices and beliefs in conservation and management of natural resources. Community engagement in participatory forest management. 	<ul style="list-style-type: none"> High dependency on forest-based products leading unsustainable of forest related products. High rates of rural unemployment and poverty levels. FLR approach has low inclusivity which limits 	<ul style="list-style-type: none"> Many stakeholders participating in FLR. Improved uptake of nature-based interventions. Vast land resources in the communities, private and arid and 	<ul style="list-style-type: none"> High population growth putting strain on landscape targeted for restoration activities. High poverty levels.

PESTLEG	SWOT			
	Strengths	Weaknesses	Opportunities	Threats
	<ul style="list-style-type: none"> Willingness of stakeholders to participate in Forest and land restoration programmes and projects. 	<ul style="list-style-type: none"> ownership of the process at the community level. Inadequate knowledge on the importance and impacts of FLR among the communities. 	<ul style="list-style-type: none"> semi-arid for restoration. 	
Technological	<ul style="list-style-type: none"> Technologies for land and forest restoration initiatives. Existence of research institutions. Availability of trained workforce in the market for FOLAREP. Upgraded forest information center. Existence of restoration related infrastructure for mapping, forecasting etc. 	<ul style="list-style-type: none"> Inadequate information dissemination on best practices for landscape restoration. Low level use of technology in marketing of forest and other land-based products. Limited profiling of empirical evidence and most recent information to Influence policy on landscape restoration. Weak investment on ICT in forestry and land-based sectors. 	<ul style="list-style-type: none"> Emerging technologies in forest and land restoration. Favorable policies on ICT and establishment of ICTA to automate government services for improved efficiency and effectiveness. 	<ul style="list-style-type: none"> Cyber-crime. Low uptake on ICT technologies.

PESTLEG	SWOT			
	Strengths	Weaknesses	Opportunities	Threats
Legislative	<ul style="list-style-type: none"> Entrenchment of management of conflicts. Community Forest Association and other legislations in conservation and management of forest resources. Supportive policy and legislative Instruments. 	<ul style="list-style-type: none"> Conflicting policies and laws both at national and sectoral levels. Weak policy formulation and implementation framework. Weak linkages between science and policy development on natural resources management. 	<ul style="list-style-type: none"> Existence of government blue prints such as Vision 2030, Agenda four, National Forest Programme. Favorable constitutional dispensation, Effective County Assemblies. 	<ul style="list-style-type: none"> Lengthy process on formulation and legislation of laws and policies governing the sustainable use of forest resources and other land-based sector goods and services.
Environment	<ul style="list-style-type: none"> Domesticated Multi-lateral Environmental Agreements (MEAs). Existence of national protocols and Agreements. Recognition of forests and trees in climate change mitigation and adaptation options. 	<ul style="list-style-type: none"> Weaknesses in implementation and monitoring of environmental Laws and policies. Low level of awareness on nature-based income generating opportunities e.g. carbon. Financing. 	<ul style="list-style-type: none"> Emerging of payment of ecosystem services (PES). Availability of funding opportunities. Existence of regional framework for sustainable forest management. The UN Decade of Ecosystem Restoration. 	<ul style="list-style-type: none"> Inadequate disaster recovery plans and conflict resolution mechanisms on environmental issues.

PESTLEG	SWOT			
	Strengths	Weaknesses	Opportunities	Threats
Governance	<ul style="list-style-type: none"> • Two-tier level of governance at national and county for coordination and strengthening implementation of FOLAREP. • Existence of national institutions responsible for forest to promote management, conservation and research. • Existence of Acts and regulations that guide participation of the community in restoration activities. • Participatory forest management through CFAs. 	<ul style="list-style-type: none"> • Bureaucratic layering of governance. • Low capacities of the county governments to implement devolved forestry and agriculture functions. • Conflicting and overlapping Institutional mandates. • Limited capacity to strengthen enforcement of County and community managed protected areas. • Limited public private partnership frameworks on forest and other landscape restoration initiatives. • Limited data to inform decision making. 	<ul style="list-style-type: none"> • Restructuring/changes in land governance. • Increased funding from Government and development partners. • Existence of mechanism for fundraising for restoration activities. 	<ul style="list-style-type: none"> • Dilemma of gazetted land and protection and alternative livelihood provisions.

2.9 Risk Analysis

Table 4 analyses the risks and mitigation measures associated with implementation of FOLAREP.

Table 4: Risk analysis and mitigation measures for identified threats

Risk	Level*	Mitigation	Responsibility for mitigation
Drought	High	<ul style="list-style-type: none"> Species site matching, early planting/preparedness and underground water provision to supplement Research on drought resistant species Deployment of innovative technologies to address erratic weather patterns Early warning systems 	KEFRI, KFS, County Governments, PBOs, NDMA, KWS
Wildfires	Moderate	<ul style="list-style-type: none"> Use of firebreaks Installation of fire rating board Enhanced fire outbreaks surveillance Enhance Fire management capacity including skills and tools 	KFS, County Governments, Communities, KWS, NDMA
Insecurity	Moderate	<ul style="list-style-type: none"> Security enhanced by already established organs 	Ministry of Internal security, KFS, KWS
Floods and Landslides	Moderate	<ul style="list-style-type: none"> Correct prediction of mean annual discharge, early warning, monitor flood frequency, timing and magnitude Putting mitigating infrastructure Map landslide prone areas 	NDMA, KRCS, Ministry of Water, Sanitation and Irrigation
Pest and diseases	Low	<ul style="list-style-type: none"> Monitoring and development of prediction models Mixed tree species planting 	KEFRI, KEPHIS, MOA, KARLO, KFS, KWS, PBOs, County governments,

Risk	Level*	Mitigation	Responsibility for mitigation
Invasive species	Moderate	<ul style="list-style-type: none"> Species site matching Implement applicable policies and guidelines on invasive species management 	KEFRI, KEPHIS, KFS, MoAL, NEMA, KALRO
Pandemics and epidemics	High	<ul style="list-style-type: none"> Developing and implementing guidelines for prevention and management of pandemics and epidemics 	MoH
Awareness and stakeholders support	Moderate	<ul style="list-style-type: none"> Stakeholder engagements 	KEFRI, KFS, County Governments, NACOFA.

*NOTE: Likelihood (Low=1, Moderate = 2, High = 3); Severity (Low=1, Moderate = 2, High = 3); Level (Low 1-3, Moderate 4-6, High 7-9). Risk level is calculated as Likelihood x Severity.

2.10 Stakeholder Analysis

The key stakeholders of FOLAREP and their roles are as outlined in Table 5.

Table 5: Stakeholders' roles and responsibilities

Stakeholder	Roles and responsibilities
National Government	<ul style="list-style-type: none"> Integrate FOLAREP into sectoral strategies, projects and plans with adequate staffing and financial resources. Coordinate mapping, planning, implementation, monitoring and reporting on the restoration interventions
County Governments	<ul style="list-style-type: none"> Carry out county level ROAMs and FOLAREPs Integrate and mainstream FOLAREP into County Integrated Development Plans (CIDPs), County Environment Action Plans (CEAPs), County Climate Action Plans (CCAPs) Report on progress of FLR implementation to National FLR Advisory Committee
Communities	<ul style="list-style-type: none"> Planning and validation of FLR activities Implementation of FOLAREP programmes and projects Participatory monitoring and evaluation Resource mobilization Link between the private sector and governments

Stakeholder	Roles and responsibilities
	<ul style="list-style-type: none"> • Information dissemination
Research Institutions and Academia	<ul style="list-style-type: none"> • Development of technologies to improve restoration activities • Capacity building for stakeholders • Generate and disseminate, Knowledge, tools and information to support FLR initiatives • Coordinate and undertake research on adoption of FLR technologies, practices and innovations.
Private sector	<ul style="list-style-type: none"> • Leverage private sector financing in FLR through identification and development of sustainable value chains/ investments • Co-implementing Policies, Plans, Programmes and Projects
Public Benefit Organizations (PBOs)	<ul style="list-style-type: none"> • Advocate for wider stakeholder engagement and participation of FLR implementation. • Support sector wide intervention benefiting communities. • Sensitization and capacity development in partnership with public service.
Media	<ul style="list-style-type: none"> • Develop and disseminate content on FLR best practices.
Special interest groups	<ul style="list-style-type: none"> • Sensitization and advocacy • Dissemination of information • Demonstration of technologies • Capacity building
Development Partners	<ul style="list-style-type: none"> • Research • Technology development • Capacity building • Resource mobilization • Innovations • Dissemination of information

3 CHAPTER 3: GOAL, OBJECTIVES, INTERVENTIONS AND ACTIONS

This chapter presents the goal, strategic objectives, interventions, and actions for the Forest and Landscape Restoration Action Plan (FOLAREP). The situation analysis (current status, SWOT and PESTLEG and Risk analysis) helped to establish the strategic objectives and interventions for investment in FLR by MoEF and partners (Table 6).

3.1 Goal, Strategic Objectives, intervention, and Actions

Goal

Accelerate actions towards restoring 5.1 million hectares of deforested and degraded landscapes by 2030 and contribute to the achievement of national aspirations and international obligations.

Overall Objective

To restore 3.5 million hectares of degraded landscapes through integrated forest and landscape restoration approaches for improved ecological functionality and social economic benefits by 2027.

Specific Objectives

1. To strengthen policy, regulatory frameworks and institutional coordination for enhanced FLR implementation.
2. To put 3.5 million ha of degraded forests and landscapes under restoration for improved biodiversity and resilience to negative effects of climate change.
3. To mobilize resources from public and private partnerships for FLR implementation
4. To promote inclusive nature-based value chains for improved livelihoods for communities.
5. To strengthen FLR research, monitoring, evaluation and knowledge management.

Specific Objectives, Intervention and Actions

Table 6: Specific Objectives, Interventions and Actions

Key Interventions Area	Actions
Objective 1: To strengthen policy, regulatory frameworks and institutional coordination for enhanced FLR implementation.	
1.1 Review existing policy and regulatory frameworks.	<p>1.1.1 Carry out an inventory of existing FLR related policies and regulatory frameworks</p> <p>1.1.2 Review and identify the gaps in the existing FLR related policies and regulations considering global, regional, national initiatives, treaties, conventions, protocols and agreements</p> <p>1.1.3 Harmonize the gaps in existing FLR related policies and regulations frameworks</p> <p>1.1.4 Validation of reviewed policies by stakeholders</p> <p>1.1.5 Prepare a cabinet paper outlining key recommendations on policy review and harmonization.</p>

Key Interventions Area	Actions
	1.1.6 Recommend new policies and/or regulations.
1.2 Support implementation and development of FLR-related policy and regulatory frameworks	<p>1.2.1 Create awareness on FLR-related policies and regulations at the County and community levels.</p> <p>1.2.2 Support development of recommended policies in activity</p> <p>1.2.3 Support counties to develop FLR related policies and legislations, framework.</p> <p>1.2.4 Support counties to integrate FLR policies and strategies in County Integrated Development Plans (CIDPs).</p>
1.3 Support institutional coordination to enhance implementation of FLR	<p>1.3.1 Strengthen existing FLR related coordination units at national and county level</p> <p>1.3.2 Establish technical working groups for coordination of FLR efforts at national and county level</p> <p>1.3.3 Develop stakeholder engagement criteria at national county and level.</p> <p>1.3.4 Develop and strengthen forums for stakeholders' engagement in FLR implementation and monitoring</p> <p>1.3.5 Develop and strengthen transboundary and inter-county frameworks for FLR implementation.</p> <p>1.3.6 Strengthen existing national inter-ministerial collaboration on FLR related actions.</p> <p>1.3.7 Strengthen inter- institutional efforts on FLR related activities</p> <p>1.3.8 Create and strengthen linkages and synergies with existing FLR related programmes</p>
Objective 2. To put 3.5 million ha of degraded forests and landscapes under restoration for improved biodiversity and resilience to negative effects of climate change	
2.1 Update and scale down the national level forest landscape restoration assessment to the county level.	<p>2.1.1. Review the Technical Report on the National Assessment of FLR Opportunities in Kenya (MENR,2016).</p> <p>2.1.2. Strengthen capacity of stakeholders to undertake county level Forest Landscape Restoration assessment (ROAM).</p>

Key Interventions Area	Actions
	<p>2.1.3 Undertake county level restoration assessments.</p> <p>2.1.4 Develop county level forest and landscape restoration implementation plans.</p>
<p>2.2 Restore and protect 900,000 ha of degraded forest land</p> <p>Restore 880, 000 ha of degraded natural forests and 20, 000 ha of plantations.</p>	<p>2.2.1 Strengthen capacity of stakeholders to produce 1.5billion seedlings/ germplasm for restoration.</p> <p>2.2.2. Carry out tree growing and silvi-cultural practices in plantations</p> <p>2.2.3. Undertake enrichment planting, silvi-cultural practices in natural forests</p> <p>2.2.4. Support natural regeneration in specific identified natural forests</p> <p>2.2.5 Review and update ecosystem and catchment management plans</p> <p>2.2.6. Review and revise Participatory Forest Management Plans- PFMPs</p> <p>2.2.7 Support result-based financing for the PFMPs</p> <p>2.2.8. Awareness creation and sensitization</p> <p>2.2.9. Promote innovative, community-based and cost-efficient approaches such as use of surveillance technologies, adopt a forest, social fencing, solar fencing among others for protection of restored and areas under restoration.</p>
2.3 Restore 1,050,000 ha of degraded cropland	<p>2.3.1 Identify and promote the adoption of agroforestry best practices</p> <p>2.3.2 Promote soil and water conservation measures in degraded croplands</p> <p>2.3.3 Support mass production and access to 200 million quality fruit trees and high value tree seedlings.</p> <p>2.3.4 Map and promote protection of ecologically sensitive niches within croplands from degradation</p> <p>2.3.5. Promote Sustainable Land Management Practices (SLM) such as conservation agriculture, Climate Smart Agriculture, farmer managed natural regeneration etc.)</p>

Key Interventions Area	Actions
2.4 Restore 1, 50,000 ha of degraded rangelands	<p>2.4.1 Promote range reseeding and natural regeneration initiatives through community involvement</p> <p>2.4.2 Improve access to 200 million drought-tolerant seedlings</p> <p>2.4.3 Support the development of holistic grazing plans in 12 ASAL counties.</p> <p>2.4.4 Promote soil and water conservation technologies and water harvesting measures</p> <p>2.4.5 Promote protective measures against fire</p> <p>2.4.6 Map and manage key invasive species</p> <p>2.4.6 Promote livelihood diversification programmes and green IGAs</p> <p>2.4.7 Promote sustainable utilization of wood and non-wood products</p>
2.5 Restore 50,000 ha of degraded buffer zones along water bodies and wetlands	<p>2.5.1 Map and secure water bodies, wetlands and riparian buffer zones</p> <p>2.5.2 Strengthen the capacity of local communities to undertake restoration of water bodies, wetlands and riparian zones</p> <p>2.5.3 Demonstrate and upscale best practices of restoring water bodies and wetlands</p> <p>2.5.4 Rehabilitate degraded water bodies, wetlands and riparian buffer zones</p> <p>2.5.5 Promote community and cultural initiatives towards conservation and restoration waterbodies, wetlands and riparian buffer zones</p> <p>2.5.6 Provide incentives for promotion of conservation and protection water bodies, wetlands and riparian buffer zones</p>
Objective 3: To mobilize financial resources from public and private partnership for FLR implementation.	
3.1 Support financial resource mobilization initiatives for FLR implementation.	3.1.1 Conduct capacity needs assessment on resource mobilization at the national and county levels.

Key Interventions Area	Actions
	<p>3.1.2 Enhance capacity resource mobilization and proposal development training by stakeholders and actors implementing FLR.</p> <p>3.1.3 Support stakeholders to develop a bankable FLR investment projects and business plans.</p> <p>3.1.4 Promote community-based innovative financing mechanisms to support restoration.</p> <p>3.1.5 Advocate for development of a public-private partnership (PPP) framework or platform to finance FLR.</p> <p>3.1.6 Advocate for additional FLR budgetary allocations by national and county governments</p> <p>3.1.7 Develop a strategy for enhancing access to financial resources for FLR from private sector and other stakeholders</p> <p>3.1.8 Promote linkages to optimize bilateral and multilateral funding opportunities for restoration</p>
3.2 Strengthening restoration fund schemes (Forest Conservation fund, WSTF, and NET fund)	<p>3.2.1 Strengthen existing governance structures for FLR resources mobilization and disbursement.</p> <p>3.2.2 Advocate and champion the use of existing funding scheme</p> <p>3.2.3 Develop and strengthen fund structure and governance procedures.</p>
Objective 4: To promote inclusive nature-based value chains for improved livelihoods for communities.	
4.1 Promote and develop gender inclusive green value chains.	<p>4.1.1 Map out existing green value chains and technologies for improved livelihoods.</p> <p>4.1.2 Identify structural barriers to equitable access to restoration benefits (gender, youth and vulnerable groups).</p> <p>4.1.3. Develop measures that enhance equitable access to restoration benefits.</p> <p>4.1.4. Develop appropriate value chain for the identified products</p> <p>4.1.5 Disseminate and upscale green value products</p>

Key Interventions Area	Actions
4.2 Improve Marketing and market access for green value chain products.	<p>4.2.1 Carry out market analysis</p> <p>4.2.2 Identify barriers in green value chain product promotion and marketing.</p> <p>4.2.3 Negotiate on appropriate market access requirements</p> <p>4.2.4 Enhance promotion and marketing of FLR green value chain products.</p>
Objective 5. To strengthen research, monitoring, evaluation and knowledge management for FLR implementation	
5.1. Develop an integrated monitoring, evaluation and knowledge management system	<p>5.1.1 Develop a national Monitoring, Evaluation Reporting and Learning (MERL) framework for FLR</p> <p>5.1.2 Integrate FLR knowledge and information into a mandated central repository hub/portal</p> <p>5.1.3 Operationalize forest and landscape restoration MERL sharing protocols</p> <p>5.1.4 Develop a communication strategy to facilitate communication across institutions and partners</p>
5.2 Strengthen Research and development for FLR scaling up.	<p>5.2.1 Identify and document priority FLR research areas.</p> <p>5.2.2 Support new and emerging research areas of FLR.</p> <p>5.2.3 Support networks and partnership on FLR</p> <p>5.2.4 Enhance North-South, and South-South cooperation for FLR research and development.</p>
5.3 Support capacity building on MERL and research for FLR	<p>5.3.1 Conduct capacity and training needs assessment on MERL and research for FLR</p> <p>5.3.2 Develop training programmes for key stakeholders on MERL and research for FLR</p> <p>5.3.3 Develop and validate training curriculum and manuals for FLR</p> <p>5.3.4 Conduct Training of Trainers (ToTs) on MERL and research for FLR</p> <p>5.3.5 Support community training on MERL and FLR research</p>

Key Interventions Area	Actions
	<p>5.3.6 Establish new and strengthen existing community resource centres</p> <p>5.3.7 Support institutional strengthening on MERL and FLR research</p>

3.2 Implementation of the proposed restoration interventions in the counties

The national government will liaise with the County Governments to facilitate FLR action planning and implementation. It is recommended that each County conducts a ROAM and prepares a FOLAREP relevant to their agro-climatic zones and conditions to guide restoration activities.

The county-level FOLAREP will be integrated and mainstreamed into the county planning processes, including the County Integrated Development Plans (CIDPs), County Environment Action Plans, Spatial plans, Wetland Management Plans, Catchment Management Plans and Annual Developments Plans and Budgets.

Consequently, County Governments are to collaborate with National Government Ministries, Departments and Agencies with mandates on forests and landscape restoration, as well as non-state actors implementing FLR actions. County Governments are encouraged to formulate, enact and implement requisite legislations and policies to create a conducive environment for FLR interventions.

The Counties Environment Committees (CEC) should take the lead in managing environmental issues in the Counties. The County Governments are urged to prioritize budgetary allocation to the environment sector to support the operations of the Committees.

4 CHAPTER 4: COORDINATION AND INSTITUTIONAL FRAMEWORK

4.1 Introduction

FOLAREP will leverage on the existing structures and institutional frameworks both at the local, county and national levels. The Ministry in charge of Environment, Climate Change and Forestry (MoECCF) will be the focal point of FOLAREP. It will provide the overall coordination of FOLAREP. The successful implementation of the plan will require commitment and interaction of top management at National and County levels, technical experts and all stakeholders. The structure takes into consideration the two levels of government as detailed in Figure 5. It provides a clear link and feedback mechanism between national and county governments in the planning, resource allocation, implementation, monitoring, evaluation and reporting of FLR activities. Membership of the various committees will be informed by the mandates of various MDAs, county governments and key stakeholders involved in FLR activities in Kenya.

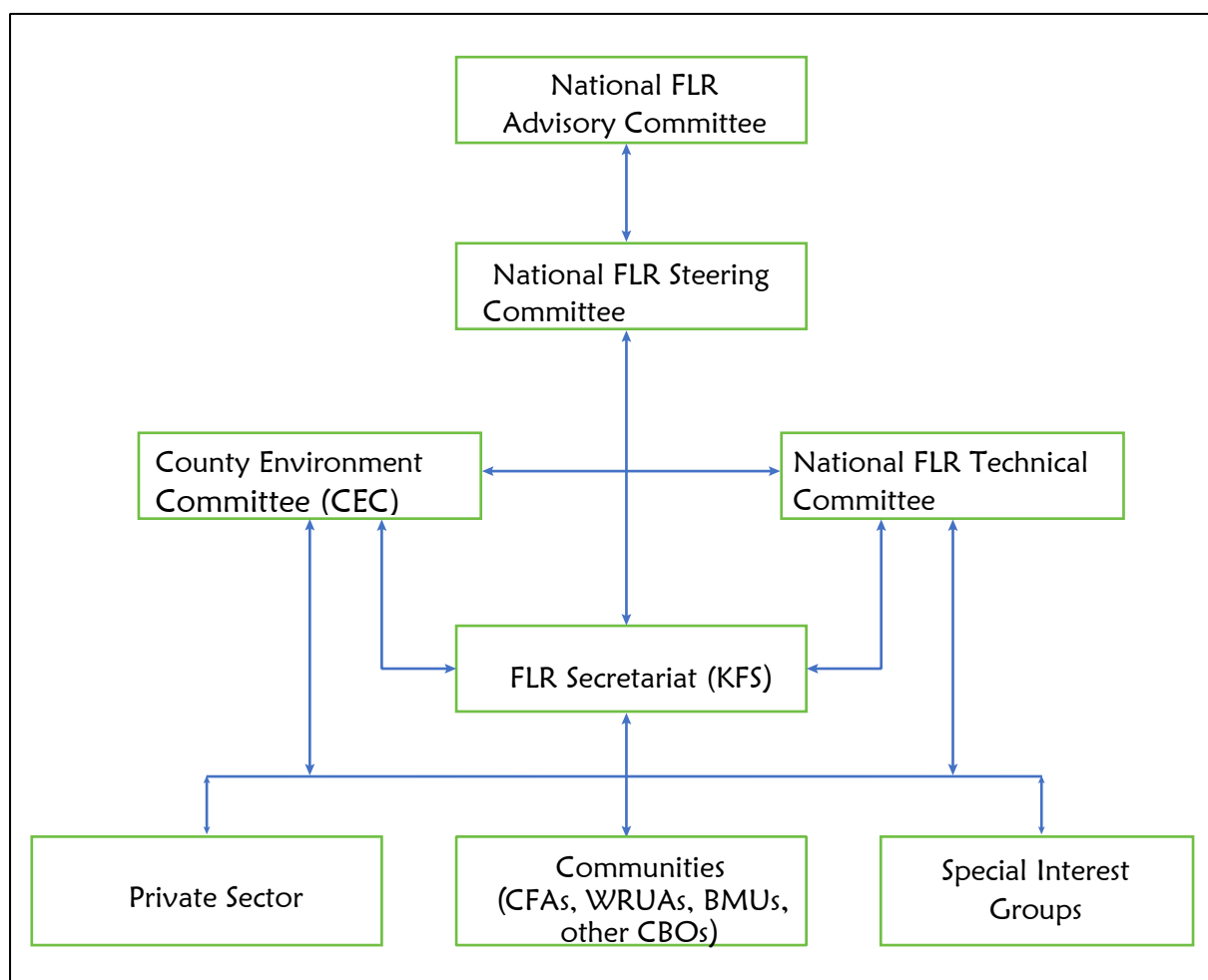


Figure 5: Coordination and institutional framework for implementation of FOLAREP.

4.2 Composition and Roles of the various committees for FOLAREP

National FLR Advisory Committee

The committee will comprise 15 members: the Cabinet Secretary for the Ministry responsible for Environment and Forestry (Chair), the Chair responsible for Natural Resources and Forestry Committee Council of Governors (Co-Chair), The Principal Secretaries responsible for seven State Departments (Forestry and Environment, Wildlife Conservation, The National Treasury, Lands and Physical Planning, Interior and Coordination of National Government, Crop Development and

Agricultural Research, Water Resources, Livestock, Mining and Blue Economy) and representatives of Heads of Missions, Development Partners, Public Benefit Organizations (PBOs), and the Private Sector actors. The secretary for this committee will be the Principal Secretary responsible for Forestry and Environment.

This Committee will provide overall oversight and policy direction, set the agenda and top priorities for FOLAREP, and promote financial and technical resource mobilization for the governance and implementation of FOLAREP. It will work along with Sector working groups as envisaged in the Intergovernmental Relations Act 2012, 13 sub-sections 1 and 2.

National FLR Steering Committee

The committee will comprise the following 17 members: Principal Secretary responsible for Environment and Forestry (Chair), Chairman County Executive Member Caucus for Forestry (Co-chair), Chief Conservator of Forests (Secretary), Director KEFRI, Director General Kenya Water Towers Agency, Director State Department for Crops and Agriculture Development, Director State Department Livestock Resources and Market Development, Director Water Resources Authority, Director General NEMA, Director General KWS and six representatives from Private Sector, Development Partners and PBOs.

The role of the committee will be to review and approve Annual Work Plans and Budgets (AWP&B) for FLR activities, review current and emerging policies as well as regulations on FLR and provide recommendations to the National FLR Advisory Committee; Implement recommendations from the National FLR Advisory Committee; monitor and evaluate FOLAREP's implementation, carry out resource mobilization and address any associated risks. The committee will also ensure that FLR activities are entrenched and budgeted for in their institutional programs and initiatives.

National FLR Technical Committee

This Committee will be composed of a maximum of 31 members nominated by the accounting officers of the following organizations : The National Treasury and Planning, The Ministry of Environment and Forestry, CoG, KFS, NEMA, NETFUND, KEFRI, Kenya Marine and Fisheries Research Institute, KALRO, KWS, NMK, WRA, KWTA, Departments of Crop production, Departments of Livestock production, Water Department, Lands and Physical Planning, NDMA, NACOPA, and representatives from PBOs, Kenya Private Sector Association (KEPSA), Co-chair Environment and Natural Resources Development Partners Caucus. The chair of this committee shall be the National FLR Focal Point nominated by the Principal Secretary MoEF while the secretary shall be the nominated representative of the CCF.

The committee will provide technical support to the steering committee and county governments on the implementation of FOLAREP; promote synergies and complementarities on FLR amongst key actors; carry out resource mobilisation for implementation of FOLAREP. It shall also review and recommend the annual FLR Work Plans and Budgets for approval by the steering committee; prepare progress, quarterly and annual reports. It will further ensure that recommendations from the steering are implemented and constitute sub-committees to provide technical support in the various thematic areas of FOLAREP including capacity building of CECs and other stakeholders among others.

County Environment Committees

The County Environment Committee's composition is provided for in EMCA Cap 387 of the Laws of Kenya. The CECs will provide oversight, coordination and implementation of FOLAREP and resource mobilization at the county level among others.

FLR Secretariat

Kenya Forest Service will host the FLR secretariat and will incorporate other stakeholders on a need-by-need basis. The functions of the secretariat will be to: prepare Annual Work Plans and Budgets (AWP&B) for FLR activities; coordinate implementation of FLR activities at both national and county levels; ensure effective communication, knowledge management and learning on FLR; organize quarterly fora on information sharing on challenges, milestones for implementation FLR activities; act as the central repository for FLR data, reports and information on FLR projects; compile Country Restoration Status Report (CRSR) for consideration and adoption by the technical committee; prepare terms of reference for consultancies for consideration by the technical committee; consolidate information on available resources and their utilization on FLR activities; prepare draft concept notes for engaging with potential development partners for funding of FLR activities for consideration by the technical committee; identify and provide stakeholders with available funding opportunities; documentation of restoration initiatives and support resource mobilization.

5 CHAPTER 5: RESOURCE MOBILIZATION

5.1 Introduction

FOLAREP aims to improve the ecological functionality of forests, agricultural lands, rangelands and wetlands and enhance the livelihoods of communities by restoring 3.5 million hectares of degraded landscapes. Implementing FOLAREP requires resources to achieve the set objectives, planning, coordination, administration, capital investments, communication and publicity. It is, therefore, necessary to explore available financial options at global, regional, national and county levels; and other mechanisms to fund the plan.

5.2 Budget and financing mechanisms for FLR

The overall financial requirements to implement this plan are estimated at Kshs 150.3 billion (approx. USD 1.25 billion) over five years (Table 7).

Table 7: Financial resources required for FOLAREP

Objective	Amount (Kshs)	Amount (USD)
1.To strengthen policy, regulatory frameworks, and institutional coordination for enhanced FLR implementation	1,768,562,000	14,738,016.67
2.To put 3.5 million ha. of degraded forests and landscapes under restoration for improved biodiversity and resilience to negative effects of climate change	98,849,458,750	823,745,489.58
3.To mobilize resources from public and private partnerships for FLR implementation	712,864,600	5,940,538.33
4.To promote inclusive nature-based value chains for improved livelihoods for communities.	3,524,882,500	29,374,020.83
5.To strengthen research, monitoring, evaluation, and knowledge management for FLR implementation	3,301,007,050	27,508,392.08
Sub-total	108,156,774,900	901,306,457.5
General Coordination and Administration Expenses (9 %)	9,734,109,741	81,117,581.18
Capital investments at (25%)	27,564,193,725	229,701,614.38
Communication and publicity (2.5%)	2,756,419,372	22,970,161.43
Inflation (5%)	5,512,838,745	45,940,322.88
TOTAL	150,337,917,111	1,252,815,976.9

These resources will be mobilized from the global, regional, national and county government's budgetary allocations, bilateral donors, public private partnership, local and international NGOs. An opportunity for prioritization of FOLAREP funding from key global financing mechanisms such as GCF and GEF should be pursued by the government in collaboration with other stakeholders.

5.3 Status of FLR financing

Currently, most of the funds for restoration are project based and sourced through different avenues. Key financial sources available for FLR include:

- National and County governments
- Bilateral funding agencies such as Japan International Cooperation Agency (JICA), Swiss Agency for Development and Cooperation (SDC), Swedish International Development Cooperation Agency (SIDA), United States Agency for International Development (USAID), Norwegian Agency for Development Cooperation (NORAD), The International Climate Initiative (IKI) of the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety and Australian Aid.
- Multi-lateral funds such as Global Environment Facility (GEF); Green Climate Fund; Adaptation Fund; Bio carbon Fund; and Forest Carbon Partnership Facility, World Bank.
- Non state actors such as WWF, CIFOR-ICRAF, IUCN, Nature Kenya, private sector among others.

6 CHAPTER 6. MONITORING, EVALUATION AND REPORTING FRAMEWORK

6.1 Monitoring and Evaluation Plan/Matrix

For effective implementation and monitoring of the results foreseen in FOLAREP, the Kenya Forest and Landscape Restoration Monitoring Framework will support coordinated tracking, assessment, and reflective learning to both report on restoration of landscapes in the country and direct future investments. This is important because without a consistent and coherent monitoring framework and related institutional arrangements it is challenging to report on the progress and learning towards the achievement of restoration related commitments and expected impacts of these investments.

Through a consultative multi-stakeholder process that engaged views from all 47 Counties, the Restoration Monitoring Technical Working Group developed the framework that outlines a set of 30 indicators and 45 sub-indicators for restoration monitoring at both process and outcome levels. The process result areas within the FOLAREP will be tracked based on a monitoring plan summarized in Figure 6 and Table 8

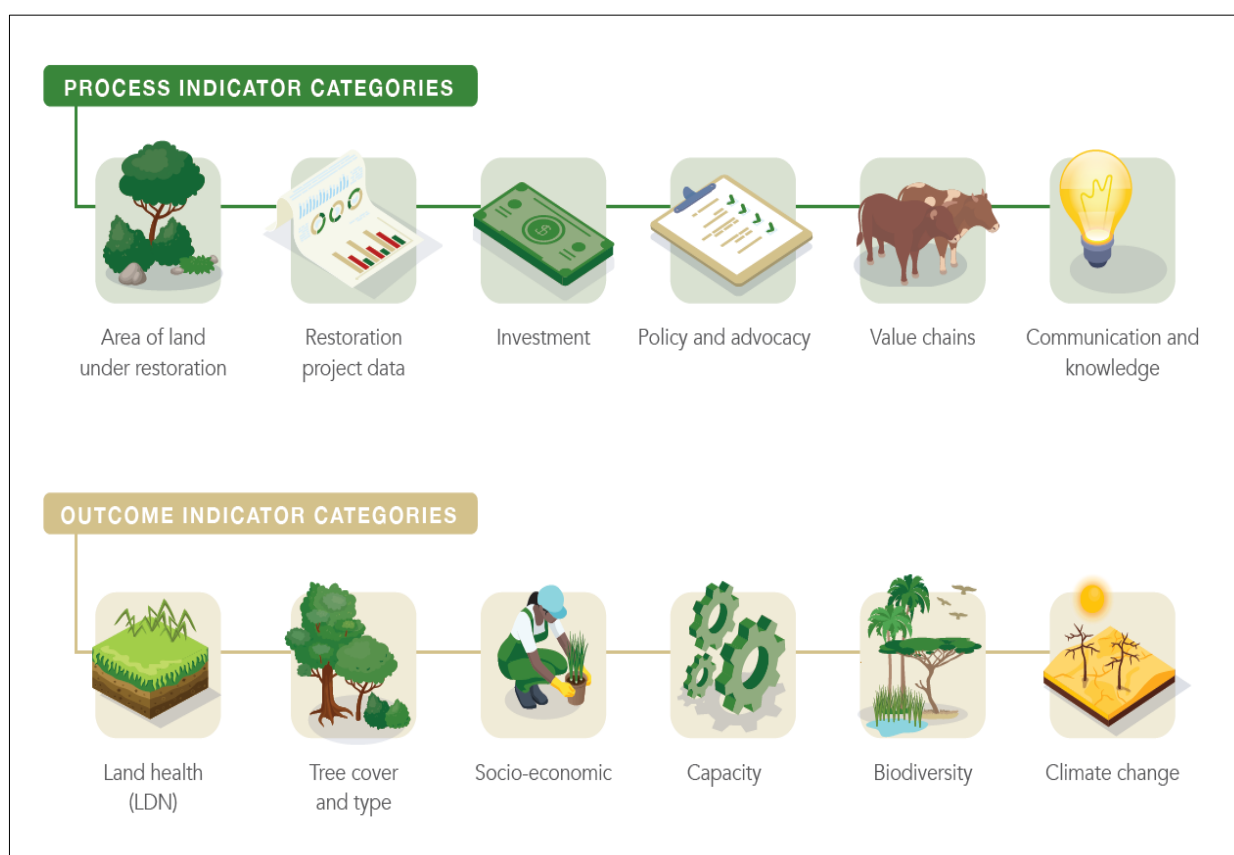


Figure 6: FOLAREP process and outcome indicator categories based on the monitoring and evaluation framework

Table 8: FOLAREP monitoring plan

Result Area	Indicator	Metrics	Source of data	Frequency	Responsibility
Policy and institutional coordination	New or reviewed policies, and regulatory frameworks that positively impact landscape restoration	Number, type and description	Policy briefs Cabinet papers TWG Annual Assessment report	Annually	MoEF/KFS FLR TWG
	Operational FLR coordination mechanisms	Number and status	National FLR Steering committee report TWG Annual Assessment report	Annually	KFS FLR TWG
Area of land under restoration	Area of landscape under improved practices and/or undergoing restoration	ha disaggregated into forestland, grassland, crop land, rangeland, wetland	State of Environment Report Forest Assessment Report KwTA Monitoring and Evaluation System County Environment Statistics Report MoEF- Annual performance assessment report	Annually	NEMA KFS KwTA COG MoEF/KEFRI
Investment	Amount invested in landscape restoration (KSH/USD)	Kshs / USD List (private, donor, national) Location (county, sub county, ward) Types of funding (loans, grant, equity, in kind)	Annual Fiscal Statement report Project financial reports Restoration Barometer Annual Fundraising report	Annually	MoEF/KFS FLR TWG IUCN/TWG NETFUND
Nature based Value chains	Nature based value chains promoted and commercialized	Number and description	TWG Annual Assessment report Project reports	Annual	FLR TWG/KFS KEFRI
	Bankable projects on nature-based Value Chains financed	Number and description (financed amount)	Community Grants disbursement report Project reports	Annual	NETFUND

Result Area	Indicator	Metrics	Source of data	Frequency	Responsibility
			TWG Annual Assessment report		FLR TWG/KFS
	Change in income	Percentage	TWG Annual Assessment report	Annual	FLR TWG/KFS
	Jobs created	Number	Restoration Barometer	Annual	IUCN/KFS
Research, Communication Knowledge	Knowledge products produced and shared	Number and description	TWG Annual Assessment report	Annual	FLR-TWG/KFS/KEFRI
	TIMPS (Technologies, Innovations and Management Practices) developed and promoted	Number and description	Innovations and Technologies report KEFRI Annual Programme report	Annual/Biannual	NETFUND KEFRI
	An integrated monitoring, evaluation, and knowledge management system in place or adapted	Number and description	Completion certificate TWG Annual Assessment report	Annual	FLR TWG/KFS

Table 9: FOLAREP Implementation matrix

Activity	Output	MoV	Responsible Institution	Time frame				
				YR1	YR2	YR3	YR4	YR5
Objective 1: To strengthen policy, regulatory frameworks, and institutional coordination for enhanced implementation of FLR.								
1.1 Review existing policy and regulatory frameworks.	FLR related policies and regulatory frameworks reviewed and recommended	Workshop reports	KFS, CoG, MoEF	×				
1.2 Support implementation and development of FLR-related policy and regulatory frameworks	Identified and developed FLR- related policies, implemented at both National and County levels	Workshop reports New enacted policies	KFS, CoG, MoEF	×				
Objective 2. To restore 3.5 million ha of degraded forests and landscapes by 2027								
2.1 Update and scale down the national level forest landscape restoration assessment to the county level	County level Restoration Assessments done	Technical reports	KFS, KWTA, CoG, WRI	×	×			
2.2 Restore and protect 500,000 ha of degraded forest land	500,000 ha of deforested and degraded forest land restored	Project reports	KFS, KWTA, CoG, MoEF	×	×	×	×	×

Activity	Output	MoV	Responsible Institution	Time frame				
				YR1	YR2	YR3	YR4	YR5
2.3 Restore 1,050,000 ha of degraded cropland	1,050,000 ha of degraded croplands restored	Progress report	MoAFL, CoG, KFS	×	×	×	×	×
2.4 Restore 950,000 ha of degraded rangelands	950,000 ha of degraded rangelands restored	Project reports	MoAFL, CoG, NDMA, KFS, KWS	×	×	×	×	×
2.5 Restore 50,000 ha of degraded buffer zones along water bodies and wetlands	50,000 ha of degraded buffer zones along wetlands and water bodies.	Project reports	WRA, KWTa, KFS, NEMA, CoG, MoEF	×	×	×	×	×
Objective 3: To promote green value chains for improved livelihoods.								
3.1 Promote and develop diverse green value chains.	Green value chains developed and promoted.	Project reports	MoALF, MoT&I, KFS, CoG		×	×	×	×
3.2 Improve Marketing and market access for green value chain products	Marketing and Market access for green value chain products improved	Project reports	MoALF, MoT&I, KFS, CoG		×	×	×	×
Objective 4. To develop an integrated monitoring, evaluation and learning framework for improved reporting on FLR								

Activity	Output	MoV	Responsible Institution	Time frame				
				YR1	YR2	YR3	YR4	YR5
4.1 Develop an integrated monitoring, evaluation, and knowledge management system	Integrated monitoring evaluation and knowledge management system developed	Progress reports	KFS, MoEF, KWTa, KEFRI, CoG		×	×	×	×
4.2 Strengthen Research and development of FLR	FLR research developed and strengthened	Progress reports	KEFRI, KFS, KWTa, MoEF, Universities	×	×	×	×	×
4.3 Support capacity building for FLR implementation	FLR stakeholders and actors' capacity strengthened	Progress reports, Training manuals	KEFRI, KFS, KWTa, MoEF	×	×	×	×	×
Objective 5. To mobilize resources in support of FLR programmes								
5.1 Support resource mobilization initiatives to finance FLR	Financial resources mobilized to finance FLR-2023-2027	Financial reports Progress reports	KFS, KWTa, CoG, MoEF, Treasury	×	×	×	×	×
5.2 Strengthening fund schemes (Forest Conservation fund, WSTF, and NETFUND)	Existing fund schemes strengthened (governance) to channel funding into FLR	Progress reports	Treasury, MoEF, CoG, KFS, KWTa		×	×	×	×

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