



Tana River County Forest and Landscape Restoration Action Plan (TANA- FOLAREP) 2021-2030



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Table of Contents

Table of Contents	iii
FOREWORD	v
Governor Tana River County PREFACE	v
EXECUTIVE SUMMARY	viii
LIST OF ABBREVIATIONS	x
CHAPTER 1: INTRODUCTION.....	1
1.1 Background.....	1
1.2. Rationale and scope for Tana River County FLR Action Plan	2
1.3. The Tana River County FLR Action Plan Formulation process	2
1.4. Guiding principles.....	3
1.5 Enabling Legal frameworks policies and strategies for FLR Implementation	3
1.6 Gaps in FLR Policy and Legislative Framework	4
CHAPTER 2: SITUATIONAL ANALYSIS.....	4
2.1. Tana River County’s restoration opportunities.....	4
2.2. Forest lands.....	5
2.3 Rangelands.....	6
2.4 Agricultural landscapes	7
2.5 Wetlands.....	8
2.6 Governance, partnerships and Coordination of FLR activities	8
2.7 Capacity development, research, technologies and innovations.....	9
2.8 Economics for scaling up FLR in Kenya	9
2.9 FLR and livelihood improvement.....	9
CHAPTER 3: GOAL, OBJECTIVES, INTERVENTIONS AND ACTIONS.....	11
3.1 Introduction.....	11
3.2 Goal and Objectives.....	11
3.3 Objectives, interventions and actions.....	11
3.3.1 Reduction of deforestation, restoration of degraded forests	11
3.3.2: Restoration of Degraded Rangelands	14
3.3:3 Restoration of degraded wetlands.	15
3.3.4 Restoration of Degraded Cropland.....	16
3.3.5: Creation of enabling environment for TANA-FOLAREP implementation	17
CHAPTER 4: COORDINATION AND IMPLEMENTATION OF TANA-FOLAREP	19
4.1 Implementation of TANA-FOLAREP.....	19

4.1.1 Implementation at the county level.....	19
4.1.2 Sub-county and Ward Level Committees.....	19
4.1.3 Link with National FOLAREP.....	20
4.2 Finance and Resource Mobilization	20
4.2.1 Budget	20
4.2.2 Resource Mobilization.....	21
4.4 Monitoring and evaluation	22
References	22
Annex 1: Participants during Stakeholders Consultations	25
Annex 2: A summary of national legal, policy commitments on which Tana River Forest and Landscape Restoration (FLR) is anchored.....	26
Annex 3: TANA FOLAREP Implementation Framework	28

FOREWORD

Tana River County has diverse ecosystems and landscapes including forests, wetlands, rangelands and croplands that provide goods and services required for the county's social-economic development. These goods and services include wood products (like timber, poles and wood fuel), livestock fodder, herbal medicines and food among others. Healthy ecosystems also control soil erosion and regulate water supply, air quality, water quality and climate. The rich biodiversity supported by the Tana River County's ecosystems coupled with its rich cultural heritage and scenic landscapes provide the foundation for the development of tourism industry.

Our county's ecosystems have become degraded mainly due to anthropogenic forces including expanding agricultural activities, overgrazing, unsuitable extraction of goods from ecosystems and increased human settlements. Land degradation is expensive as it leads to reduced capacity of ecosystems to provide goods and services required for socio-economic development. This leads to loss of livelihoods and increased poverty among the county's residents. I am therefore delighted that the Department of Water, Energy, Environment and Natural Resources has worked with relevant stakeholders to develop TANA-FOLAREP that will guide the restoration of our forests and other landscapes and therefore the livelihoods of our county's citizens. My government will provide the necessary support to ensure that this action plan is implemented. This will include allocating financial and human resources for the identified activities and by formulating the required legislation and regulations. However, the financial and technical demands for the implementation of this plan are beyond the capacity available from the County Government. I therefore call upon all stakeholders including the national government ministries and agencies, private sector players, civil society, our development partners, religious organisation and private individuals to play their rightful roles in the implementation of this action plan.

His Excellency Major (Rtd) Dhadho Gaddae Godhana

Governor Tana River County

PREFACE

Tana River County's social-economic development relies on her ecosystems that include forests, wetlands, croplands and rangelands. Indeed, most of the county's residents rely on natural resource based economic activities including; farming, livestock production and fishing. The ability of ecosystems to support these livelihoods has become compromised by degradation that is attributed to anthropogenic factors including unsustainable exploitation of resources; conversion of natural ecosystems for agricultural expansion and for human settlement. Other causes of ecosystem degradation include climate change impacts, spread of invasive species, unsustainable agricultural and livestock production, wild fires and inadequate capacity to police and manage the county's expansive landscapes. Tana River County Forest and Landscape Restoration Action Plan (TANA-FOLAREP) was formulated to guide the restoration of the county's degraded ecosystems.

TANA-FOLAREP is comprised of four Chapters. Chapter I provides a background on Forest and Landscape Restoration (FLR) and a rationale for the development of the plan. The Chapter also outlines Forest and Landscape (FLR) guiding principles and the global, national and county level policy and legal frameworks on which TANA-FOLAREP is anchored. Lastly, it also provides a description of the participatory process through which the action plan was developed. Chapter 2, provides a summary of the status of forests, rangelands, wetlands and croplands as of 2020 with a focus on FLR related issues and challenges and hence the restoration potential. Cross-cutting issues including governance, capacity for FLR implementation, partnerships, economics of FLR implementation and stakeholders in FLR implementation are also discussed in Chapter 2. The goal of TANA-FOLAREP is presented in Chapter 3. The plan's objectives and associated interventions and actions that can help achieve the goal are also presented in Chapter 3. Implementation issues including governance for TANA-FOLAREP, links with the national FOLAREP, resource mobilisation and Monitoring and Evaluation are discussed in Chapter 4.

Hon. Yahya Ali Borrow

County Executive Committee Member,

Department of Water, Energy, Environment, Climate Change and Natural Resources

ACKNOWLEDGEMENTS

Tana River County Forest and Landscape Restoration Action Plan (TANA - FOLAREP) (2021 - 2030) was formulated through a consultative process that was led by the Department of Environment Wildlife and Natural Resources but involved diverse stakeholders. The plan drafting team comprised of a team experts from Lamu County Government, the national government ministries and agencies, non-governmental organizations and Kenyatta University. The plan development process was facilitated with funding from Nature Kenya (through funding from GEF) and Lamu County Government. We acknowledge the participation of all individuals and organisations that participated in various workshops, reviewed various versions of the document or provided logistical support.

The County Government of Tana River wish to express our profound gratitude to the key partners who contributed to the development of the Forest and Landscape Restoration Action Plan , led by the Department of Environment Wildlife and Natural Resources. We would also like to convey our sincere appreciation to an extensive range of stakeholders, including the national government ministries and agencies, non-governmental organizations and Kenyatta University and Lamu County Government, whose support and insights were invaluable in our collective effort to build a common understanding of the action Plan.

The development of this Strategy and Action Plan was led by Department of Environment Wildlife and Natural Resources and was largely funded by the Tana River County Government and the Nature Kenya.

EXECUTIVE SUMMARY

Healthy ecosystems including forests, wetlands, rangelands and agricultural landscapes provide food, wood products, water, herbal medicines and livestock fodder among others. These provisioning services are the basis of the livelihoods of most of the county's residents. The scenic appeal Tana River County's landscapes coupled with their rich cultural and biodiversity heritage forms a firm foundation for the development of tourism sector. Furthermore Tana River County's Forests and other ecosystems help regulate soil erosion, water supplies, air quality and local and global climate. However, most of Tana River County's ecosystems are undergoing degradation mainly as a consequence of anthropogenic activities including unregulated charcoal production, expansion of agricultural activities, unsustainable mining activities, overgrazing and urbanization Land degradation reduces the ecosystems' ability to support the livelihoods of the local residents and the county's economy. Tana River County Forest and Landscape Restoration Action Plan (TANA-FOLAREP) was formulated to guide the county in the restoration of its degraded ecosystems. It is anchored on relevant global, national and county policies, plans and legislations. The plan was formulated in a consultative process that involved diverse stakeholders.

The goal of TANA-FOLAREP is **“to restore and sustainably manage Tana River County's Forests and landscapes for enhanced ecological integrity and socio-economic development.”** The goal will be achieved through five strategic objectives namely:

1. To reduce deforestation and restore degraded -forests
2. To restore degraded rangelands
3. To restore degraded inland wetlands and marine ecosystems in Tana River County
4. To restore degraded cropland
5. To create enabling environment for TANA-FOLAREP implementation

Each strategic objective will be accomplished through the implementation of several interventions and actions that address identified issues, challenges and emerging opportunities. Existing institutional and administrative frameworks will be used to implement TANA - FOLAREP. Implementation will be led by the Department responsible for forestry but will involve all stakeholders. At the county level, the implementation of the plan will be overseen by a **County FLR Coordinating Committee (CFLRCC)** chaired by CEC responsible for Forestry). The agenda of the **County FLR Coordinating Committee (CFLRCC)** will be executed by **County FLR Technical Committee (CFLRTC)** that will be chaired by the Director responsible for Forestry. The day to day operations of TANA-FOLAREP will be coordinated by a **director responsible for forestry. Sub-county Committee FLR (SCFLRC)** and **Ward FLR Committee (WFLRC)** will coordinate TANA-FOLAREP implementation activities at the sub-county level and ward levels, respectively.

The CEC responsible for forestry will report on TANA-FOLAREP implementation at the national CEC forum as part of the implementation of the National FOLAREP. Implementation of TANA-FOLAREP will cost about 1.03 Billion Kenya Shillings over a five year period. The county government will work with all stakeholders including the national government, development partners, private sector players, civil society organisations and private individuals to raise funds to

implement this plan. Monitoring and evaluation will be led by the County FLR Coordinating Committee but will be the responsibility all the implementing partners.

LIST OF ABBREVIATIONS

CDM	Clean Development Mechanism
CEC	County Executive Committee
CFLRCC	County Forest and Landscape Restoration Coordinating Committee
CFLRTC	County Forest and Landscape Restoration Technical Committee
CIDP	County Integrated Development Plan
CSR	Corporate Social Responsibility
EAC	East African Community
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
FLR	Forest and landscapes Restoration
FOLAREP	Forest and Landscape Restoration Action Plan
GEF	Global Environment Facility
GoK	Government of Kenya
ICCA	Indigenous Community Conserved Area
IKI	International Climate Initiative
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
KEMFRI	Kenya Marine & Fisheries Research Institute
KFS	Kenya Forest Service
KWS	Kenya Wildlife Service
MEA	Multilateral Environmental Agreements
MENR	Ministry of Environment and Natural Resources
MTP	Medium Term Plan
NCCAP	National Climate Change Action Plan
NEMA	National Environment Management Authority
NFLRTWG	National FLR Technical Working Group
NIB	National Irrigation Board
NORAD	Norwegian Agency for Development Cooperation
NTFPs	Non-Timber Forest Products and Services
PES	Payment for Ecosystem Services
PFMPs	Participatory Forests Management Plans
REDD+	Reducing Emissions from Deforestation and forest Degradation
SCFLRC	Sub-county FLR Committee
SDC	Swiss Agency for Development and Cooperation
SDGs	Sustainable Development Goals
SIDA	Swedish International Development Cooperation Agency
TANA-FOLAREP	Tana River County Forest and Landscapes Restoration Action Plan
TARDA	Tana and Athi Rivers Development Authority
TDIP	Tana Delta Irrigation Project
TDLUP	Tana Delta Land Use Plan
TRCG	Tana River County Government
TRPNR	Tana River Primate National Reserve
TRPNR	Tana River Primate National Reserve
UNCBD	United Nation Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification ()
UNCCD	United Nations Convention to Combat Desertification

UNFCCC
USAID
WFLRC

United Nations Framework Convention on Climate Change
United States Agency for International Development
Ward FLR Committee

CHAPTER 1: INTRODUCTION

1.1 Background

Ecosystems including forests, wetlands, rangelands and agricultural landscapes provide goods and services required for human welfare and socio-economic development. Forests and other landscapes provide man with energy (hydroelectric power, fuelwood and charcoal), water (for domestic use, industrial use and irrigation), food (cultivated crops, wild fruits, game meat and honey), fodder for the livestock, medicines and materials for house construction and cultural and religious use (Baker et al., 2015). In Kenya, and specifically in Tana River County, most of the local residents depend on firewood as the main source of energy for cooking and heating (GoK, 2018). The rich biodiversity and scenic appeal of forests, rangelands, wetlands and marine ecosystems in Tana River County form a firm foundation for the development of tourism sector. The sale of forest products generates income and sustains artisan sectors, including carpentry, construction, carving wood for tourist souvenirs (Baker et al., 2015).

Forests and other landscapes are also key in provisioning of regulating ecosystem services such as soil conservation, regulation of the hydrological cycle, sequestration of carbon dioxide and moderation of climate as well as protection of water catchment areas. Healthy landscapes are important in purification of atmospheric air, bioremediation and removal of pollutants from the soil and water, maintenance of biodiversity as well as regulating nutrient cycling in the soil (Baker et al., 2015). Cumulatively, these can work for the benefit of reducing land degradation and improving the ecosystem functioning and ecological benefits derived from the forests and other landscapes in Tana River County.

Land degradation negatively affects the normal functioning of the ecosystems and consequently the delivery ecosystem services that are the basis of local community livelihoods and indeed the economy of Tana River County. Landscape degradation is mainly a consequence of anthropogenic interferences including unregulated charcoal production, mining activities that do not adhere to environmental regulations, cultivation along the river banks, overstocking and overgrazing and urbanization (Baker et al., 2015). The spread of invasive species particularly *Prosopis juliflora* is also a serious problem in Tana River County (Koech, 2014; Kahuria, 2015). Land degradation has led to loss of habitats, loss of biodiversity, soil erosion and environmental pollution. Land degradation increases the county's vulnerability to the impacts of climate change including droughts and floods.

Land degradation is very costly and its prevention should be optimised in all operational spheres of Tana River County. For example, it was estimated that the cost of land degradation in Kenya in the period from 2001 to 2009 was 1.3 billion USD annually and this was majorly due anthropogenic causes manifested through land use and land cover changes (Mulinge *et al*, 2016). Similarly, the cost of restoring the degraded ecosystem for the purposes of improving livelihoods in Tana River County was reported in June 2019 to be Ksh. 4 billion for restoration of 130,000ha of degraded land for sustainable livestock, fish and crop management (Gari, 2019).



Figure 1: Location of Tana River County

1.2. Rationale and scope for Tana River County FLR Action Plan

Forests and other ecosystems in Tana River County have been degraded mainly through anthropogenic activities (Wieczkowski & Kinnaird, 2008). This reduces the ecosystems' ability to support the livelihoods of the residents and the county's economy. This action plan was formulated to guide the county in the restoration of its degraded ecosystems – an action also prioritized the Tana River County Integrated Development Plan (CIDP III) 2023-2027 that highlights the need to restore degraded of forests, rangelands, shoreline and agricultural landscapes. The implementation of this plan will help reduce the county's vulnerability to the impacts of climate change while also contributing to the national commitments including increasing and maintain tree cover to at least 10% of the land area.

1.3. The Tana River County FLR Action Plan Formulation process

The Tana River County FLR Action Plan will be developed by a multi-sectoral team of experts from Tana River County Government led by the environmental protection, water and natural resources sector supported by experts from the national government, academia and Environmental civil society organisations. The draft action plan document was subjected a rigorous multi-stakeholder consultation process (See Annex 1 for participants) for contribution and validation. The final document was submitted to the county government through CEC forestry for approval and implementation.

1.4. Guiding principles

The Tana River County FLR Action Plan will embrace the IUCN (2020) guiding principles on forests and landscapes restoration, which include:

1. **Focus on landscapes** – TAFLRAP implementation will not take place in individual sites but involves mosaics of interacting land uses to balance social, ecological and economic priorities.
2. **Maintain and enhance natural ecosystems within landscapes** - Implementation of the plan will enhance the conservation, recovery, and sustainable management of forests and other ecosystems.
3. **Engage stakeholders and support participatory governance**- TANA-FOLAREP implementation will be participatory and will involve all stakeholders at all levels, including vulnerable groups at all stages including planning, decision making and implementation of the plan.
4. **Tailor to the local context using a variety of approaches** – TANA-FOLAREP will use various approaches including scientific knowledge, indigenous knowledge and best practices which are adapted to local social, economic, cultural, needs, ecological and landscapes history during its implementation.
5. **Restore multiple functions for multiple benefits** – The interventions of TANA-FOLAREP in this plan aim to restore multiple social, economic and ecological functions across the landscape to generate range of ecosystem goods and services that benefit multiple stakeholder groups.
6. **Manage adaptively for long-term resilience** – TANA-FOLAREP aims at enhancing the resilience of ecosystems and the stakeholders over the medium and long-term. Information from the research, monitoring activities and stakeholder guidance will be integrated into this management plan during the restoration process.

1.5 Enabling Legal frameworks policies and strategies for FLR Implementation

Tana River County Forest and Landscape Restoration Action plan is anchored on global, regional, national and county commitments, legal and policy frameworks. At the county level, Tana River County Integrated Development Plan (CIDP III) 2023-2027 aims to increasing forest cover by 30% from the baseline by expanding the area under forest. This will contribute to the national goal of 10% tree cover as envisioned in the Kenyan Constitution. Implementation of this plan will also contribute to the sustainable management of Tana River Delta as envisioned in Tana Delta Land Use Plan (Odhengo et al 2014b).

Nationally, the Kenyan Constitution requires the state to reforest and maintain tree cover of at least 10% of the total land area (GoK, 2010). Kenya has developed several policies, legislations and strategies, and plans in environment, forest, agriculture, land, wildlife and water sectors among others (See Annex 2 for details) that are relevant to this action plan. For example, Kenya's Vision 2030 Medium term Plan (MTP) III (2017-2022) - flagship project to rehabilitate and protect

indigenous forests in water towers will have significant implications on Tana River – the main water resource in the county. The National Climate Change Response Strategy (MENR, 2010) aimed at growing 7.6 billion trees on 4.1 million hectares of land by 2030. The National Climate Change Action Plan 2018-2020 recommends many actions that are relevant to Tana River County Forest and Landscape Restoration Action Plan.

Regionally, Kenya is party to the African Union’s Agenda 2063 that Focus on building climate resilient economies and communities, African Forest Landscape Restoration Initiative (AFR100) that aims to restore 100 million hectares of deforested and degraded land in Africa by 2030 and the East African Community (EAC) Climate Change Policy and Strategy (2018-2023). Kenya is also a party to The Nairobi Convention which focus on the conservation and management of marine and coastal resources in the Western Indian Ocean region (GoK, 2017).

Kenya has ratified and domesticated many Multilateral Environmental Agreements (MEAs), treaties, strategies and commitments relevant to FLR in Kenya including the Bonn Challenge (Kenya has pledged to restore 5.1 million hectares by 2030), United Nations Framework Convention on Climate Change (UNFCCC) - Paris Agreement, United Nation Convention on Biological Diversity (UNCBD), United Nations Strategic Plan for Forests 2017-2030, New York Declaration on Forests, 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. This plan will contribute to most of the Sustainable Development Goals (SDGs) including Goal 13 (Climate change action) Goal 12 (Responsible Consumption), Goal 14 (Life under water) and Goal 15 (Life on land).

1.6 Gaps in FLR Policy and Legislative Framework

Inadequate implementation of existing global, national and Tana River County based environmental policies and legislation is a major hindrance in efforts to accelerate FLR initiatives. Moreover, meaningful participation of private sector stakeholders in FLR initiatives is limited by gaps in policy. For instance, there is need for a policy on Payment for Ecosystem Services (PES) – the one of the mechanisms through which private sector can finance FLR activities. In addition, many national policies, strategies and programmes relevant to FLR have not been adequately mainstreamed into Tana River County planning and implementation processes. For instance, the National Climate Change Action Plan (NCCAP) 2018-2022 that proposed FLR related actions including on-farm water and soil conservation measures, agroforestry, restoration of riparian areas and building of partnerships for tree planting has not yet domesticated to Tana River County.

CHAPTER 2: SITUATIONAL ANALYSIS

2.1. Tana River County’s restoration opportunities

The main ecosystems of Tana River County include rangelands, forests (coastal, mangrove forests and riverine) and wetlands (freshwater wetlands and the coastline). Most of these ecosystems are degraded mainly through anthropogenic disturbances and require restoration and protection.

2.2. Forest lands

Forest ecosystems in Tana River County include; riverine forests found along Tana River, high canopy coastal forests including Ozi Forest and mangrove forests along parts of the coastline. Forests within Tana River County are a very important resource. They provide many goods and services including firewood, charcoal, herbal medicine, poles, timber, and other wood products. They also control soil erosion and help retain soil moisture. Forests are also important carbon sinks thus contributing to regulation of local and global climate. Forests of Tana River County are important for biodiversity conservation. For example, forest Patches along Tana River in its lower reaches are the only remaining habitats for the two threatened primates; the endangered Tana River Crested Mangabey (*Cercocebus galeritus galeritus*) and the Tana River red colobus (*Procolobus rufomitratu*s) (Birdlife International 2020). The need to conserve these two primate species led to the creation of the 171Km²Tana River Primate National Reserve (TRPNR) in 1976. The forests and the associated biodiversity are important asset in the development of tourism and recreational sector in the county. In spite of their importance, forests within Tana River County are threatened by increasing levels of fragmentation due to three major activities; irrigation, overexploitation by increasing human population and an ever-changing river course of Tana River. The forests land has been converted into croplands by residents and also by state agencies. For example, construction of dykes by the TARDA for irrigation in the lower course of R. Tana has been found to impact greatly on the forests in this county (Butynski & Mwangi, 1994; Muoria et al, 2003). Wahungu et al (2005) reported that Tana River forest patches significantly decreased in total area by 35% between 1979 and 2000. Other threats to forests include invasion by invasive plant species (particularly *Prosopis juliflora*), forest fires, impacts of climate change and the dynamic hydrological regime associated with shifts in Tana River flow channel. Forests in Tana River County are also negatively impacted by unsustainable extraction firewood and timber, palm wine tapping, mining and negative attitude due to human wildlife conflicts.

Mangrove forests extent within Tana River County cover is about 3,260 (GoK, 2017). These forests provide many ecosystem services that are important for socio-economic development. They provide many timber and non-timber products like firewood, furniture, building poles, charcoal, wood for boat construction and fish traps/stakes. Mangrove forests also provide non-timber products including honey, herbal medicines and food (mainly crabs and fish caught in mangrove forests). Mangroves are also important habitat for biodiversity, breeding grounds for fish and other fauna, provide shoreline protection, waste assimilation, and carbon sequestration. The biodiversity and scenic appeal of this ecosystem can be tapped for tourism development.

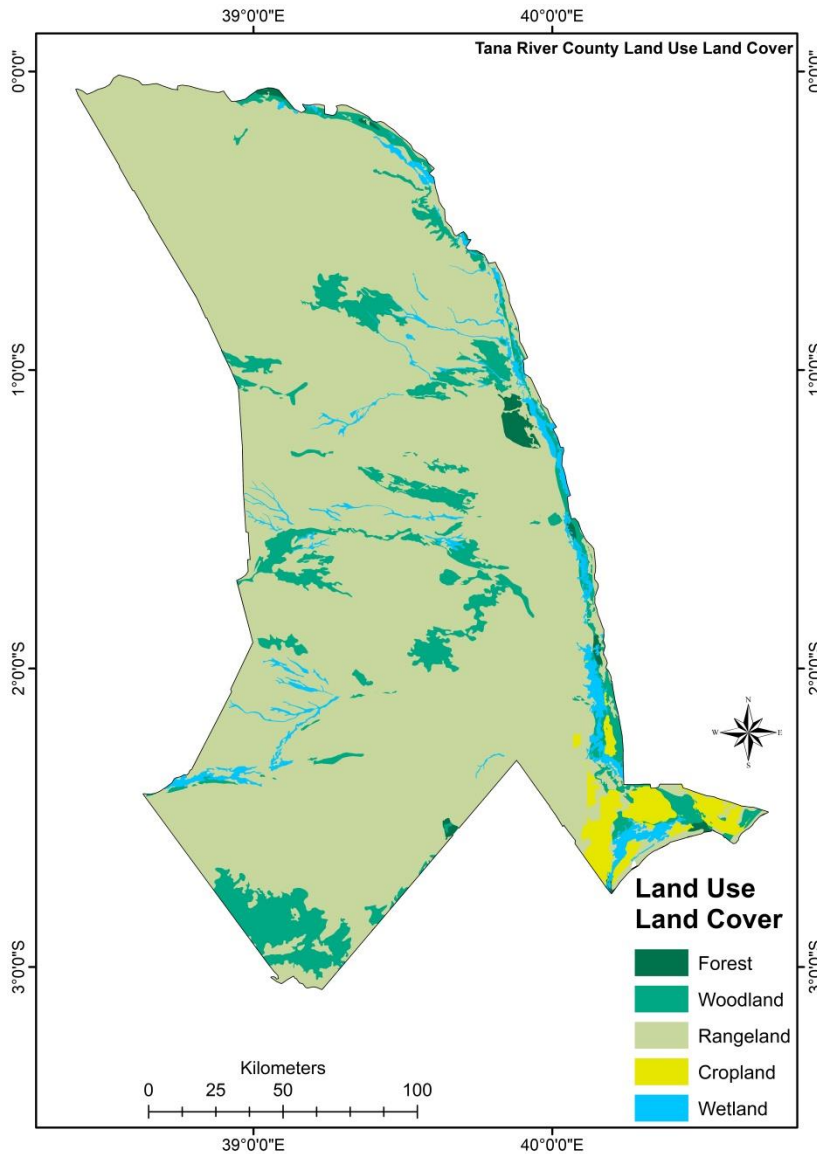


Figure 2: The main Landscapes of Tana River County

Despite the myriad of benefits, Tana River County’s mangrove forests face many threats, these include; conversion for human settlements, effluents from salt mining, unsustainable harvesting of poles, and canoe constructions. Stakeholders involved in mangrove forest management and conservation have limited resources including manpower and finances to adequately protect this ecosystem. Unsustainable land uses in the hinterland lead to sedimentation in the mangrove forests which damages mangrove trees. Moreover, climate change is also a major threat facing mangroves in Tana River County, manifested through sea level rise, with increased flooding/sedimentation in some parts. These issues need to be addressed.

2.3 Rangelands

Rangelands are the dominant landscape in Tana River County. The vegetation of rangelands is dominated by grasses. However, the wetter parts along the delta are dominated by perennial grasses

and trees while thorny thickets of acacia trees and shrubs are found along the riverine ecosystems. Rangeland resources in Tana River County are mainly utilized for livestock production and wildlife conservation. The rangelands of Tana River County are rich in biodiversity implying that there is potential to develop tourism and enhance the economy of the county.

The rangelands are affected by the invasive species such as *Prosopis juliflora* (Mathenge) which smothers indigenous trees, particularly affecting undergrowth, shrubs and grasses (Koech, 2014) and this therefore pose a threat of eliminating natural vegetation, blocking water points, canals and colonizing riparian areas. The major drivers of ecosystem degradation in the rangelands include invasion by invasive species (such as *Prosopis juliflora*), increased livestock stocking rates, unplanned human settlements, infrastructure development initiatives, and lack of fodder/pasture conservation initiatives such as grazing plans. These issues need to be resolved in order to restore the productivity of the rangelands. In addition, the impacts of climate change in the rangelands have been very severe. Climate linked issues experienced in Tana River County rangelands include frequent severe droughts interspersed with severe flooding events. Resource use conflicts arising from drought have been an issue of concern in Tana River County particularly during drought periods. Rangeland degradation worsens the impacts of climate change on the local community, their livelihoods and biodiversity.

2.4 Agricultural landscapes

Over 80% of the population in Tana River County is dependent on agriculture and livestock production (GoK, 2018). Only 2,547km² (6%) of the county is under crop farming, mostly in the riverine areas of the county while the rest of the county is drier and mostly dedicated to livestock farming. Crop farming is mainly rain fed but farmers also practice flood recession farming along Tana River. A few farmers also practice irrigation. Most of the farming activities in the county are still for subsistence. However, Tana River County has four large scale irrigation schemes, Hola, Bura, Galana Kulalu and Tana Delta Irrigation Project (TDIP) which are engaged in maize and rice production. Bura and Hola irrigation schemes are managed by the National Irrigation Authority (NIA) while Tana Delta is managed by the Tana and Athi Rivers Development Authority (TARDA). TDIP is a rice irrigation project which is located South of TRPNR on the lower course of Tana River and covers an area of 160 Km².

Factors that limit food production in the county include the use of inappropriate farming techniques and farm management practices leading to land degradation; Lack of or limited access to certified seeds; Poor soil fertility and Human wildlife conflicts, Low prices of farm produce; Post-harvest losses; Climate change and its effects including prolonged droughts and floods; Endemic conflicts between pastoralists and farmers as well as Sea-water intrusion in the lower part of the delta. Agricultural land degradation leads to reduced agricultural production and the need to encroach forested areas in search of more fertile land. Agricultural landscapes provide an opportunity to increase tree cover in the county through agroforestry, planting trees along the farm boundaries and in home compounds. Tree planting on farms can also provide alternative income streams and provide wood for firewood, timber and other uses.

2.5 Wetlands

Wetland ecosystems in Tana River County include the Tana River itself, its associated oxbow lakes and the 2,250KM² delta it forms as it enters the Indian Ocean. The County borders the Indian Ocean to the South and has a coastal strip of 76km (TRCG, 2018). Wetlands provide many ecosystem services that are necessary for socio-economic development. These includes provision of food (fish, cultivated crops), fuelwood, thatching grass, fodder for livestock and water for domestic, livestock, industrial and irrigation use. Wetlands are also important carbon sinks thus contributing to climate regulation. Tana River and associated wetland are of very high scenic appeal and host wildlife of high conservation and tourism value. Wetlands within Tana Delta at times hold exceptional concentrations of water birds and provide breeding sites for colonial water birds. Three globally threatened turtles (*Chelonia mydas* (Endangered), *Eretmochelys imbricata* (Critically Endangered) and *Lepidochelys olivacea* (Endangered)) nest in the delta's sandy beaches. *Dugong dugon*, an endangered sea mammal, is also found at the Tana River County marine ecosystem while hippopotamus and Nile crocodiles are common in fresh water wetlands and the river itself.

The wetlands in the Tana River County are under threat from human activities including agriculture, deforestation, overstocking and overgrazing which increases soil erosion, siltation into the water sources, increased use of chemicals in flood recession farming; prolonged droughts as a result of climate change and pressure to convert the delta into agricultural land. Tana River has been undergoing both natural and man driven diversion leading to changes in water courses and the associated changes in the riverine habitat. Over- abstraction of water for irrigation and other needs has led to reduced water flows especially during the dry season. Other challenges include creation of dams upstream leading to changes in water flows and silting. Agrochemicals have also found their way into the river leading to reduced water quality and low fish stocks. Climate change has led unpredictable water flows leading frequent dry spells and flooding incidents. Destruction of riparian vegetation has reduced the ability of this habitat to regulate water quality and flow.

In order to address some of these issues, Tana River County government is working with Stakeholders to implement a Tana Delta Land Use Plan (Odhengo et al, 2014b) that aims at ensuring sustainable development of the delta ecosystem. Other relevant activities include the implementation of an Indigenous Community Conserved Area (ICCA) management plan developed by the residents of the delta, forest management plans among other efforts

2.6 Governance, partnerships and Coordination of FLR activities

Ecosystem boundaries are not geographical, sectoral or political. As such Tana River County government will need to work with the national government and other counties with which she share ecosystems particularly the counties with which she shares Tana River water resources. Within the county government, most of the departments will have a role to play. The county government will also need to partner with private sector players, development partners and with civil society and local community members to deliver on this plan. The sectors at both national and county levels involved in implementation will include; forestry, wildlife, agriculture, Fisheries, livestock, tourism,

water development authorities. The local communities can provide manpower needed for the implementation of FLR but their technical capacity is limited. The development partners are key in resource mobilization to finance the implementation of the plan but they have to be engaged through technical proposals. The private sector players can contribute immensely in the implementation of FLR initiatives but their engagement is currently minimal and policies that can stimulate their engagement need to be developed. The implementation of this plan will have to be configured to be inclusive and cognizant of the need for partnerships and collaboration between the county government and other stakeholders.

2.7 Capacity development, research, technologies and innovations

The FLR involves a variety of activities, which are aimed at collectively achieving the multiple objectives to enhance ecological integrity, human well-being and improve landscape functions. Guidance on the process and monitoring of the project are therefore crucial to ensure the FLR adheres to its core principles. According to (Chazdon et al., 2020), many FLR plans fail to achieve their objectives due to lack local capacity, and limited information flow from researchers to FLR practitioners. Capacity building, research and technology are crucial in the FLR plan for identifying the human interaction with the environment, the deforested and degraded landscapes, the areas that require restoration, planning the FLR actions, implementation and monitoring of the plan. Geospatial techniques among them satellite imagery provide data on human activities and the landscape degradation and therefore useful in decision making during the planning and the implementation of FLR activities.

2.8 Economics for scaling up FLR in Kenya

(Cheboiwo *et al.*, 2018) estimated that the benefits of restoring degraded forests and landscapes would be 4 times higher than the cost restoration. Moreover, implementation of FLR initiatives are expected to provide incomes to the local people and improve livelihoods as it will result into increased water supply for domestic, industrial and irrigation use; enhance biodiversity conservation, minimize the frequency and intensity of natural disasters and reduce resource use conflicts in the county, mitigate greenhouse effects, increase agricultural production through increased number of fish ponds, honey production and growing crops. However, the benefits of restoration will not be immediate and therefore innovative financing mechanisms have to be found.

2.9 FLR and livelihood improvement

At 72%, Tana River County has a high poverty index. Implementation of Forest and Landscape Restoration initiatives is expected to enhance ecological integrity and the ability of the ecosystem to provide goods and services required for human wellbeing including improved pasture, biodiversity, food supply and alternative income streams in associated ventures like ecotourism, apiculture and agroforestry among others. Forest and Landscape restoration will enhance the county and the local community's ability to adapt to the impacts of climate change and enhance the county's climate change mitigation capacity. This will lead to the local community and indeed the entire economy becoming resilient in the face of climate change.

CHAPTER 3: GOAL, OBJECTIVES, INTERVENTIONS AND ACTIONS

3.1 Introduction

This chapter presents the goal, strategic objectives and actions for Tana River County Forest and Landscape Restoration Action Plan (TANA -FOLAREP)

3.2 Goal and Objectives

Goal

The goal of this action plan is **“to restore and sustainably manage Tana River County’s Forests and landscapes for enhanced ecological integrity and socio-economic development.”**

3.3 Objectives, interventions and actions

The followings five strategic objectives, each with several actions, will be implemented to achieve the goal of this action plan.

1. Reduce deforestation and restore degraded -forests
2. Restore degraded rangelands
3. Restore degraded inland wetlands and marine ecosystems in Tana River County
4. Restore degraded cropland
5. Create enabling environment for TANA-FOLAREP implementation

The strategic objectives and the associated interventions were derived from priority restoration options identified during stakeholders’ consultations during the plan formulation process and from the National FOLAREP (GOK, 2022). Several interventions have been formulated to resolve the challenges experienced in forests, rangelands, wetlands and farmlands. Furthermore, interventions and associated actions that can help create an enabling environment for TANA-FOLAREP implementation are also presented.

3.3.1 Reduction of deforestation, restoration of degraded forests

Deforestation and forest degradation in Tana River County is mainly driven by the need to convert more land for agricultural production to feed the expanding human population. Other causes include; logging for the production of wood products including timber, poles and fuelwood. Additional drivers of deforestation include increased demand for land for human settlement and for infrastructural developments. Deforestation and forest degradation reduces the capacity of forests to provide ecosystem services including carbon sequestration potential, biodiversity value, water and soil erosion regulation, recreation value among others. Deforestation of mangrove forests reduces their ability to moderate the impacts of storms and waves on coastal areas. In order to reduce

deforestation in Tana River County, it will be necessary to intervene by implementing actions to secure forests from further encroachment, develop and implement policies to halt forest deforestation and improve the livelihoods of forest dependent communities. Other potential interventions include measures to targeting rehabilitation, reforestation and protection of terrestrial and mangrove forests; Promoting and adopting sustainable energy sources and technologies; Utilising forest resources including Non-Timber Forest Products Sustainably; Building the capacity of local communities to restore degraded forests; and promotion of tree planting outside forests to reduce pressure on existing forests. Actions to implement each of the interventions have been identified.

Intervention: 1.1 Securing the public and community forest area from further deforestation and encroachment.

1. Map and align forest boundaries.
2. Strengthen the capacity of local community groups on implementing FLR actions.
3. Enhance forest surveillance and community-based forest monitoring.
4. Conduct Environmental and Social Impact Assessment (ESIA) on development projects that affect forests
5. Enforce laws and regulation on logging and other consumptive use of forest products.
6. Mainstream FLR concepts in Participatory Forests Management Plans (PFMPs) and sub catchment management plans.
7. Promote restoration initiatives including reforestation and afforestation.

Intervention: 1.2 Develop new policies and strengthen the implementation of existing ones to halt deforestation and forest degradation.

1. Conduct an audit of gaps in FLR policy framework
2. Develop new policies to facilitate FLR implementation based on the audit
3. Conduct capacity building forums to operationalize and implement policies to halt deforestation in Tana River County.
4. Mainstream forest restoration activities in county planning and budgeting processes including in County Integrated Development Plans (CIDPs), annual workplans, sectoral plans and other relevant county-based plans
5. Enforce laws and regulations on logging and other consumptive use of forest products.
6. Conduct Environmental and Social Impact Assessment (ESIA) on development projects that touch on forests

Intervention: 1.3 Enhancing alternative livelihood options for local communities, indigenous people and vulnerable groups living adjacent to forest lands (nature-based enterprises).

1. Conduct baseline of nature-based enterprises/solutions and their prioritization
2. Identify and prioritize potentially viable NTFPs enterprises.
3. Develop business case for prioritized nature-based enterprises /solutions
4. Support implementation of prioritized nature-based enterprises including forest based ecotourism.

5. Capacity build communities on resource mobilization and entrepreneurial skills necessary to commercialize the NBEs
6. Develop and promote value addition of viable bio-enterprises.

Intervention: 1.4 Rehabilitation, reforestation and protection of terrestrial and mangrove forests

1. Identify and map the degraded forest areas.
2. Restore degraded forest areas using appropriate techniques including natural regeneration and reforestation.
3. Formally gazette threatened forests
4. Strengthen forest fire management capacity
5. Map and manage invasive species in forests
6. Strengthen the capacity of local community groups including CFAs on FLR actions.
7. Conduct biodiversity assessment and monitoring in terrestrial and mangrove forests
8. Take measures to reduce human-wildlife conflicts
9. Enforce laws on wildlife and habitat protection
10. Recruit and equip community scouts
11. Develop and enforce grazing plans that protect restored areas

Intervention: 1.5 Promoting adoption of sustainable energy sources and technologies

1. Promote adoption of viable energy saving technologies.
2. Support sustainable production of woody biomass for energy outside forests
3. Promote use of alternative energy sources (e.g. solar power, biogas)

Intervention: 1.6 Build the capacity of local communities to restore degraded forests

1. Undertake a community capacity needs assessment in FLR.
2. Undertake capacity building of community institutions on FLR.

Carry out training on rehabilitation and reforestation of degraded forests, water catchments and mangroves ecosystems.

3. Identify opportunities for local people to engage in and benefit from the restoration Plan, and support county to mobilize local communities and strengthen their role in planning and implementation.
1. Compile and share information on the most promising technical, social and institutional approaches for generating short and long-term benefits for communities, including from products and ecosystem services.
2. Facilitate partnerships and collaboration between local communities and other agencies including the government, the private sector and civil society organizations.

Intervention: 1.8 Increase tree cover and reverse forest degradation

1. Raise awareness on the importance of forest restoration among the stakeholders.
2. Support tree planting in schools, public institutions, urban centres, road reserves and private land.
3. Promote use of appropriate technologies and germplasm forest restoration.
4. Promote the establishment and management of private and community forests.
5. Promote commercial forestry on private land for associated benefits including provision of livestock fodder and herbal medicine.

3.3.2: Restoration of Degraded Rangelands

Tana River County's rangelands are important for livestock production and biodiversity conservation. Economic activities supported by the rangelands include livestock production, ecotourism, honey production and the largely unregulated charcoal production. The productivity of rangelands has declined due to ecological degradation that is largely driven by a combination of factors including overgrazing, spread of invasive species such as particularly *Prosopis juliflora*, unplanned human settlements, infrastructure development initiatives, and climate change linked impacts. Some of the climate change impacts include frequent severe droughts and severe flooding events and inter-community resource use conflicts. The following interventions were designed to address the drivers of degradation in Tana River Rangelands to take advantage of available opportunities for the development of conservation enterprises that can offer alternative livelihood options.

Intervention: 2.1 Enhancing rangeland management and conservation

1. Identify and map degraded hotspots in rangelands
2. Undertake assessment of the carrying capacity of rangelands
3. Conduct destocking campaigns in overstocked rangelands
4. Support the implementation of grazing plans and cooperative ranching in rangelands.
5. Promote natural regeneration of degraded rangelands
6. Require Environmental and Social Impact Assessment (ESIA) on development projects that impacts on rangelands.
7. Promote integrated rangeland management practices.

Intervention: 2.2. Rehabilitation of degraded hotspots in rangelands

1. Promote rain water harvesting technologies.
2. Manage invasive species as per species specific guidelines
3. Promote aided natural regeneration including reseedling
4. Promote tree planting in wooded rangelands using the appropriate tree species.
5. **Promote restoration of degraded rangelands.**

Intervention 2.3: Improve the livelihood of rangeland dependent communities

1. Support establishment and management of community conservancies
2. Promote Ecotourism and other nature-based enterprises in rangelands.

3. Support sustainable Livestock production including marketing and value addition of livestock products.
4. Promote marketing of Non-Timber Forest Products and Services (NTFPs).
5. Halt charcoal production in rangelands
6. Promote use of alternative energy sources
7. Support vulnerable community members including women, youth and indigenous communities in livelihood improvement initiatives.

3.3:3 Restoration of degraded wetlands.

Despite the importance of wetlands for provision, regulating, cultural and supporting services, they are under threat from anthropogenic activities including; poor agricultural practices, deforestation, overstocking and overgrazing, soil erosion and siltation into the water sources. Other challenges include prolonged droughts as a result of climate change and pressure to convert the delta into agricultural land, over- abstraction of water for irrigation and other needs that has led to reduced water flows especially during the dry season. Marine ecosystems suffer from overexploitation of resources and pollution. The interventions that can address these issues were derived from stakeholder consultations, the National FOLAREP document, from Tana Delta Land Use Plan (Odhengo et al, 2014b) and Tana River Delta Indigenous Community Conserved Area (ICCA).

Intervention 3.1: Securing and restoring wetlands and riparian areas

1. Create awareness on the importance of wetland conservation and legal regime for riparian and wetland conservation
2. Determine and demarcate boundaries and buffer zones for wetlands to protect from encroachment
3. Identify, map and reclaim wetlands and riparian areas that have been encroached and converted to other land uses.
4. Rehabilitate degraded water catchment and associated wetlands using appropriate species and technologies
5. Develop and implement protocols to deal with oil spills in marine ecosystems
6. Undertake capacity building of community institutions on planning and implementation of restoration of degraded wetlands and riparian vegetation.
7. Promote active participation of community members in wetland conservation including restoration and biodiversity monitoring.
8. Restore watershed and riparian areas to reduce soil erosion and silting
9. Conduct Environmental and Social Impact Assessment (ESIA) on development projects that affect wetlands

Intervention 3.2: Promote sustainable utilisation of wetland resources

1. Build capacity of local communities to use wetland resources including sand and fish sustainably
2. Enforce use of right fishing gear in both inland and marine ecosystems
3. Map and protect ecologically sensitive areas including sand dunes and turtle nesting sites
4. Regulate livestock grazing in ecologically sensitive areas

Intervention: 3.3 Strengthening policies and actions to halt and reverse wetland/riparian encroachment.

1. Develop and/or implement county policies on sustainable wetland management
2. Enforce regulations to control effluent and solid waste disposal into inland wetlands and marine ecosystems
3. Develop and implement water abstraction regulations
4. Work with relevant research institutions on collecting, archiving and disseminating of information on wetland biodiversity
5. Undertake Environmental and Socio-impact assessment for projects impacting on wetlands where applicable.

Intervention: 3.4. Providing alternative livelihood options (nature-based enterprises/solutions)

1. Identify and support the development of wetland nature-based enterprises
2. Create infrastructure to access water outside wetlands and riparian areas in inland wetlands.
3. Create infrastructure to enhance sustainable ecotourism in inland wetland and marine ecosystems.
4. Promote the uptake of rain and flood water harvesting technologies for irrigation.

3.3.4 Restoration of Degraded Cropland

There is an urgent need to restore degraded agricultural land as a way of increasing agricultural production and therefore food security. Increasing agricultural production on existing farmlands reduces the need to convert forests and rangelands for agricultural production while also alleviating poverty. Initiatives to promote sustainable agricultural intensification and overcoming marketing barriers would improve the profitability of agricultural enterprises. It will also be necessary to address the impacts of climate change through use of appropriate seed varieties, water conservation and other appropriate technologies. Adoption of agroforestry as a cropland restoration activity would lead to increased biodiversity on croplands while also providing alternative income streams through provision of wood for fuel, timber and other uses. Adoption of soil conservation measures would lead to reducing silting of dams while also increasing agricultural productivity. Some of the restoration initiatives including agroforestry are hampered by insecure land tenure. This therefore needs to be addressed if farmers are to invest in tree growing on their farms.

The following interventions and associated actions will restore degraded croplands in Tana River County.

Intervention: 4.1 Promoting agroforestry practices in degraded croplands

1. Identify and map degraded hotspots in croplands
2. Identify suitable high value tree species for the degraded croplands
3. Provide incentives to farmers and private sector for investment in profitable agroforestry ventures

Intervention: 4.2 Enhancing capacity of local communities and vulnerable groups to adopt FLR approaches in agriculture

1. Undertake a community-based capacity vulnerability and needs assessments on FLR.

2. Undertake capacity building of community institutions for FLR planning and implementation based on identified needs.
3. Enhance capacity of County Governments and other stakeholders to provide forest extension services.

Intervention: 4.3. Developing crop- based FLR Bio-Enterprises value chains systems.

1. Carry out value chain analysis for crop- land based FLR bio enterprises value chains and their profitability analysis
2. Develop and implement enterprise development plans for priority value chains.
3. Mobilize communities including vulnerable groups (women, youth and indigenous communities) to form tree growers associations and link them to markets.
4. Promote alternative bio enterprises such as bee keeping to compliment horticultural value chains.
5. Support establishment of community- owned multi-purpose trees and fruit nurseries.

Intervention: 4.4. Protecting ecologically sensitive croplands from degradation

1. Create awareness on policies, legislations and regulations on protection of ecologically sensitive areas including river banks and riparian areas
2. Formulate and Implement legislations and regulations on protection of ecologically sensitive areas
3. Promote climate smart agriculture practices that enhance productivity, resilience and minimize greenhouse gas emissions.
4. Conduct Environmental and social impact studies for all development of irrigation projects in Tana River Delta and other wetlands.

3.3.5: Creation of enabling environment for TANA-FOLAREP implementation

The success of implementing TANA-FOLAREP will depend on the existence of an enabling environment particularly in relation to policy, governance, capacity, sustainable FLR finance. Implementation of FLR initiatives in the county will require that Tana River County works collaboratively with all the relevant stakeholders. To achieve this, TANA-FOLAREP development process was participatory– a process which allowed mutual understanding and negotiation to take place. The Plan Implementation structure (See Section 4.1.1) was designed to facilitate the participation of all stakeholders. However, implementation of this plan will require that the enabling policy and regulatory framework is in place and that they are implemented. Key policy gaps exist in the area of private sector engagement in FLR activities in the mainstreaming of national policies, strategies and programmes relevant to FLR into the county planning processes. Lastly, implementation of this plan will require adequate human and financial capacity.

The following interventions and associated actions will create enabling environment for the implementation of TANA-FOLAREP.

Intervention 5.1: Formulate enabling policy and regulatory framework

1. Develop policy and legislation on FLR
2. Promote mainstreaming of FLR in CIDP, other county level policies and budgetary allocation.

3. Develop policy on private sector engagement in FLR initiatives
4. Promote intercounty collaboration on FLR issues and the management of Tana River waters

Intervention: 5.2. Capacity building and knowledge management for FLR

1. Build the capacity of county government and other stakeholders on FLR monitoring and evaluation
2. Conduct regular monitoring and Evaluation
3. Develop collaborations with scientific community on FLR research needs
4. Build a database of lessons in FLR implementation

Intervention 5.3 Mobilize adequate financial and other resources for FOLAREP implementation

1. Map FLR resource availability among stakeholders
2. Advocate for FLR budgetary allocations in the county budgeting process
3. Mobilize FLR finance from development partners.
4. Address policy gaps to attract private sector resources
5. Build a suite of business cases for carbon trading, apiculture and other conservation enterprises.
6. Build partnerships with private sector towards FLR implementation

Intervention: 5.4 Establish enabling governance, institutional arrangements and partnerships for FLR implementation

1. Constitute inclusive county, sub-county and ward level FLR implementation committees.
2. Build the capacity of the FLR committees and partners on FLR implementation and mandates
3. Hold regular FLR implementation committee meetings
4. Build the capacity of FLR implementers

CHAPTER4: COORDINATION AND IMPLEMENTATION OF TANA-FOLAREP

4.1 Implementation of TANA-FOLAREP

4.1.1 Implementation at the county level

Existing institutional and administrative frameworks will be used to implement TANA- FOLAREP. The implementation of the plan will be overseen by a **County FLR Coordinating Committee (CFLRCC)** to be chaired by CECM responsible for Forestry. Other members of the committee will include Chief Officers responsible for the relevant sectors (Environment and/or Forestry, Agriculture, fisheries, Livestock production, Tourism and Trade), NEMA County Director of Environment, Tana River County Assembly Chair of Environment Committee, and Kenya Forest Service’s County Conservator of Forest. The agenda of the **County FLR Coordinating Committee (CFLRCC)** will be executed by **County FLR Technical Committee (CFLRTC)** that will be chaired by the Director responsible for Forestry and/or environment Sector. Members of the CFLRTC will include Directors county government departments responsible for agriculture, livestock, fisheries; Water and irrigation; Environment, Climate Change, tourism; representatives of government agencies including KFS, NEMA; KWS, KEMFRI; Conservation NGOs representatives; Private sector representative and Research and training institutions. The County Director responsible for Forestry will be responsible for day to day operation.

4.1.2 Sub-county and Ward Level Committees

Sub-county FLR Committee (SCFLRC) and **Ward FLR Committee (WFLRC)** will coordinate TANA-FOLAREP implementation activities at the sub-county level and ward levels, respectively. These committees will be coordinated by the sub-county administrator and Ward administrators respectively. Membership of Sub-county FLR Committee (SCFLRC) will include officers from relevant county and national government departments, Faith –based and civil society organisations among others. The **Ward FLR Committee (WFLRC)** will draw membership from CBOs including Water Resource User Associations, Community Forest Associations (CFAs), BMUs, Community conservancies other non-state actors operating in the area. The responsibilities of the WFLRC will include:

- identifying areas that require restoration acquiring seedlings and technologies for restoration
- developing bio-enterprises and mobilizing resources for the same
- mobilizing the community and CBOs for restoration activities
- Monitoring and protecting of restored areas.

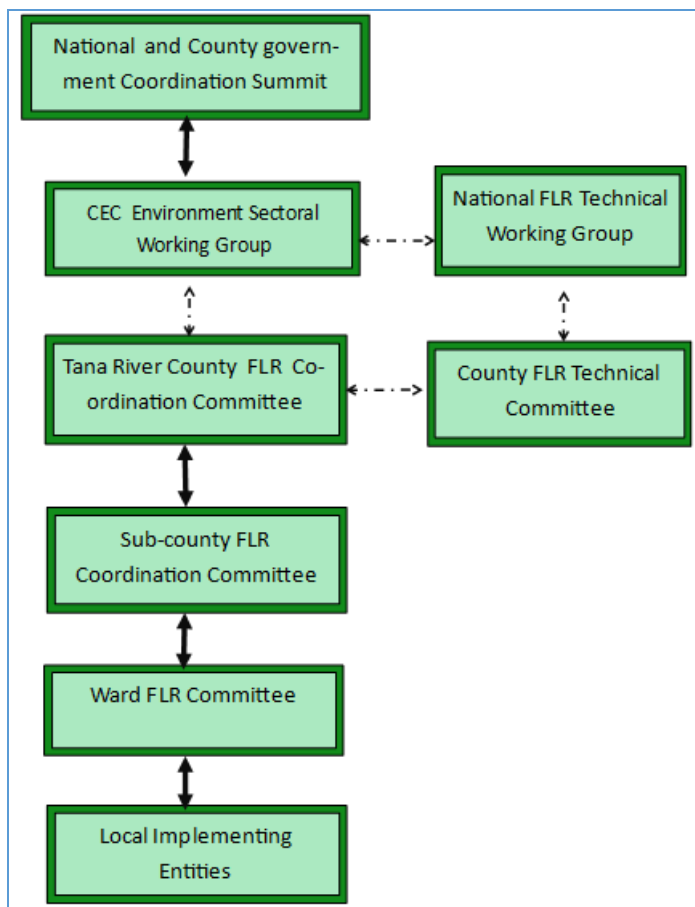


Figure 2: TANA-FLAREP IMPLEMENTATION STRUCTURE

4.1.3 Link with National FOLAREP

Tana River County Government will work with the national government to implement TANA-FOLAREP using the inter-governmental relations structures that are anchored on the Constitution and inter-governmental relations Act (2012) and other relevant Laws governing management of natural resources like land, water, and forests at landscape scale. The CECM responsible for forestry will report on TANA-FOLAREP implementation at the national CEC forum which implements the agenda for the National and County Government Coordination Summit. The CEC forum is advised by the National FLR Technical Working Group (NFLRTWG). The County FLR Technical Working group will establish a link with the NFLRTWG in order to get technical support at the county level.

4.2 Finance and Resource Mobilization

4.2.1 Budget

Implementation of TANA-FOLAREP will cost about 1.03 Billion Kenya Shillings over a five year period. This translates into about 206 Million Kenya Shillings per year. The county government will

work with all stakeholders including the national government, development partners, private sector players, civil society organisations and private individuals to raise funds to implement this plan.

4.2.2 Resource Mobilization

Financial resources for implementing this plan will be raised from the following sources.

1. **State funding.** These resources will be unlocked by integrating FLR integrated in the Tana River County and the National Government budgeting system. State agencies involved in FLR including Kenya Forest Service (KFS), Kenya Forest Research Institute (KEFRI), Kenya Wildlife Service (KWS) among others will mainstream FLR actions into their planning and budgeting processes.
2. **Development partners and International financing mechanisms.** Tana River County Government and other FLR implementing partners can mobilize funds from development partners and international and regional funding mechanisms. This can be achieved through development of technical project or programme proposals. Some of the potential funding mechanisms/development partners include:
 - Adaptation Fund
 - Green Climate Fund
 - Bio Carbon Fund
 - Readiness Fund (RF) for reducing emissions from deforestation and forest degradation (REDD+)
 - Clean Development Mechanism (CDM)
 - Global Environment Facility (GEF)
 - Forest Carbon Partnership Facility
 - AFR100 initiatives
 - African Development Bank
 - 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.
3. **Private sector**

Private sector players can participate in implementing FLR initiatives through corporate Social Responsibility (CSR), Impact marketing, and Payment for Ecosystem Services (PES). The private sector also provides market for conservation enterprise products. PES can target the carbon sequestration potential of the county's forests and also water and recreation services. Other options for private sector players include impact marketing whereby companies that would invest in raising the value of their brands by associating with ecosystem conservation will pay for FLR activities. These can attract telecommunication companies and banks. Additionally, private sector players can also engage in timber production in private plantations.

4. **Civil Society funding** .There are many **International**, national and local NGOs and foundations operating in Tana River County in particular that have an interest in nature conservation including Nature Kenya, WWF, NRT, Eden Restoration, World Vision, ADS Pwani, The Nature Conservancy, Wetlands International, Welthungerhilfe, Concern Worldwide etc. There are also foundations and trusts with interest in FLR that can be approached for funding.
5. **Non-traditional funding**
 Innovative financing approaches including Crowdfunding and green bank cards will be explored.

4.4 Monitoring and evaluation

Monitoring and evaluation will be led by the County FLR Coordinating Committee but will be the responsibility of the County monitoring and evaluation unit. TANA-FOLAREP implementation targets will be mainstreamed into the performance contracts of all relevant officers including CECMs, Chief Officers, Directors, and Administrators (County, Sub-county and ward level). Implementing entities will follow guidance provided by Annex 3 (Implementation structure). The Director in-charge of forestry will compile annual reports that will be used for annual reviews, five year evaluation and reviews

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Annex 2: A summary of national legal, policy commitments on which Tana River Forest and Landscape Restoration (FLR) is anchored.

Policy/Legal/Commitment	Relevance
The Kenya Constitution 2010	Provides for sustainable natural resource management in the bill of rights especially land, environment and natural resources. Proposes increasing and maintaining a tree cover of at least 10% of the country total land area.
Kenya's Vision 2030	Proposes the need to achieve 10% forest cover by 2030 and also proposes rehabilitation of degraded water catchments areas while promoting on-farm forestry.
Environment policy, 2013	Provides for the development and implementation of a national strategy for rehabilitation and restoration of degraded forest ecosystems and water catchment areas with active community involvement/participation. It promotes sustainable forest management and encourages development and implementation of appropriate forestry-based investment programmes and projects.
Environmental Management and Coordination Act (EMCA) 1999 (reviewed in 2015)	Provides a framework for environmental and social development and harmonizes the various sector specific legislations impacting on environment and the management of natural resources. Provides for Environmental Impact Assessment (EIA) for activities such as clearance of forest areas, reforestation/afforestation with alien species, and introduction of alien species and excisions of gazetted forest.
National Climate Change Framework Policy, 2016	This policy aims at facilitating a coordinated, coherent and effective response to the local, national and global challenges and opportunities presented by climate change.
Climate Change Act, 2016	Provides for a regulatory frame work for enhanced response to climate change to provide for mechanisms and measures to achieve low carbon climate development and for connected purposes.
Draft Forestry Policy, 2020	Proposes rehabilitation, restoration and protection of degraded forest ecosystems, water towers, catchment areas and other ecologically fragile areas. It also lays emphasis on investments in urban forestry, farm forestry, non-timber forest products and also on research and innovation.
Forest Management and Conservation Act 2016	Provides for establishment, development and sustainable management, including conservation and rational utilization of forest resources for socio-economic development of the country. Proposes enforcement of related regulations and creation and management of forests. Provides incentives for increasing forest and tree cover and establishment of a facility to provide financial and technical support forestry programmes and payment for ecosystem services.
National Land Policy, 2017	Provides for protection of natural resources including forests, water catchment areas, rangelands, wetlands and cultural sites to prevent environmental degradation to foster sustainable development. It also provides for biodiversity conservation
Land Act, 2012 (revised 2016)	Restrict allocation of public land that falls within forest and wild life reserves, mangroves, and wetlands or fall within the buffer zones of such reserves or within environmentally sensitive areas to other land use. It act also gives provisions to make rules and regulations measures to facilitate the access, use and co-management of forests, water and other resources by communities who have customary rights to these recourses.
Agricultural Policy, 2016	Promotes conservation, protection, development and sustainable management of agricultural based bio-diversity. Provides for the development of mechanisms for controlling, management and utilization of alien and invasive species
Agriculture, Fisheries and Food Authority Act, 2013	Promotes soil and water conservation and prevents destruction of vegetation; requiring, regulating or controlling the afforestation or re-afforestation of land.
National Wildlife	Promotes conservation and rehabilitation of forests and other water catchment areas that are

Conservation and Management Policy, 2012	significant wildlife habitats and the establishment of trans-boundary and/or trans-frontier wildlife conservation areas.
The Wildlife Act, 2013	Provides for conservation of forests within national parks, national reserves and sanctuaries, and of all wild animals occurring in all forests
Water policy 2012	Proposes progressive restoration and protection of ecological systems as well as biodiversity in strategic water catchments, increasing forest cover using rainwater harvesting management systems, and increasing capacity of forests in catchment water balance.
National Energy and Petroleum Policy 2015	Calls for collaboration with other relevant ministries and stakeholders to increase and sustain tree cover to above 10% Proposes incentives for private sector participation in generation, exploitation, production, distribution, supply and use of biomass energy
National Wetland Policy (MENR, 2014)	Seeks to regulate, protect, manage and conserve all wetlands within public, private and community land in line with the Constitution. It also proposes restoration and rehabilitation of degraded wetlands using indigenous vegetation and promotion of natural regeneration.
National strategy for achieving and maintaining over 10% tree cover by 2022	Aims at accelerating actions towards the achievement of Constitutional, Vision 2030 and the Presidential Directives of 10% national tree cover, for environmental integrity and social economic development.
The National Forest Programme (2016–2030)	Sustainable forest management, conservation, and restoration are key aspects of the programme.
National Climate Change Response Strategy, 2010	The National Climate Change Response Strategy proposes planting of 7.6 billion trees on 4.1 million hectares of land during the next 20 years.
National Policy for the Sustainable Development of Northern Kenya and other Arid Lands	Promotes integrated management of dryland natural resources, conservation and management of dryland forests and regulating unsustainable utilization of forests including charcoal burning.

Annex 3: TANA FOLAREP Implementation Framework

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
Objective 1: Reduction of deforestation, restoration of degraded forests							
Securing the public and community forest area from further deforestation and encroachment.	Map and align and securing forest boundaries.	Total forest area of km fence No of kms of boundaries beacons fencing	Periodic project reports	TCRG KFS, CFAs, NGOs	Y1 -Y5		10 500 m
	Strengthen the capacity of local community groups on implementing FLR actions.	Number of community members/groups trained,	Periodic reports	TCRG KFS, CFAs, NGOs	Y1 -Y5		10
	Enhance forest surveillance and community-based forest monitoring.	Forest condition/status, Biodiversity status	Periodic reports	TCRG KFS, CFAs, NGOs	Y1 -Y5		5
	Conduct Environmental and Social Impact Assessment (ESIA) on development projects that affect forests	No of projects without EIA conducted	EIA reports	TRCG KFS, project proponents	Y1 -Y5		1
	Enforce laws and regulation on logging and other consumptive use of forest products.	No. of Arrests, Forest condition/status	Periodic report	TRCG KFS, CFAs,	Y1 -Y5		5
	Mainstream FLR concepts in Participatory Forests Management Plans (PFMPs) and sub catchment management plans.	No of operational CFAs actively involved in forest boundary management.	Periodic reports	TRCG KFS, CFAs, WRUs	Y1 -Y5		5
	Promote restoration initiatives including reforestation and afforestation.	Area in hectares Increased in Forest cover	Periodic project reports	TCG KFS, CFAs,	Y1 -Y5		5
<i>Develop new</i>	Conduct an audit of gaps in FLR policy	No. Meetings/workshops/	Gaps report	TCG KFS, CFAs,	Y1 -Y2		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
<i>policies and strengthen the implementation of existing ones to halt deforestation and forest degradation.</i>	framework	sessions					
	Develop new policies to facilitate FLR implementation based on the audit	Meetings/sessions	Policy documents developed	TCG KFS, CFAs,	Y3-Y5		10
	Conduct capacity building forums to operationalize and implement policies to halt deforestation in Tana River County.	No. of Meetings/training sessions held	Training reports, Workshop reports	TCG KFS, CFAs, NGOs	Y3-Y5		10
	Mainstream forest restoration activities in county planning processes	Percentage of policy mainstreaming forest restoration	Policy documents mainstreaming forest restoration	TCG, KFS, CFA	Y1-Y5		1
	Enforce laws and regulation on logging and other consumptive use of forest products.	No. of culprits arrested and charged Reduction in forest degradation	Number of arrests and prosecution	TCG, KFS, CFA	Y1-Y5		1
	Conduct Environmental and Social Impact Assessment (ESIA) on development projects that touch on forests	No of projects with EIA conducted	AIA reports	TCG KFS, project proponents	Y1 -Y5		1
<i>Enhancing alternative livelihood options</i>	Conduct baseline of nature-based enterprises/solutions and their prioritization	No. of nature based Baseline conducted	No. Baseline reports	“TRCG, KFS, NGOs	Y1		5
	Identity and prioritize potentially viable NTFPs enterprises.	No. of NTFP identified and Prioritization done	Report	“TCG, KFS, NGOs	Y1		4

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Develop business case for prioritized nature-based enterprises /solutions	Number of business cases developed	Reports/docu ments	“TCG, KFS, NGOs	Y2		5
	Support implementation of prioritized nature-based enterprises including forest based ecotourism.	Number of businesses supported	Reports	“TCG, KFS, NGOs	Y3-Y5		5
	Develop and promote value addition of viable bio-enterprises.	Number of enterprises promoted value addition	Periodic Project reports	“TCG, KFS, NGOs	Y2 -Y5		5
Rehabilitation, reforestation and protection of terrestrial and mangrove forests	Identify and map the degraded forest areas.	No of Areas in hectares identified and mapped	Reports	TCG, KFS, NGOs, KEFRI	Y1		5
	Restore degraded forest areas using appropriate techniques including natural regeneration and reforestation.	No. of hectares from the degraded restored Area restored	Reports	TCG, KFS, NGOs, KEFRI	Y3-Y5		50
	Formally gazette threatened forests	Area Gazetted	Reports	KFS, TCG	Y1-Y5		2
	Strengthen forest fire management capacity	<ul style="list-style-type: none"> ◆ Fire management Plans ◆ Fire management Equipment supplied No of trainings on forest fire management 	Reports, plan documents, percent decrease in forest fire incidences	TRCG, KFS, NGOs,	Y1 -Y5		8
	Map and manage invasive species in forests	No. of hectares mapped and managed Area mapped	Reports, Maps	TRCG. KFS, CFAs	Y2=Y5		5
	Strengthen the capacity of local community groups on FLR actions.	Number of people trained	Reports, Maps	TRCG. KFS, CFAs	Y2=Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Conduct biodiversity assessment and monitoring in terrestrial forests and mangrove forests	Number of hectares of the forest assessed and monitored	Reports, Maps	TRCG, KFS, CFAs	Y2=Y5		5
	Take measures to reduce human-wildlife conflicts	Percent reduction in human wildlife conflicts	Reports	KWS, , TCGCBOs, NGOs, KFS	Y1-Y5		10
	Enforce laws on wildlife and habitat protection	Percent reduction in poaching and habitat destruction	Reports	KWS, KFS, TCG, CFAs, CBOs and NGOs	Y1-Y5		10
	Recruit and equip community scouts	Number of Scouts recruited Number of equipment bought	Reports	KFS, TCG, CFAs, CBOs and NGOs	Y2		5
Objective 2: Restoration Degraded Rangelands							
Enhancing rangeland management and conservation	Identify and map degraded hotspots in rangelands	Area in hectares identified & mapped	Report	TCG, MOA,	Y1		5
	Undertake assessment of the carrying capacity of rangelands	No. of hectares assessed in the rangeland Assessment carried out	Report	TCG, MOA,	Y1		5
	Conduct destocking campaigns in overstocked range lands	Number of campaign in destocking assessments/reports on the carrying capacity of Rangeland Ecosystems	Reports	TCG, KWS, KFS, NGOs, Academia, NRT, KALRO	Y 1-Y3		55
	Support the implementation of grazing plans and cooperative ranching in	Number of grazing plan	Surveys,	TCG, NGOs, CBOs,	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	rangelands.	and ranch in the rangelands implemented Livestock heads per community herd	Reports	NRT, KALRO			
	Promote natural regeneration of degraded rangelands	Area in hectares restored naturally	Reports	TCG, NGOs, CBOs, NRT, KALRO	Y1-Y5		5
	Require Environmental and Social Impact Assessment (ESIA) on development projects that touch on forests	No of ESIA done Proportion of projects with EIA conducted	NEMA reports	TCG, NGOs, CBOs, NEMA	Y1-Y5		5
Rehabilitation of degraded hotspots in rangelands	Promote rain water harvesting technologies.	Level of uptake % of rain water harvesting technologies	Reports, Surveys	TCG, Relevant county departments, NGOs, CBOs	Y1-Y5		10
	Manage invasive species as per species specific guidelines	<ul style="list-style-type: none"> ◆ Extent of Invasive species in percentage tackled/Managed ◆ Number of innovations/ enterprises established to process invasive species into commercial products. ◆ Number of projects aimed at 	Surveys, Reports	TCG, Relevant county departments, KFS, KEFRI, NRT, KALRO, NGOs, CBOs	Y1-Y5		30

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		removal/reduction of Invasive species					
	Promote aided natural regeneration including reseeded	<ul style="list-style-type: none"> ○ Area in hectares reseeded ○ Area in hectares under Natural regeneration 	Surveys, Maps, Reports	KEFRI, TCG, NGOs, CBOs	Y1-Y5		10
	Promote tree planting in wooded rangelands using the appropriate tree species.	Percentage of tree cover Extent of reforested wooded rangelands	Surveys, Maps, Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1-Y5		5
Improve the livelihood of rangeland dependent community	Support establishment and management of community conservancies	Number of community conservancies established	Reports, Legal documents	TCG, NGOs, CBOs	Y1-Y5		3
	Promote Ecotourism and other nature-based enterprises in rangelands.	Number of Nature based enterprises established & operational in the rangelands	Reports, Surveys	TCG, CBOs	Y1-Y5		5
	Support sustainable Livestock production including marketing and value addition of livestock products	Number of livestock market established and the value addition of livestock products supported priority value chains established	Reports	TCG, CBOs, NGOs, MoL	Y1-Y5		20
	Promote marketing of Non-Timber Forest Products and Services (NTFPs).	Number of NTFP based enterprises operational	Surveys, Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1-Y5		25
	Regulate charcoal production in rangelands	◆ No. of people arrested for illegal charcoal	Surveys, Reports,	TCG, KFS, KEFRI, CBOs, NGOs	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		production ◆ Extent of enforcement of charcoal ban on public land Area of private land dedicated to woody mass production esp. charcoal	Licenses				
	Promote use of alternative energy sources	◆ Level of adoption in percentage promoted of alternative energy sources	Surveys, Reports, Licenses	TCG, KFS, KEFRI, CBOs, NGOs	Y1-Y5		5
	Support vulnerable community members including women, youth and indigenous communities in livelihood improvement initiatives.	Number of vulnerable members/groups supported	Reports	TCG, KFS, KEFRI, CBOs, NGOs	Y1-Y5		5
Objective 3: Restore of degraded wetlands.							
Secure and restoring wetlands and riparian areas	Create awareness on the importance of wetland conservation and legal regime for riparian and wetland conservation	◆ Level of awareness in percentage on importance of riparian and wetland conservation	◆ Surveys, Reports	TCG, NGOs, CBOs, KFS,	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Determine and demarcate boundaries and buffer zones for wetlands to protect from encroachment	<ul style="list-style-type: none"> ◆ Area in hectare of land demarcated where beacons have been erected to demarcate boundaries 	<ul style="list-style-type: none"> ◆ Surveys, Reports, Maps 	TCG,, KFS, WRUAs, WRMA, TAWSB	Y1-Y3		10
	Identify, map and reclaim wetlands and riparian areas that have been encroached and converted to other land uses.	<ul style="list-style-type: none"> ◆ Area of land of wetland in hectares identified, mapped and reclaimed ◆ Number of trainings/capacity building done at community institutions 	<ul style="list-style-type: none"> ◆ Training reports, Attendance lists, Certifications 	WRMA, KWTA, TCG, NGOs, TAWSB	Y1-Y5		10
	Rehabilitate degraded water catchment and associated wetlands using appropriate species and technologies	<ul style="list-style-type: none"> ◆ Area of land in hectares in wetlands rehabilitated Representation /Number of community members taking part in wetland conservation 	<ul style="list-style-type: none"> ◆ Surveys, Reports 	WRMA, TCG, Relevant departments, NGOs, CBOs	Y1-Y5		3
	Develop and implement protocols to deal with oil spills in marine ecosystems	<ul style="list-style-type: none"> ◆ The no. of protocols developed and implement to deal with oil spills Extent of watershed/riparian 	<ul style="list-style-type: none"> ◆ Surveys, Maps, Reports 	KWTA, WRMA, TCG, NGOs	Y1-Y5		50

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		areas restored					
	Undertake capacity building of community institutions on planning and implementation of restoration of degraded wetlands and Riparian vegetation.	◆ No. of Training sessions/workshops	◆ Reports	KWTA, WRMA, TCG, NGOs	Y1-Y5		50
	Promote active participation of community members in wetland conservation including restoration and biodiversity monitoring.	◆ No. of sessions Community engaged	◆ Monitoring reports	TCG, NGOs,	Y1-Y5		50
	Restore watershed and riparian areas to reduce soil erosion and silting	◆ Area in hectares Restored	◆ Reports, maps	TCG, NGOs, WRUAs	Y1-Y5		50
	Conduct Environmental and Social Impact Assessment (ESIA) on development projects that affect wetlands	◆ No. of projects subjected to ESIA Proportion projects with ESIA submitted and approved	◆ Reports	NEMA, TCG, WRMA	Y1-Y5		5
Promote sustainable utilisation of wetland resources	Build capacity of local communities to use wetland resources including sand and fish sustainably	◆ Number of communities members trained to wetland resources of Capacity Building programs established	◆ Surveys, Training Reports	WRMA, TCG, NGOs	Y1-Y5		10
	Enforce use of right fishing gear in both inland and marine ecosystems	◆ Level of in % of Enforcement of fishing requirements	◆ Licences, Surveys, Reports,	TCG,	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		◆ Level of regulation of limestone mining	Fines, Arrests				
	Map and protect ecologically sensitive areas including sand dunes and turtle nesting sites	◆ Extent of ecologically sensitive areas in hectares mapped ◆ Extent of ESAs legally protected	◆ Reports, Maps	TCG, KWS	Y1-Y5		10
	Regulate livestock grazing in ecologically sensitive areas	◆ Number of grazing plans in ESAs not defined in the action ◆ Level of livestock grazing area in hectares regulated through enforcement of grazing regulation in ESAs	◆ Reports, Fines,	TCG, CBOs, NRT	Y1-Y5		5
Strengthen policies and actions to halt and reverse wetland/riparian encroachment	Develop and/or implement county policies on sustainable wetland management	◆ Number of policies developed and implemented on sustainable wetland	◆ Reports	TCG, WRMA,	Y1-Y5		5
	Enforce regulations to control effluent and solid waste disposal into inland wetlands and marine ecosystems	◆ The level effluent and solid waste in % Extent are enforced and controlled of enforcement of regulations	◆ Reports, Arrests, Fines, Licences revoked	TCG, WRMA, Relevant county departments	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Develop and implement water abstraction regulations	◆ The number policy/bill developed and implemented on water abstraction regulations	◆ Reports, Bills, Regulations	TCG, Academia, NGOs	Y1-Y3		3
	Work with relevant research institutions on collecting, archiving and disseminating of information on wetland biodiversity	◆ The number of research institutions Demonstrated partnership/working relations with research institutions	◆ Partnership documents, Reports	TCG, Academia, NGOs, CBOs, KEMFRI,	Y1-Y5		6
	Enforce conduct of Environmental and Socio-impact assessment for projects impacting on wetlands.	◆ The number ESIA for projects impacting on wetlands enforcement conducted Proportion of projects with EIA conducted	◆ Reports, approval	NEMA, TCG,	Y1-Y5		2
Provide alternative livelihood options (nature-based enterprises /solutions)	Identify and support the development of wetland nature-based enterprises	◆ Number of enterprises identified and supported	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		3
	Create infrastructure to access water outside wetlands and riparian areas in inland wetlands	◆ Number of watering points established	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		5
	Create infrastructure to enhance ecotourism in inland wetland and marine ecosystems.	◆ Number of tourist facilities established	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		10
	Promote the uptake of rain and flood	◆ The number of farmers	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		40

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	water harvesting technologies for irrigation.	promoted to the uptake of rain and flood water harvesting technologies for irrigation Proportion of farmers using water harvesting technology					
Objective 5: Restore Degraded Croplands							
Promote agroforestry practices in degraded croplands	Identify and map degraded hotspots in croplands	◆ Area identified	◆ Reports, Maps	TCG, NGOs, CBOs	Y1		5
	Identify suitable high value tree species for the degraded croplands	◆ The number suitable high value tree species are identified Species List for different agro ecological zones	◆ List, Reports	TCG, KFS, KEFRI	Y1		2
	Provide incentives to farmers and private sector for investment in profitable agroforestry ventures	◆ Number of incentives farmers/private sector available to farmers/private sector	◆ Reports, Budgetary allocations, legal investment documents	TCG, , KEFRI. KFS	Y1-Y5		50
Enhance the	Undertake community-based capacity vulnerability and needs assessments on	◆ The number of training undertaken on the	◆ Report	TCG, KEFRI, KFS, NGOs, CBOs	Y1		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
capacity of local communities and vulnerable groups to adopt FLR approaches in agriculture	FLR.	community – based vulnerability and needs assessment on the FLR Vulnerability assessment conducted					
	Undertake capacity building of community institutions for FLR planning and implementation based on identified needs.	◆ Number of community members trained	◆ Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1		5
	Enhance capacity of County Governments and other stakeholders to provide forest extension services.	◆ Number of stakeholder members trained	◆ Report	TCG, KEFRI, KFS, NGOs, CBOs	Y1		5
Developing crop-based FLR Bio-Enterprises value chains systems	Carry out value chain analysis for crop-land based FLR bio enterprises value chains and their profitability analysis	◆ Number of value chain analysis for crop land based FLR bio enterprises value chains and their profitability are carried out ◆ Value chain analysis carried out	◆ Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1		3
	Develop and implement enterprise development plans for priority value chains.	◆ Number of Plan developed and implemented for priority value chains	◆ Plan	TCG, KEFRI, KFS, NGOs, CBOs	Y1-Y5		10
	Mobilize communities including	◆ No of community	◆ Reports	TCG, KEFRI, KFS,	Y3 –Y5		10

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	vulnerable groups (women, youth and indigenous communities) to form tree growers associations and link them to markets.	<ul style="list-style-type: none"> mobilized to form tree growers associations Groups established ◆ Number of community groups linked to markets was not defined in the action 		NGOs, CBOs			
	Promote alternative bio enterprises such as bee keeping to compliment horticultural value chains.	<ul style="list-style-type: none"> ◆ Number of bio-enterprises established 	<ul style="list-style-type: none"> ◆ Reports 	TCG, KEFRI, KFS, NGOs, CBOs	Y2-Y5		10
	Support establishment of community-owned multi-purpose trees and fruit nurseries	<ul style="list-style-type: none"> ◆ Number of Nurseries established ◆ Number of seedlings produced 	<ul style="list-style-type: none"> ◆ Reports 	TCG, KEFRI, KFS, NGOs, CBOs	Y2-Y5		40
Protect ecologically sensitive croplands from degradation	Create awareness on policies, legislations and regulations on protection of ecologically sensitive areas including river banks and riparian areas	<ul style="list-style-type: none"> ◆ Number of awareness are conducted on policies legislation and regulation on the protection of ecologically sensitive areas ◆ for a conducted 	<ul style="list-style-type: none"> ◆ Reports 	TCG, NEMA, WRA, CBOs	Y1 –Y5		5
	Implement legislations and regulations on protection of ecologically sensitive areas	<ul style="list-style-type: none"> ◆ Percent decrease in ecologically sensitive areas in hectares that 	<ul style="list-style-type: none"> ◆ Maps, Reports 	TCG, NEMA, WRA, CBOs	Y1-Y5		2

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		become degraded					
	Promote climate smart agroforestry practices that enhance soil and water conservation.	◆ Number of farmers practicing climate smart agroforestry are conducted	◆ Reports	TCG, farmers, NEMA, KFS, KEFRI, WRA, CBOs	Y1-Y5		5
	Conduct Environmental and social impact studies for all development of irrigation projects in Tana River Delta and other wetlands.	◆ The number ESIA studies for all development of irrigation projects are conducted. Proportion of projects with EIA conducted	◆ Reports	TCG, NEMA, WRA, CBOs	Y1-Y5		1
Objective 5: Create an enabling environment for TANA-FOLAREP implementation							
Formulate enabling policy and regulatory framework	Develop policy and legislation on FLR	◆ The number of policy and legislation on FLR developed A launch of FLR policy & Action plan	◆ Reports, Plans	TCG, NGOs, CBOs, KEMFRI, Private Sector, relevant county departments, Parastatals	Y1-Y2		5
	Promote mainstreaming of FLR in CIDP and other county level policies and plans	◆ Number of The number of CIDP and other county level policies and plans are mainstreamed Clauses/actionable items in CIDP, County	◆ Plans, Reports	TCG, Academia, NGOs, CBOs, KEMFRI, Private Sector, relevant county departments, Parastatals	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		policies & plans linking FLR to County Development					
	Develop policy on private sector engagement in FLR initiatives	◆ Number of Policy on private engagement in FLR developed document & action plan	◆ Policy document, Plans	TCG, Academia, NGOs, CBOs, KEMFRI, Private Sector, relevant county departments, Parastatals	Y1-Y2		5
	Promote intercounty collaboration on FLR issues	◆ Number of of intercounty collaboration on FLR issues promoted identified areas/actions of collaboration among relevant counties	◆ Plans, MOUs	TCG, Other county Governments	Y1-Y5		5
Capacity building and knowledge management for FLR	Build the capacity of county government officials and other stakeholders on FLR monitoring and evaluation	◆ Number of stakeholders FLR M&E capacity built benefitting from training on	◆ Training reports, Attendance lists	TCG, Academia, NGOs, KFS, KEFRI,	Y1-Y5		5
	Conduct regular monitoring and Evaluation	◆ Number of Monitoring & Evaluation conducted reports	◆ Reports	TCG, Academia, NGOs, KFS, KEFRI,	Y1-Y5		5
	Develop collaborations with scientific community on FLR research needs	◆ MOUs/collaboration	◆ Agreements	TCG, Academia,	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		agreements signed	ts, MOUs	NGOs, Research Institutions, Relevant Parastatals			
	Build a database of lessons in FLR implementation	◆ The number of data based of lessons in FLR built An established, updated & accessible database on lessons in FLR	◆ Database, Reports	TCG, Academia, NGOs, Research Institutions, Relevant Parastatals, Private sector players	Y1-Y5		5
Mobilize adequate financial and other resources for FOLAREP implementation	Map FLR resource availability among stakeholders	The number of FLR resources availability among stakeholders mapped Number of Reports on resource availability	◆ Reports,	All relevant stakeholders in FLR	Y1-Y5		3
	Advocate for FLR budgetary allocations in the county budgeting process	◆ The amount of money Budgetary allocations for FLR advocated	◆ Reports	TCG	Y1-Y5		0.5
	Mobilize FLR finance from development partners and the private sector	◆ Amount of funding mobilized	◆ Reports, Financing (\$)	TCG, NGOs, Development Partners, Private Sector	Y1-Y5		0.5
	Address policy gaps to attract private sector resources	◆ Number of policy gaps identified & addressed ◆ no of private sector Increased Private	◆ Policy briefs, Funding (\$)	TCG, NGOs, Development Partners, Private Sector	Y1-Y5		1

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds* *	Indicative budget (X 000000)
		sector funding/investment					
	Build a suite of business cases for carbon trading, apiculture and other conservation enterprises.	◆ Number of business cases developed, presented & funded	◆ Reports, Business Cases,	TCG, NGOs, CBOs, Development Partners, Private Sector & other relevant stakeholders	Y1-Y5		5
	Build partnerships with private towards FLR implementation	Number of Established working relations. ◆ Number of Conservation Enterprises Established & Operational	◆ MOUs, Agreements, Licences, Reports	TCG, NGOs, CBOs, Development Partners, Private Sector & other relevant stakeholders	Y1-Y5		5
Establish enabling governance, institutional arrangements and partnerships for FLR implementation	Constitute and gazette county, sub-county and ward level FLR implementation committees	◆ Number of FLR committee constituted & gazetted committees	◆ Reports	TCG & all relevant stakeholders	Y1-Y3		10
	Build the capacity of the FLR committees and partners on FLR implementation and mandates	◆ Number of meeting capacity built FLR beneficiaries of capacity building Programs in FLR	◆ Training reports, certifications.	TCG, Academia, Relevant county departments, Private sector, NGOs, CBOs, Relevant ministries/parastatals	Y1-Y5		15
	Hold regular FLR implementation committee meetings Build the capacity of FLR implementers	◆ Number of meetings organized for committee on FLR implementation capacity built	◆ Minutes, Certifications, Training Reports	TCG, CFLRC, WFLRC, Academia, NGOs & all relevant stakeholders	Y1-Y5		55

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Similarity	◆ Number of FLR implementers trained & commissioned					
	Build the capacity of FLR implementers	◆ Number of training for implementers FLR capacity built ◆ Number of partners trained	◆ Minutes, reports	TCG, CFLRC, WFLRC, Academia, NGOs & all relevant stakeholders	Y1-Y5		5

Grand Total **1,031**

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
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Objective 1: Reduction of deforestation, restoration of degraded forests

Securing the public and community forest area from further deforestation and encroachment.	Map and align forest boundaries.	No of Kms of boundaries beacons	Periodic project reports	TCG KFS, CFAs,NGOs	Y1 -Y5		10
	Strengthen the capacity of local community groups on implementing FLR actions.	Number of community members/groups trained,	Periodic reports	TCG KFS, CFAs,NGOs	Y1 -Y5		10
	Enhance forest surveillance and community-based forest monitoring.	Forest condition/status, Biodiversity status	Periodic reports	TCG KFS, CFAs,NGOs	Y1 -Y5		5
	Conduct Environmental and Social Impact Assessment (ESIA) on development projects that affect forests	No of projects with EIA conducted	AIA reports	TCG KFS, project proponents	Y1 -Y5		1
	Enforce laws and regulation on logging	No. of Arrests, Forest	Periodic	TCG KFS, CFAs,	Y1 -Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	and other consumptive use of forest products.	condition/status	report				
	Mainstream FLR concepts in Participatory Forests Management Plans (PFMPs) and sub catchment management plans.	No of operational CFAs actively involved in forest boundary management.	Periodic reports	TCG KFS, CFAs,	Y1 -Y5		5
	Promote restoration initiatives including reforestation and afforestation.	Increase in Forest cover	Periodic project reports	TCG KFS, CFAs,	Y1 -Y5		5
<i>Develop new policies and strengthen the implementation of existing ones to halt deforestation and forest degradation.</i>	Conduct an audit of gaps in FLR policy framework	Meetings/workshops/sessions	Gaps report	TCG KFS, CFAs,	Y1 –Y2		5
	Develop new policies to facilitate FLR implementation based on the audit	Meetings/sessions	Policy documents developed	TCG KFS, CFAs,	Y3-Y5		10
	Conduct capacity building forums to operationalize and implement policies to halt deforestation in Tana River County.	Meetings/training sessions held	Training reports, Workshop reports	TCG KFS, CFAs, NGOs	Y3-Y5		10
	Mainstream forest restoration activities in county planning processes	Percentage of policy mainstreaming forest restoration	Policy documents mainstreaming forest restoration	TCG, KFS, CFA	Y1-Y5		1
	Enforce laws and regulation on logging and other consumptive use of forest products.	Reduction in forest degradation	Number of arrests and prosecutions	TCG, KFS, CFA	Y1-Y5		1

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Conduct Environmental and Social Impact Assessment (ESIA) on development projects that touch on forests	No of projects with EIA conducted	AIA reports	TCG KFS, project proponents	Y1 -Y5		1
<i>Enhancing alternative livelihood options</i>	Conduct baseline of nature-based enterprises/solutions and their prioritization	Baseline conducted	Baseline reports	“TCG, KFS, NGOs	Y1		5
	Identify and prioritize potentially viable NTFPs enterprises.	Prioritization done	Report	“TCG, KFS, NGOs	Y1		4
	Develop business case for prioritized nature-based enterprises /solutions	Number of business cases developed	Reports/docu-ments	“TCG, KFS, NGOs	Y2		5
	Support implementation of prioritized nature-based enterprises including forest based ecotourism.	Number of businesses supported	Reports	“TCG, KFS, NGOs	Y3-Y5		5
	Develop and promote value addition of viable bio-enterprises.	Number of enterprises	Periodic Project reports	“TCG, KFS, NGOs	Y2 -Y5		5
Rehabilitation, reforestation and protection of terrestrial and mangrove forests	Identify and map the degraded forest areas.	Areas identified	Reports	TCG, KFS, NGOs, KEFRI	Y1		5
	Restore degraded forest areas using appropriate techniques including natural regeneration and reforestation.	Area restored	Reports	TCG, KFS, NGOs, KEFRI	Y3-Y5		50
	Formally gazette threatened forests	Area Gazetted	Reports	KFS, TCG	Y1-Y5		2
	Strengthen forest fire management capacity	<ul style="list-style-type: none"> ◆ Fire management Plans ◆ Fire management Equipment supplied 	Reports, plan documents, percent	TCG, KFS, NGOs,	Y1 -Y5		8

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		No of trainings on forest fire management	decrease in forest fire incidences				
	Map and manage invasive species in forests	Area mapped	Reports, Maps	TCG, KFS, CFAs	Y2=Y5		5
	Strengthen the capacity of local community groups on FLR actions.	Number of people trained	Reports, Maps	TCG, KFS, CFAs	Y2=Y5		5
	Conduct biodiversity assessment and monitoring in terrestrial forests and mangrove forests	Number of monitoring expeditions	Reports, Maps	TCG, KFS, CFAs	Y2=Y5		5
	Take measures to reduce human-wildlife conflicts	Percent reduction in human wildlife conflicts	Reports	KWS, , TCGCBOs, NGOs, KFS	Y1-Y5		10
	Enforce laws on wildlife and habitat protection	Percent reduction in poaching and habitat destruction	Reports	KWS, KFS, TCG, CFAs, CBOs and NGOs	Y1-Y5		10
	Recruit and equip community scouts	Number of Scouts recruited Number of equipment bought	Reports	KFS, TCG, CFAs, CBOs and NGOs	Y2		5
Objective 2: Restoration Degraded Rangelands							
Enhancing rangeland management and conservation	Identify and map degraded hotspots in rangelands	Area mapped	Report	TCG, MOA,	Y1		5
	Undertake assessment of the carrying capacity of rangelands	Assessment carried out	Report	TCG, MOA,	Y1		5
	Conduct destocking campaigns in overstocked range lands	Number of assessments/reports on the carrying capacity of Rangeland Ecosystems	Reports	TCG, KWS, KFS, NGOs, Academia, NRT, KALRO	Y 1-Y3		55
	Support the implementation of grazing	Number of Livestock	Surveys,	TCG, NGOs, CBOs,	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	plans and cooperative ranching in rangelands.	heads per community herd	Reports	NRT, KALRO			
	Promote natural regeneration of degraded rangelands	Area restored naturally	Reports	TCG, NGOs, CBOs, NRT, KALRO	Y1-Y5		5
	Require Environmental and Social Impact Assessment (ESIA) on development projects that touch on forests	Proportion of projects with EIA conducted	NEMA reports	TCG, NGOs, CBOs, NEMA	Y1-Y5		5
Rehabilitation of degraded hotspots in rangelands	Promote rain water harvesting technologies.	Level of uptake of rain water harvesting technologies	Reports, Surveys	TCG, Relevant county departments, NGOs, CBOs	Y1-Y5		10
	Manage invasive species as per species specific guidelines	<ul style="list-style-type: none"> ◆ Extent of Invasive species tackled/Managed ◆ Number of innovations/ enterprises established to process invasive species into commercial products. ◆ Number of projects aimed at removal/reduction of Invasive species 	Surveys, Reports	TCG, Relevant county departments, KFS, KEFRI, NRT, KALRO, NGOs, CBOs	Y1-Y5		30

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Promote aided natural regeneration including reseeded	<ul style="list-style-type: none"> o Area reseeded o Area under Natural regeneration 	Surveys, Maps, Reports	KEFRI, TCG, NGOs, CBOs	Y1-Y5		10
	Promote tree planting in wooded rangelands using the appropriate tree species.	Extent of reforested wooded rangelands	Surveys, Maps, Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1-Y5		5
Improve the livelihood of rangeland dependent community	Support establishment and management of community conservancies	Number of community conservancies established	Reports, Legal documents	TCG, NGOs, CBOs	Y1-Y5		3
	Promote Ecotourism and other nature-based enterprises in rangelands.	Number of Nature based enterprises established & operational in the rangelands	Reports, Surveys	TCG, CBOs	Y1-Y5		5
	Support sustainable Livestock production including marketing and value addition of livestock products	Number of livestock priority value chains established	Reports	TCG, CBOs, NGOs, MoL	Y1-Y5		20
	Promote marketing of Non-Timber Forest Products and Services (NTFPs).	Number of NTFP based enterprises operational	Surveys, Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1-Y5		25
	Regulate charcoal production in rangelands	<ul style="list-style-type: none"> ◆ Extent of enforcement of charcoal ban on public land Area of private land dedicated to woody mass production esp. charcoal 	Surveys, Reports, Licenses	TCG, KFS, KEFRI, CBOs, NGOs	Y1-Y5		5
	Promote use of alternative energy sources	◆ Level of adoption of alternative energy	Surveys, Reports,	TCG, KFS, KEFRI, CBOs, NGOs	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
		sources	Licenses				
	Support vulnerable community members including women, youth and indigenous communities in livelihood improvement initiatives.	Number of vulnerable members/groups supported	Reports	TCG, KFS, KEFRI, CBOs, NGOs	Y1-Y5		5
Objective 3: Restore of degraded wetlands.							
Secure and restoring wetlands and riparian areas	Create awareness on the importance of wetland conservation and legal regime for riparian and wetland conservation	◆ Level of awareness on importance of riparian and wetland conservation	◆ Surveys, Reports	TCG, NGOs, CBOs, KFS,	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	Determine and demarcate boundaries and buffer zones for wetlands to protect from encroachment	◆ Extent/Area where beacons have been erected to demarcate boundaries	◆ Surveys, Reports, Maps	TCG, KFS, WRUAs, WRMA, TAWSB	Y1-Y3		10
	Identify, map and reclaim wetlands and riparian areas that have been encroached and converted to other land uses.	◆ Number of trainings/capacity building done at community institutions	◆ Training reports, Attendance lists, Certifications	WRMA, KWTA, TCG, NGOs, TAWSB	Y1-Y5		10
	Rehabilitate degraded water catchment and associated wetlands using appropriate species and technologies	◆ Representation /Number of community members taking part in wetland conservation	◆ Surveys, Reports	WRMA, TCG, Relevant departments, NGOs, CBOs	Y1-Y5		3
	Develop and implement protocols to deal with oil spills in marine ecosystems	◆ Extent of watershed/riparian areas restored	◆ Surveys, Maps, Reports	KWTA, WRMA, TCG, NGOs	Y1-Y5		50
	Undertake capacity building of community institutions on planning and implementation of restoration of degraded wetlands and Riparian vegetation.	◆ Training sessions/workshops	◆ Reports	KWTA, WRMA, TCG, NGOs	Y1-Y5		50
	Promote active participation of community members in wetland conservation including restoration and	◆ Community engagement sessions	◆ Monitoring reports	TCG, NGOs,	Y1-Y5		50

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
	biodiversity monitoring.						
	Restore watershed and riparian areas to reduce soil erosion and silting	◆ Area Restored	◆ Reports, maps	TCG, NGOs, WRUAs	Y1-Y5		50
	Conduct Environmental and Social Impact Assessment (ESIA) on development projects that affect wetlands	◆ Proportion projects with ESIA submitted and approved	◆ Reports	NEMA, TCG, WRMA	Y1-Y5		5
Promote sustainable utilisation of wetland resources	Build capacity of local communities to use wetland resources including sand and fish sustainably	◆ Number of Capacity Building programs established	◆ Surveys, Training Reports	WRMA, TCG, NGOs	Y1-Y5		10
	Enforce use of right fishing gear in both inland and marine ecosystems	◆ Level of Enforcement of fishing requirements ◆ Level of regulation of limestone mining	◆ Licences, Surveys, Reports, Fines, Arrests	TCG,	Y1-Y5		5
	Map and protect ecologically sensitive areas including sand dunes and turtle nesting sites	◆ Extent of ecologically sensitive areas mapped ◆ Extent of ESAs legally protected	◆ Reports, Maps	TCG, KWS	Y1-Y5		10
	Regulate livestock grazing in ecologically sensitive areas	◆ Number of grazing plans in ESAs ◆ Level of enforcement of grazing regulation in ESAs	◆ Reports, Fines,	TCG, CBOs, NRT	Y1-Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
Strengthen policies and actions to halt and reverse wetland/riparian encroachment	Develop and/or implement county policies on sustainable wetland management	◆ Number of policies developed and implemented	◆ Reports	TCG, WRMA,	Y1-Y5		5
	Enforce regulations to control effluent and solid waste disposal into inland wetlands and marine ecosystems	◆ Extent of enforcement of regulations	◆ Reports, Arrests, Fines, Licences revoked	TCG, WRMA, Relevant county departments	Y1-Y5		5
	Develop and implement water abstraction regulations	◆ A policy/bill on water abstraction regulations	◆ Reports, Bills, Regulations	TCG, Academia, NGOs	Y1-Y3		3
	Work with relevant research institutions on collecting, archiving and disseminating of information on wetland biodiversity	◆ Demonstrated partnership/working relations with research institutions	◆ Partnership documents, Reports	TCG, Academia, NGOs, CBOs, KEMFRI,	Y1-Y5		6
	Enforce conduct of Environmental and Socio-impact assessment for projects impacting on wetlands.	◆ Proportion of projects with EIA conducted	◆ Reports, approvals	NEMA, TCG,	Y1-Y5		2
Provide alternative livelihood options (nature-based enterprises/	Identify and support the development of wetland nature-based enterprises	◆ Number of enterprises identified	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		3
	Create infrastructure to access water outside wetlands and riparian areas in inland wetlands	◆ Number of watering points established	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		5
	Create infrastructure to enhance ecotourism in inland wetland and marine	◆ Number of tourist	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		10

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
solutions)	ecosystems.	facilities established					
	Promote the uptake of rain and flood water harvesting technologies for irrigation.	◆ Proportion of farmers using water harvesting technology	◆ Reports	TCG, NGOS, CBOs	Y1-Y5		40
Objective 5: Restore Degraded Croplands							
Promote agroforestry practices in degraded croplands	Identify and map degraded hotspots in croplands	◆ Area identified	◆ Reports, Maps	TCG, NGOs, CBOs	Y1		5
	Identify suitable high value tree species for the degraded croplands	◆ Species List for different agro ecological zones	◆ List, Reports	TCG, KFS, KEFRI	Y1		2
	Provide incentives to famers and private sector for investment in profitable agroforestry ventures	◆ Number of incentives available to farmers/private sector	◆ Reports, Budgetary allocations, legal investment documents	TCG, , KEFRI. KFS	Y1-Y5		50
Enhance the capacity of local communities and vulnerable	Undertake community-based capacity vulnerability and needs assessments on FLR.	◆ Vulnerability assessment conducted	◆ Report	TCG, KEFRI, KFS, NGOs, CBOs	Y1		5
	Undertake capacity building of community institutions for FLR planning and implementation based on identified needs.	◆ Number of community members trained	◆ Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
groups to adopt FLR approaches in agriculture	Enhance capacity of County Governments and other stakeholders to provide forest extension services.	◆ Number of stakeholder members trained	◆ Report	TCG, KEFRI, KFS, NGOs, CBOs	Y1		5
Developing crop- based FLR Bio-Enterprises value chains systems	Carry out value chain analysis for crop-land based FLR bio enterprises value chains and their profitability analysis	◆ Value chain analysis carried out	◆ Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y1		3
	Develop and implement enterprise development plans for priority value chains.	◆ Plan developed	◆ Plan	TCG, KEFRI, KFS, NGOs, CBOs	Y1-Y5		10
	Mobilize communities including vulnerable groups (women, youth and indigenous communities) to form tree growers associations and link them to markets.	◆ No of community Groups established ◆ Number of community groups linked to markets	◆ Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y3 –Y5		10
	Promote alternative bio enterprises such as bee keeping to compliment horticultural value chains.	◆ Number of bio-enterprises established	◆ Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y2-Y5		10
	Support establishment of community-owned multi-purpose trees and fruit nurseries	◆ Number of Nuseies established ◆ Number of seedlings produced	◆ Reports	TCG, KEFRI, KFS, NGOs, CBOs	Y2-Y5		40
Protect ecologically sensitive	Create awareness on policies, legislations and regulations on protection of ecologically sensitive areas including river banks and riparian areas	◆ Number of awareness for a conducted	◆ Reports	TCG, NEMA, WRA, CBOs	Y1 –Y5		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
croplands from degradation	Implement legislations and regulations on protection of ecologically sensitive areas	◆ Percent decrease in ecologically sensitive areas that become degraded	◆ Maps, Reports	TCG, NEMA, WRA, CBOs	Y1-Y5		2
	Promote climate smart agroforestry practices that enhance soil and water conservation.	◆ Number of farmers practicing climate smart agroforestry	◆ Reports	TCG, farmers, NEMA, KFS, KEFRI, WRA, CBOs	Y1-Y5		5
	Conduct Environmental and social impact studies for all development of irrigation projects in Tana River Delta and other wetlands.	◆ Proportion of projects with EIA conducted	◆ Reports	TCG, NEMA, WRA, CBOs	Y1-Y5		1
Objective 5: Create an enabling environment for TANA-FOLAREP implementation							
Formulate enabling policy and regulatory framework	Develop policy and legislation on FLR	◆ A launch of FLR policy & Action plan	◆ Reports, Plans	TCG, NGOs, CBOs, KEMFRI, Private Sector, relevant county departments, Parastatals	Y1-Y2		5
	Promote mainstreaming of FLR in CIDP and other county level policies and plans	◆ Number of Clauses/actionable items in CIDP, County policies & plans linking FLR to County Development	◆ Plans, Reports	TCG, Academia, NGOs, CBOs, KEMFRI, Private Sector, relevant county departments, Parastatals	Y1-Y5		5
	Develop policy on private sector engagement in FLR initiatives	◆ A Policy document & action plan	◆ Policy document, Plans	TCG, Academia, NGOs, CBOs, KEMFRI, Private	Y1-Y2		5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
				Sector, relevant county departments, Parastatals			
	Promote intercounty collaboration on FLR issues	◆ Number of identified areas/actions of collaboration among relevant counties	◆ Plans, MOUs	TCG, Other county Governments	Y1-Y5		5
Capacity building and knowledge management for FLR	Build the capacity of county government officials and other stakeholders on FLR monitoring and evaluation	◆ Number of stakeholders benefitting from training on FLR M&E	◆ Training reports, Attendance lists	TCG, Academia, NGOs, KFS, KEFRI,	Y1-Y5		5
	Conduct regular monitoring and Evaluation	◆ Number of Monitoring & Evaluation reports	◆ Reports	TCG, Academia, NGOs, KFS, KEFRI,	Y1-Y5		5
	Develop collaborations with scientific community on FLR research needs	◆ MOUs/collaboration agreements signed	◆ Agreements, MOUs	TCG, Academia, NGOs, Research Institutions, Relevant Parastatals	Y1-Y5		5
	Build a database of lessons in FLR implementation	◆ An established, updated & accessible database on lessons in FLR	◆ Database, Reports	TCG, Academia, NGOs, Research Institutions, Relevant Parastatals, Private sector players	Y1-Y5		5
Mobilize adequate financial	Map FLR resource availability among stakeholders	◆ Number of Reports on resource availability	◆ Reports,	All relevant stakeholders in FLR	Y1-Y5		3
	Advocate for FLR budgetary allocations in	◆ Budgetary allocations	◆ Reports	TCG	Y1-Y5		0.5

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds* *	Indicative budget (X 000000)
and other resources for FOLAREP implementation	the county budgeting process	for FLR					
	Mobilize FLR finance from development partners and the private sector	◆ Amount of funding mobilized	◆ Reports, Financing (\$)	TCG, NGOs, Development Partners, Private Sector	Y1-Y5		0.5
	Address policy gaps to attract private sector resources	◆ Number of gaps identified & addressed ◆ Increased Private sector funding/investment	◆ Policy briefs, Funding (\$)	TCG, NGOs, Development Partners, Private Sector	Y1-Y5		1
	Build a suite of business cases for carbon trading, apiculture and other conservation enterprises.	◆ Number of business cases developed, presented & funded	◆ Reports, Business Cases,	TCG, NGOs, CBOs, Development Partners, Private Sector & other relevant stakeholders	Y1-Y5		5
	Build partnerships with private towards FLR implementation	Number of Established working relations. ◆ Number of Conservation Enterprises Established & Operational	◆ MOUs, Agreements, Licences, Reports	TCG, NGOs, CBOs, Development Partners, Private Sector & other relevant stakeholders	Y1-Y5		5
Establish enabling governance, institutional arrangements and partnerships	Constitute and gazette county, sub-county and ward level FLR implementation committees	◆ Number of constituted & gazetted FLR committees	◆ Reports	TCG & all relevant stakeholders	Y1-Y3		10
	Build the capacity of the FLR committees and partners on FLR implementation and mandates	◆ Number of beneficiaries of capacity building Programs in FLR	◆ Training reports, certifications.	TCG, Academia, Relevant county departments, Private sector, NGOs, CBOs,	Y1-Y5		15

Intervention	Actions	Key Performance indicator	Means of verification	Responsible institutions	Time frame	Source of Funds*	Indicative budget (X 000000)
for FLR implementation				Relevant ministries/parastatals			
	Hold regular FLR implementation committee meetings Build the capacity of FLR implementers	<ul style="list-style-type: none"> ◆ Number of committee meetings on FLR implementation ◆ Number of FLR implementers trained & commissioned 	<ul style="list-style-type: none"> ◆ Minutes, Certifications, Training Reports 	TCG, CFLRC, WFLRC, Academia, NGOs & all relevant stakeholders	Y1-Y5		55
	Build the capacity of FLR implementers	<ul style="list-style-type: none"> ◆ Number of training ◆ Number of partners trained 	<ul style="list-style-type: none"> ◆ Minutes, reports 	TCG, CFLRC, WFLRC, Academia, NGOs & all relevant stakeholders	Y1-Y5		5
Grand Total							1,031

