County Government
of Elgeyo Marakwet

Sustainable Forest Management and Tree Growing Policy, 2020

Ministry of Environment and Forestry

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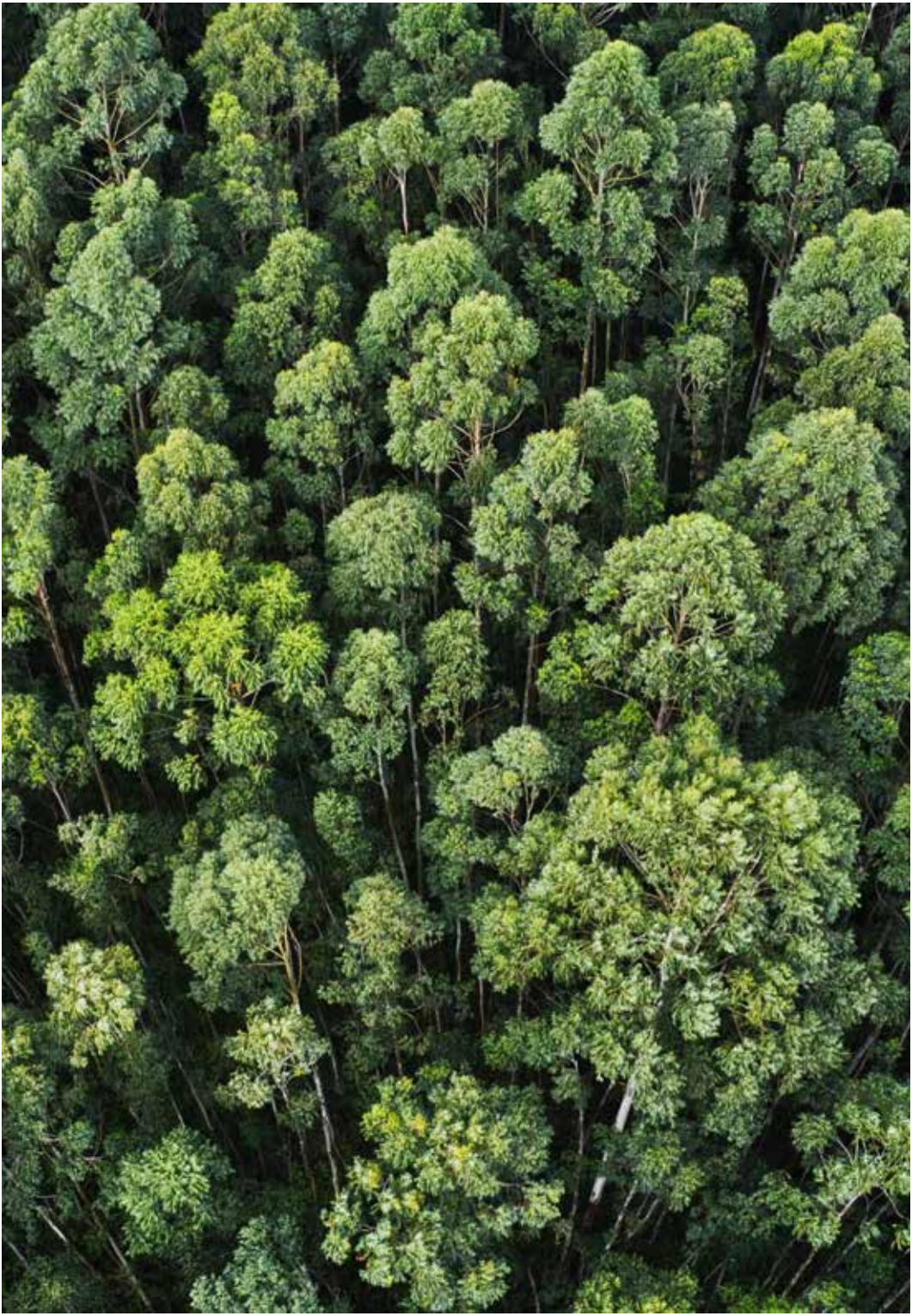

Foreword

Elgeyo Marakwet County is home to two forest ecosystems and water towers namely Kaptagat and Cherangany Hills and hosts the second largest forest cover in Kenya of 37.6%. These ecosystems are a source of many rivers that form the main water divide running along the Escarpment. The County is home to public forests managed by the Kenya Forest Service on behalf of the national government; but so far has not established county forests. While we have high overall forest cover, the county due to its hill topography experiences challenges of deforestation on farmlands, in the highlands, including farming on steep hills. This challenge extends to the escarpment area of the county, which is characterized by the upper and lower Spencer lines is a vulnerable area of land due to geological instability that makes it susceptible for landslides, and risk of serious harm to human beings and livestock. The “Spencer Lines” as commonly known, refer to areas of the escarpment identified during the colonial period by William Spencer, a District Agriculture Officer. These areas were classified as vulnerable, and for this reason all forms of human settlement and cultivation were prohibited. In order to ensure disaster risk reduction, protect human life and property and ensure sustainability of forestry and tree growing, human settlement and activities should be removed from these areas after mapping and resettlement. The financial and technical support of the national government, to the county, remains instrumental to attainment of this objective.

The mandate and functions of the County Government on forestry is defined in Part 2 of the Fourth Schedule to the Constitution. This mandate is to implement specific national government policies on natural resources and environmental conservation including forestry, as well as soil and water conservation. Additionally, the county context requires expansion of forestry function to other areas of public land (held by the county), private and community land. This is important in order to expand the scope of ecosystem services and socio-economic and environmental benefits available to the county and its residents. For that reason, this Policy will focus on forestry and associated county functions including agriculture, land use planning and development permitting, water resources management, among others. The County government has already developed various laws and policies that impact forestry that are reviewed in the Policy, and action will be taken to ensure harmony

This is important because the county has lost 14,600 ha of tree cover (13.6%) over the past 15 years. Environmental degradation has continued in all parts of the county and especially in the escarpment, the water catchments and in the wetlands. The degradation of the environment and natural resources has compromised the livelihoods of upstream and downstream communities that have led to resource-based conflicts in the county. This is also evidenced by

recurrent landslides in the escarpment, and in the Kerio valley. The recent floods and mudslides disasters, for instance led to the loss of many lives and massive destruction of the infrastructure.

The Policy Statements and Policy Directions set out in this Policy therefore set the County government on the pathway to implementing constitutional responsibilities. There are clear institutional mechanisms set out, including a high-level and participatory Forest Council that will provide required direction. I am happy that this Policy is accompanied by a Draft Bill for enactment by the County Assembly. I would like to point out that we call this document the County Sustainable Forestry and Tree Growing Policy in order to communicate to our people the need for ensuring the planting and growing of trees, which the point when results are achieved.

The County Government of Elgeyo Marakwet will continue to collaborate with other stakeholders to negotiate for urgent collective action on sustainable forestry and tree growing, including deal with the impacts of climate change. The role of our people, including local communities and indigenous peoples remains imperative – and all needed action will be taken for this purpose.

It is my heartfelt desire that all County Government sectors and agencies understand the importance of steadfast implementation of sustainable forestry and tree growing. This policy document will provide guidance for all stakeholders including the private sectors. Strategies highlighted need to be implemented in all sectors for the benefit of the county, and to contribute to the national constitutional obligation to achieve and maintain an overall ten percent minimum tree cover.

I encourage you all to use this Sustainable Forestry and Tree Growing Strategy to make a difference and spearhead action for a better environment that supports our collective social and economic needs. I thank all the partners and experts who provided technical support, our county staff and all residents, local communities and indigenous peoples who actively participated in consultations towards both this Policy and the accompanying Bill.

Thank you all

His Excellency Alex Tolgos
Governor,
Elgeyo Marakwet County

Acknowledgements

As stated by His Excellency the Governor in his foreword, while Elgeyo Marakwet County has a very high forest cover, the county has lost 14,600 ha of tree cover (13.6%) over the past 15 years. Environmental degradation has continued in all parts of the county and especially in the escarpment, the water catchments and in the wetlands. The degradation of the environment and natural resources has compromised the livelihoods of upstream and downstream communities that have led to resource-based conflicts in the county. Time for concerted and clear action towards sustainable forestry and tree growing is now. This will involve broad collaboration between actors including the county government, national government, local communities, indigenous peoples, development partners, among others. The recent floods and mudslides disasters, for instance led to the loss of many lives and massive destruction of the infrastructure, for instance, show us why inaction is only harmful to us.

This Sustainable Forestry and Tree Growing Policy has covered broad and extensive policy sectors within the mandate of the county government, and which have an impact on sustainable development. The Policy Statements and respective Policy Directions are clear. As a county, will take requisite action to implement them; and will start by development and implementation matrix with clear actions, outputs, and outcomes specified for each policy direction. We will also include these into the next performance contracting cycle. This Policy has been prepared consultatively together with a Draft Bill to support its implementation, for enactment by the County Assembly.

The preparatory process was through a very consultative process that is further described in the Policy. In 2019, I constituted a Technical Working Group (TWG) comprising members of the local communities, technical staff of the county government, and national government agencies working in the county with mandates on forestry or relating to forestry. These include Kenya Forest Service, Kenya Water Towers Agency, the National Disaster Management Authority, and the National Environment Management Authority. The TWG was instrumental in brainstorming on content to be covered by the policy, including policy statements and directions based on their knowledge of the situation, challenges and opportunities. The TWG played an important role in reviewing the draft policy at various stages, and eventually validated the policy. The TWG participation included representatives of indigenous communities' resident within Elgeyo Marakwet, including representatives of the Sengwer, Cherangany and Ogiek peoples. I want to specifically thank the following TWG members for their immense contribution to this process. The consultation process also

included a special session held through a virtual conference connection between the Sengwer people's representatives, county government officials and the technical team, during the Covid19 pandemic period when movement was restricted. We thank the following representatives for their valuable contribution to the discussions on this Policy and the Bill.

The consultative and public participation, drafting and policy review process was supported through the generous support of the REDD+ programme led by the Ministry of environment and forestry and United Nations Development Programme -UNDP. We appreciate the technical support provided at every stage of development of this policy by UNDP and the National REDD+ coordination office. I would like to thank all staff members from UNDP both in programmes and operations whose efforts in coordinating the consultative processes greatly ensured that the sessions were productive and illuminating, the logistics flawless and the overall outcome very valuable to the county and the nation.
As the lead agency in the preparation and implementation of the policy, the Department of Land, Water, Environment and Natural Resources acknowledges with thanks the active participation of all stakeholders and their invaluable contributions.

Finally, I would like to thank H.E. Hon. Alex Tolgos, Governor, Elgeyo Marakwet county, the County Executive Committee and the County Assembly members for their intellectual inputs into the policy, financial support and time at various times during the process. They responded to our calls when we sought their input and support, and we thank them on behalf of the people of the County.

Hon. Abraham Barsosio

County Executive Committee Member,
Land, Water, Environment and Natural Resources
County Government of Elgeyo Marakwet

Abbreviations and Acronyms

ASALs	Arid and Semi-Arid Lands
AFA	Agriculture and Food Authority Act
CECM	County Executive Committee Member
CIDP	County Integrated Development Plans
DRR	Disaster Risk Reduction
NDMA	National Drought Management Authority
NEMA	National Environment Management
UNFCCC	United Nations Framework Convention on Climate Change
WRA	Water Resources Authority
KTBHs	Kenya Top Bar Hives
LULUCF	Land Use, Land-Use Change and Forestry
TWG	Technical Working Group
KWTA	Kenya Water Towers Agency
CCA	Climate Change Act
KFS	Kenya Forest Service
NCCAP	National Climate Change Action Plan
CIDP	County Integrated Development Plan
EMCA	Environmental Management and Coordination Act
NET	National Environment Tribunal
GHG	Greenhouse Gas
REDD	Reducing Emissions from Deforestation and Forest Degradation
NDC	National Determined Contribution

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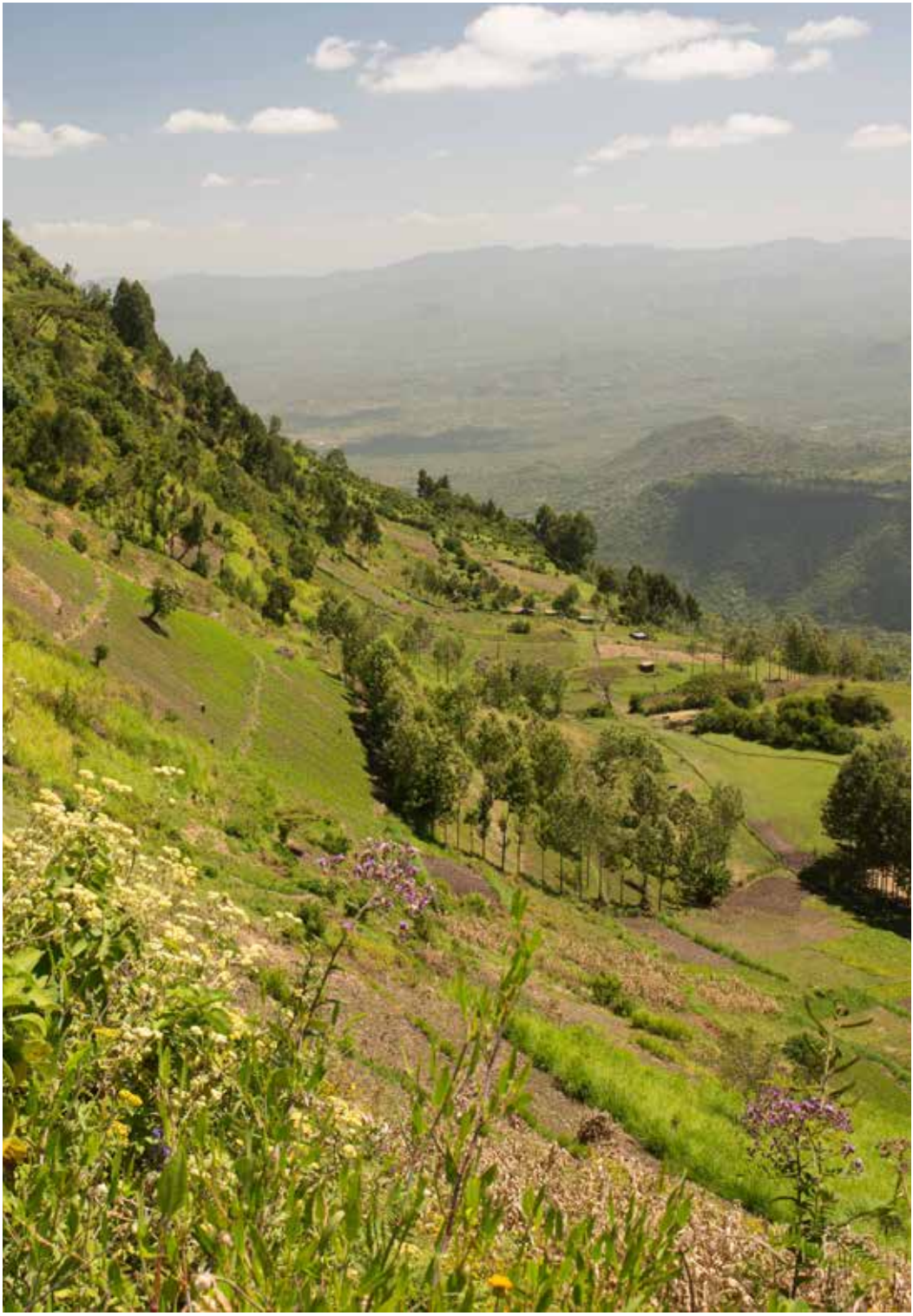
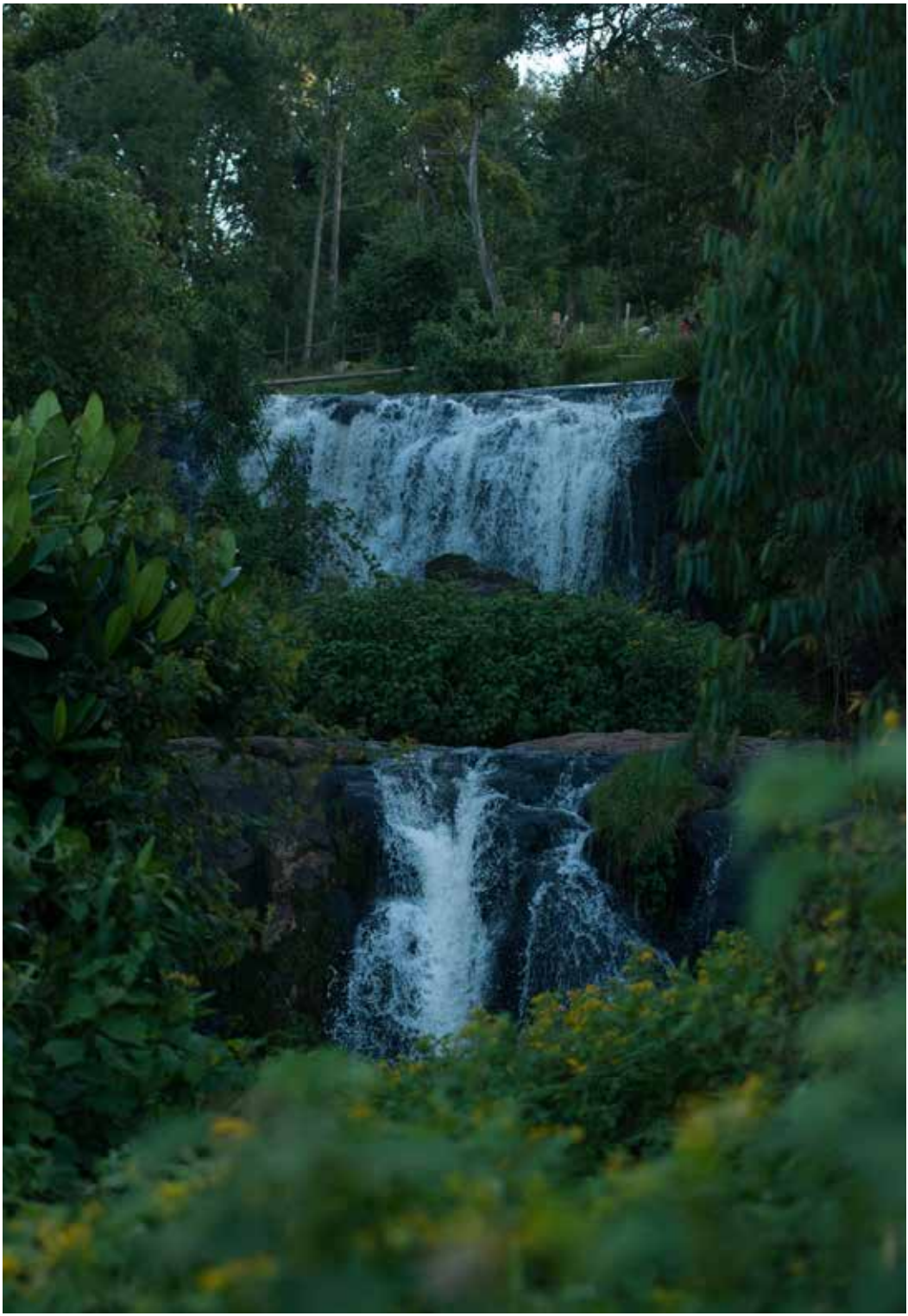


Policy Statements

The implementation of this Policy by the County Government will be guided by the following policy statements:

1. The County Government will put in place and mainstream the implementation of sustainable land management practices across all land uses on public, private and community land in the County.
2. The County Government will implement measures and programmes to integrate expansion of forests and tree growing on public, private and community land in a sustainable manner.
3. The County Government will put in place and implement mechanisms for integrating water resources management, including water towers, with sustainable management of forests and trees.
4. The County Government will implement a programme for enhancing agriculture land use and soil protection through sustainable agroforestry practices.
5. The County Government will integrate sustainable forestry and tree growing into physical and land use planning and development control processes.
6. The County Government will ensure that mining activities integrate measures to protect and conserve forests, trees and biodiversity.
7. The County Government will ensure the mainstreaming of human rights into forestry and tree growing to ensure sustainability.
8. The County Government will implement the necessary enabling actions, including building resilience, low emissions development and mobilizing climate financing to ensure forestry and tree growing measures, plans and activities are sustainable.
9. The County Government put in place institutional mechanisms to steer sustainable forestry and tree growing, and for mainstreaming of forestry activities in relevant sectoral areas.
10. The County Government will put in place a strengthened implementation framework for effective and efficient deliver, monitoring, evaluation, and reporting on progress on the implementation of this policy.
11. Implement low emissions development programmes that will reduce deforestation and land degradation and contributing to Kenya's GHG reduction targets under NDC and in accordance with the REDD+ strategy.
12. The County Government will undertake a total economic valuation of forestry resources within the County to ensure proper valuation of the forestry resources in the county to ensure sustainable development in the county.



1. Introduction to Elgeyo Marakwet County

1.1 The Physical and Geographical Context of Elgeyo Marakwet County

1.1.1 Elgeyo Marakwet County covers a total area of 3029.6 km^2 which constitutes 0.4 percent of Kenya's total area. It extends from latitude 0° 20′ to 1° 30′ to the North and longitude 35° 0′ to 35° 45′ to the East. It borders West Pokot County to the North, Baringo County to the East, Trans Nzoia County to the Northwest and Uasin Gishu County to the West. The county is wedged in between the Uasin Gishu Plateau to the West and the Kerio River to the East. The Kerio River has its source in the southern highlands of the county and drains into Lake Turkana.

1.1.2 The county is divided into three topographic zones namely: Highlands, Kerio Valley and Escarpment: all of them separated by the conspicuous Elgeyo Escarpment. Each of the three zones has attracted a different settlement pattern. The Highlands, which constitute 49 percent of the county area, is densely populated due to its endowment with fertile soils and reliable rainfall.

1.1.3 The Escarpment and the Kerio Valley make up 11 percent and 40 percent respectively. These areas have low rainfall and are prone to natural disasters such as drought and landslides. Due to these harsh climatic conditions coupled with high cases of insecurity, these areas have high poverty levels and sparse population.

1.2 The Ecological Conditions in Elgeyo Marakwet County

1.2.1 The County has four ecological zones: highlands, escarpment, lowlands and the Kerio valley.

1.2.2 The County has a relatively cool climate with varied rainfall levels because of the topography that is characterized by three distinct agro-ecological zones namely the highlands to the west, the escarpment (hanging valley) and the lowlands (valley) to the east. The variation in altitude from 900 m above sea level in the Kerio Valley to over 3000 m above sea level in the highlands gives rise to considerable differences in climatic conditions.

1.2.3 The annual mean temperatures on the highland range from 18°c – 22°c, compared to 25°c – 28°c in the valley. The average annual rainfall from 700 mm in the semi-arid Kerio valley to 1700 mm on the lowlands and the highlands. The County thus shows a trend of decreasing rainfall

from west to east. The eastern lowlands of the county exhibit lower and less reliable rainfall, and are the part of the county that is most at risk of drought and floods.

1.3 The Demographic and economic context of Elgeyo Marakwet County

1.3.1 According to the 2019 National Census report, the County has a total population of 454,480 persons with 227,317 being male, and 227,151 being female respectively, with an average household size of 4.5 and a population density of 150 per square kilometer.

1.3.2 The population distribution at sub-county level is: Keiyo North, 99,176; Keiyo South, 120,750; Marakwet East, 97,041; and Marakwet West having 137,513 persons. This translates into 99,861 households being resident across the County.

1.3.3 The main sources of household cooking energy in the county are firewood, charcoal and paraffin. This has however contributed to vegetation degradation and increase in related health complications amongst the population. The number of households with electricity coverage in the county stands at 25,419 households representing 30.38 % distributed as follows; 51.94% access in Keiyo North, 37.79% in Keiyo South, 26.85% in Marakwet West and 4.8% access rate in Marakwet East.

1.3.4 The Renewable energy share in the total energy consumption is quite negligible: the population with primary reliance on clean fuels, such as solar energy and biogas, is less than 1%. Energy intensity measured in terms of primary energy and GDP is also low as the county utilizes only 4 Kilowatts which is below 1% of the current countrywide usage.

1.3.5 Land is an important resource in context of forestry. There are three major land ownership categories within the County: Private, Public and Community land. Private land ownership is mainly found in the agriculturally rich highlands and parts of the escarpment that have fair terrain that supports agricultural activities. Community Land is mainly found in the Kerio Valley where adjudication has not taken place, and here the terrain is harsh and dry. Public land in the County is mainly the gazetted forests, land owned by public (national and county) institutions, and in urban areas throughout the County.

1.3.6 The average farm size is determined by household farm size with the overall farm size averaging 2.08 hectares. There are two categories of farming in the county, i.e. small-scale and large-scale farmers. The small-scale farmers own an average of 1.36 ha while the large-scale farmers own 17.3 ha. The land classified as community land, in the Kerio Valley remains unadjudicated hence the actual land sizes have not been formally established.

1.3.7 The County is mainly agriculture based with more than 80% of the households deriving their livelihood from the sector. The major food crops include maize, beans, wheat, bananas, green grams, groundnuts, sorghum, millet and cowpeas. Crops grown mainly for sale include potatoes, avocado, passion, mangoes, tea, coffee and pyrethrum.

1.3.8 About 25% of the population experience seasonal food insecurity caused by over- reliance on rain-fed agricultural production coupled with poor storage and distribution systems; and challenges relating to livestock keeping such as drought and cattle rustling.

1.3.9 The county has a high potential for beekeeping. There are about 53,000 indigenous log hives, 1,000 Kenya Top Bar Hives (KTBHs) and 950 langstroth hives. The average yield is 20kg, 10kg and 5 kg of raw honey per year per hive for langstroth, KTBH and indigenous respectively.

1.3.10 The county's southern region has great quarrying potential for building stones, in Kipsaos, Kapng'osor and Kimwarer. Sand harvesting, also a major of county revenue, source is carried out along the Kerio river. Large deposits of Murram are found in the areas of Sergoit, Kimnai and their adjacent areas, while stone crushing quarries are being constructed in Rokocho to serve the upcoming construction industry within the county. The mining of fluoride in Kimwarer by Flourspar Company has stalled because of inadequate market targets locally and internationally.

1.4 The Administrative structure of the county

1.4.1 The county is divided into four sub-counties, namely: Keiyo North, Keiyo South, Marakwet West and Marakwet East. These sub-counties are further subdivided into 20 wards, which form the basis of electing Members of the County Assembly, and appointment of Ward

Administrators to perform county government functions.

1.4.2 Each of these sub-counties also form constituencies for purposes of electing Members of Parliament to the National Assembly; while the County is represented as a single Constituency by one Woman Member of the National Assembly, and one Member of the Senate.

1.4.3 The County is further divided into 74 Locations and 212 Sub-locations for purposes of national government administration. For this reason, at County level, the national government has deployed a County Commissioner based in Iten, and Deputy County Commissioner for each of the four sub-counties, as well as chiefs at location level.

2. Situational Analysis of Forests Conservation And Management In Kenya And Elgeyo Marakwet County

2.1 Situational analysis of Forest Conservation and Management in Kenya

2.1.1 A forest, in Kenya, as defined by the National Forest Programme (NFP, 2016-2020) refers to a land area of more than 0.5ha, with a tree canopy cover of more than 10 percent, and trees of at least 2.5m height, and this land is not primarily under agricultural or other specific non-forest land use. This includes natural or planted forest falling on public land, private land or community land. All land falling outside this definition, especially covering land area last than 0.5ha, is wooded land or trees.

2.1.2 The last comprehensive forest cover assessment, conducted in 2013, established that by 2010 the national forest cover stood at 4.18 million Ha, representing 6.99% of the total land area. The protected public forests (gazetted forests) cover 2.59 million ha. In 2015, the forest cover was estimated at 7.2% based on the national projection from the 2010 forest cover data. This is below the recommended global standard of 10% forest coverage of the national land area. The Constitution (Art.69(1)(b)) requires Kenya to work to achieve and maintain a tree cover of at least ten per cent of the national land area.

2.1.3 The NDC analysis of land-use change over the period 1990-2015 has established that Kenya lost 311,000 Ha of forestland over that time period. Further, the Kenya forest reference level derived from average annual historical emissions from deforestation, forest degradation, sustainable management of forests, and enhancement of forest carbon stocks in the period 2002-2018 monitored at 4-year intervals. The FRL for each of the REDD+ Activities has been calculated as 48,166,940 t CO2/year for Deforestation, 10,885,950 t CO2/year for forest degradation, 2,681,433 t CO2/year for sustainable management of forests and - 9,530,264 t CO2/year for enhancement of carbon stocks. Forest cover loss is mostly due to conversion to settlements, crop farming and infrastructure developments. The Land Use Land-Use Change and Forestry (LULUCF) sector is the second largest contributor to Kenya's greenhouse gas emissions after agriculture, accounting for 32% of emissions in 2015, which is largely a result of deforestation.

2.1.4 Kenya has identified a target emission reduction of 11.3 $MtCO_2e$ for the LULUCF Sector, which is equivalent to a 51% reduction in 2030

relative to the 2010 baseline LULUCF emissions. The very high target is due to the unique position of the LULUCF sector to create net sinks of carbon when, for example, new forests are planted. It is possible for emission reductions to exceed baseline emissions as identified by the maximum technical potential of 40.2 $MtCO_2e$. Emission reductions in the LULUCF sector are attractive because of the relatively low cost to create these carbon sinks compared to actions in other sectors.

2.1.5 Forests, as well as trees outside forests, are important for provision of critical ecosystem services. They provide supporting ecosystem services such as soil formation, biodiversity and habitats for various fauna. Forests provide provisioning ecosystems services including food, wood, clean water, and medicines. They also provide cultural ecosystem services such as recreational spaces, spiritual spaces, or aesthetic spaces. Forests also provide regulating ecosystem services including control of flooding, soil and water conservation, as well as carbon storage and sequestration. In practice, forests and trees outside forests provide multiple economic, social and environmental benefits.

2.1.6 This is consistent with sustainable forest management, the approach adopted by Kenya in line with article 10 of the Constitution which requires integration of sustainable development into all laws and public policy decisions, including forest conservation and management. Sustainable forest management is a dynamic concept that aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations. Management planning is an integral part of sustainable forest management. It is also important for sustainable implementation of tree growing, outside formally recognized forests and protected areas.

2.1.7 Forests and trees play multiple functions in contributing to the livelihoods of indigenous peoples and local communities, in supplying food and rural energy. However, these forests are threatened with agricultural expansion, overexploitation and unsustainable use of forest resources; population increase and widespread youth unemployment have led to increased pressure on forest resources. Sustainable forest management is therefore important because it requires the mainstreaming of human rights into forest governance and administration, including protecting the rights of indigenous peoples and local communities. It also requires the enhancement of procedural rights, including consultation of the public during decision making, provision of public awareness and education on forestry, access to

dispute resolution mechanisms, and access to critical information. All these are important as Kenya takes action to respond to continued deforestation, forest degradation, forest encroachment that results in conversion of land uses to settlement and agriculture.

2.2 Forest conservation and management in Elgeyo Marakwet County

2.2.1 Elgeyo Marakwet County is home to two forest ecosystems and water towers namely Kaptagat and Cherangany Hills and hosts the second largest forest cover in Kenya of 37.6%. These ecosystems are a source of many rivers that form the main water divide running along the Escarpment. East of the water divide is the Kerio catchment area which drains into Lake Turkana while West of the divide is the Lake Victoria Basin which drains into Lake Victoria. Lake Victoria Basin includes the Moiben, Chepkaitit and Sabor rivers. The Kerio catchment area includes the Kerrer and Kerio Rivers.

2.2.2 The other major rivers in the county are Torok, Chesegon, Embobut, Embomon, Arror, Mong and Kimwarer. The rivers feeding Kerio River have a high potential for supporting irrigation activities and for generation of small-scale Hydro-electric power. Another ecological zone is the Kerio Valley. It is narrow, averaging 6.4 km in width and stretches about 150 km in a North-South direction.

2.2.3 The County is home to public (gazetted) forests that are managed by the Kenya Forest Service on behalf of the national government, covering 93,691.28ha that includes both plantation and natural forests. The gazetted forests, which include Embobut, Kaptagat, Kiptaberr and other forests, have faced challenges including encroachment for settlement, livestocks herding and agriculture. A section of Embobut forest, commonly referred to as “below the road” has been converted for settlement and agriculture although originally intended as a temporary holding ground for landless people comprising permit holders and their descendants, victims of landslides (1951-1961).

2.2.4 The Sengwer, an indigenous community in Kenya, have laid a claim that Embobut forest is their ancestral home. The 2009 Embobut Forest Taskforce Report observed that the Sengwer “do not have any other home other than the forest,” but cautioned that because the Sengwer are polgygamous, there is a risk of rapid population growth beyond the carrying capacity of Embobut Forest. The Sengwer community have however challenged their removal from Embobut

forest by the national government, arguing that Embobut forest fits the definition of community land within the meaning of Article 63(2)(d)(ii) of the Constitution which defines community land to include ancestral lands and lands traditionally occupied by hunter-gatherer communities.

2.2.5 There are no county government owned public forests in Elgeyo Marakwet County. In the highlands, the County faces challenges of deforestation, soil erosion and landslides on privately owned farmland due to poor farming practices, including low adoption of agroforestry, poor land husbandry practices, and farming on steep hills. The escarpment area, characterized by the upper and lower Spencer lines is a vulnerable area of land due to geological instability that makes it susceptible for landslides, and risk of serious harm to human beings and livestock. In the Kerio Valley, below the Escarpment, the environment is dry and harsh, and the land is mainly unadjudicated community land. These lands present an opportunity for the County to implement dryland forestry as part of the land use and environmental management of the Kerio Valley.

2.2.6 Forests and trees in the County perform critical ecosystem services and provide socio-economic and environmental functions for the local population. These functions include soil and water conservation, habitat for fauna, prevention of soil erosion, rehabilitation of degraded and damaged soils, groundwater recharge, environment for bee keeping, pasture, energy sources, among others.

2.2.7 However, encroachment into protected public forests prevents an enduring challenge as it undermines the ability of the larger Cherangany Hills ecosystem to provide ecosystem services and perform the various socio-economic and environmental functions. For this reason, taking steps to permanently address and resolve the historical land injustice claim by the Sengwer community over Embobut forest is important. Equally important is for the County government to proactively collaborate with the national government to review the current form of Participatory Forest Management to result in a mechanism suitable for communities in the County. Similarly, the enhanced protection of the enhancement area to enhance geological stability is important.

2.2.8 Additionally this moment presents a unique opportunity for the County government to develop forestry outside of protected forests, on private and community land, in order to enhance the scope of ecosystem services that benefit the County, and further, to increase the

socio-economic benefits available to the local population and the rest of Kenya. This Policy examines these challenges and opportunities in detail and provides Policy Statements and Policy Directions that will inform the actions of the County Government going forward.

3. The Policy Formulation Process

3.1 Justification and rationale of the policy

3.1.1 In August 2010, Kenya promulgated a new Constitution that introduced devolved governments through counties, to replace the previous system of local authorities. The specific division of functions between the national government, and the forty-seven (47) county governments is set out in the Fourth Schedule to the Constitution. In Part 1 of the Fourth Schedule to the Constitution, the national government is responsible for protecting the environment and natural resources with a view to establish a durable and sustainable system of sustainable development.

3.1.2 Part 2 of the Fourth Schedule to the Constitution defines the functions of county governments which include implementing specific national government policies on natural resources and environmental conservation including forestry, as well as soil and water conservation. In the context of Elgeyo Marakwet county, the implementation of these functions should be aligned with the agriculture function that includes land, crop and animal husbandry, plant and animal disease control, as the constitutional power of the County on land use planning through development and implementation of land use and physical plans and development permitting.

3.1.3 The preparation of this County Sustainable Forest Management and Tree Growing Policy is therefore cognizant that the mandate of the county government on forestry is multi-sectoral especially since it involves performance of forestry functions on private and community land. The mandate also has an impact on other land uses including agriculture, livestock keeping, and urban area management through establishment of urban forests or open spaces and green zones. The policy is therefore necessary to enable the county government to take up, define and implement its mandate and functions under the Constitution, in context of the unique and specific circumstances of Elgeyo Marakwet County.

3.2 The policy formulation process

3.2.1 The formulation of this policy was informed Article 10 of the Constitution of Kenya requiring participation of the public and stakeholders. The initial process involved consultations with the County Executive Committee led by the Governor. Consultations were also held with the Departmental Committee of the County Assembly responsible

for forestry. This consultation was important in order to discuss the pertinent questions that the policy should address, understand the political economy context of the county, and build consensus on the process to be followed. Additional consultations were held with the two bodies together, including a final consultation to validate the content of the policy.

3.2.2 The County Executive Committee Member (CECM) responsible for forestry constituted a Technical Working Group (TWG) comprising members of the local communities, technical staff of the county government, and national government agencies working in the county with mandates on forestry or relating to forestry. These include Kenya Forest Service, Kenya Water Towers Agency, the National Disaster Management Authority, and the National Environment Management Authority. The TWG was instrumental in brainstorming on content to be covered by the policy, including policy statements and directions based on their knowledge of the situation, challenges and opportunities. The TWG played an important role in reviewing the draft policy at various stages, and eventually validated the policy. The TWG participation included representatives of indigenous communities' resident within Elgeyo Marakwet, including representatives of the Sengwer, Cherangany and Ogiek peoples. This included a special session held through a virtual conference connection between the Sengwer people's representatives, county government officials and the technical team, during the Covid19 pandemic period when movement was restricted.

3.2.3 As the process of developing this Policy, and the accompanying Bill was finalized, there were consultations with the County Assembly, through the Departmental Committee responsible for forestry matters; together with the County Executive Committee membership led by the Governor. This was undertaken through virtual conferencing connections due to restrictions on movement and meetings during the Covid19 period. This was an important final step of affirming the contents of the policy and Bill prior to submission to the County Assembly, by the Governor, for approval.

3.2.4 In accordance with the law and practice at the County level, the County Assembly through the Departmental Committee responsible for forestry matters will undertake community-level consultations on the policy, once it has been formally submitted by the County government.

4. The Governance Context of Forestry In Kenya And Elgeyo Marakwet County

4.1 Governance framework for forests in Kenya

4.1.1 Under the Constitution, the national government is responsible for the management of public forests, including mangrove forests, which are classified as public land. These are vested in the National Land Commission but managed by the Kenya Forest Service under the authority of Parliament through the Forest Conservation and Management Act, No. 34 of 2016. The national government is also responsible for the development of national forest law and policy, including establishment of institutional mechanisms and standards to implement these laws and policies.

4.1.2 The Constitution of Kenya has classified land as public, private or community land. The Constitution of Kenya provides a human right to a clean and healthy environment and requires this right to be implemented through various legal and related mechanisms. These include development and maintenance of a minimum tree cover of ten (10) percent of the total land area, elimination of processes and activities that are likely to endanger the environment; and establishing systems of environmental impact assessment, environmental audit and monitoring. The Constitution requires Kenya to ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources; and utilization of the environment and natural resources for the benefit of the people of Kenya. This is an important provision because the Constitution also provides socio-economic rights including the right to clean drinking water, freedom from hunger, and the right to earn a living to fulfil these socio-economic rights. The right to own land as property includes the entitlement to utilize the land and to enjoy the benefits from that land, often through agriculture and related land use activities. Article 10 of the Constitution requires that implementation of the Constitution; making and implementing any laws (including forestry and land use); and the making of public policy decisions should integrate national values and principles of government including sustainable development. This means that there is a need to ensure pursuit of the socio-economic rights, including land rights, does not endanger the right to a clean and healthy environment.

4.1.3 The Forest Conservation and Management Act provides classification of forests as public, private or community. Public forests

include government forests (Article 62(2)(1) of the Constitution) and mangrove forests. Community forests include forests on land lawfully registered in the name of group representatives; forests on land lawfully transferred to a specific community; forests on any other land declared to be community land by an Act of Parliament; forests on land that is lawfully held, managed or used by specific communities as community forests; forests lawfully held as Trust land by the county governments, but not including any public land held in trust by the county governments under Article 62 (2) of the Constitution, and forests on ancestral lands and lands traditionally occupied by hunter- gatherer communities. The latter category of forests, in practice, mainly refers to forests currently held and managed as public forests by the KFS. Private forests refer to a forest created on any land held by an individual, or institution as private land.

4.1.4 The forest law also provides for the mechanism for creation and establishment of all categories of forests. It also establishes the institutional mechanisms for forest administration, including the mechanisms for forest management planning, as well as participatory forest management which includes community participation through community forest associations. Kenya has developed a National Forest Programme for the 2016-2030 period covering fifteen years. It is intended to achieve sustainable forest management through development and sustainable management, conservation, restoration and utilization of forests and allied resources for socio-economic growth and climate resilience.

4.1.5 The Environmental Management and Coordination Act (EMCA) provides the overarching rules and standards, as well as institutional mechanisms to govern environmental management including forestry. EMCA establishes the National Environment Management Authority (NEMA) as the principal government agency on environmental governance, and its mandate includes exercising oversight over other lead agencies that have mandates touching on environment including KFS. NEMA is responsible for Strategic Environment Assessments (over plans, policies and programmes); Environmental Impact Assessment which are undertaken for all project activities falling within the scope of the Second Schedule to EMCA. Environmental Audits are undertaken, under EMCA, to ensure there is compliance with the terms and conditions of an EIA license. EMCA also establishes the National Environment Tribunal (NET) as the principal dispute resolution mechanism where any person had lodged an appeal from a decision of

NEMA or the KFS. EMCA empowers a County Governor to establish a County Environment Committee to provide guidance on proper environmental management within the county and to develop a county strategic environmental action plan in every five-year period. EMCA grants NEMA the authority after consultations with lead agencies such as KFS or a county government, to develop, issue and implement regulations, procedures, guidelines and measures for the sustainable use of hill sides, hill tops, mountain areas and forests and such regulations, guidelines, procedures and measures shall control the harvesting of forests and any natural resources located in or on a hill side, hill top or mountain area so as to protect water catchment areas, prevent soil erosion and regulate human settlement.

4.1.6 The National Drought Management Authority (NDMA) Act establishes the NDMA with the mandate to coordinate all matters relating to drought management including policies, coordinate drought response initiatives and promote the integration of drought response efforts into policies, plans and programmes. It also has a mandate to identify, design and implement projects and programmes that shall strengthen resilience to drought and climate change.

4.1.7 The Kenya Water Towers Agency (KWTA) Order 2012 made under the State Corporations Act has established the KWTA with a broad mandate over water towers, defined to mean an area that acts as a receptable for rain water and that stores water in aquifers underneath it and gradually releases the water to the springs emanating from it. The mandate of the KWTA includes co-ordination and oversight of the following: the protection, rehabilitation, conservation, and sustainable management of water towers; recovery and restoration of forest lands, wetlands and biodiversity hot spots; implementation of sustainable livelihood programmes in the water towers in accordance with natural resource conservation; as well as resource mobilization from public funds, and other sources including payment for environmental services, including carbon reservoirs and sequestration.

4.1.8 The Climate Change Act (CCA), enacted in 2016, provides provisions and mechanisms to guide how Kenya will respond to the challenges presented by climate change. This law is implemented together with Sessional Paper No.3 of 2016 on Climate Change Policy Framework, and they identify Kenya's climate change objectives as the achievement of low carbon climate resilient development. This means that Kenya will implement mitigation measures, as well as adaptation measures while prioritizing the latter. The Climate Change

Act establishes a National Climate Change Council, chaired by the President with the Chairperson of the Council of Governors as a member. The mandate of the Council includes ensuring the mainstreaming of the climate change function by the national and county governments and approving and overseeing implementation of the National Climate Change Action Plan. The Climate Change Act requires the preparation, in a participatory manner, of a National Climate Change Action Plan (NCCAP) which identifies how mitigation and adaptation will be undertaken across all sectors of the economy. An approved NCCAP is mandatory for implementation by all institutions at the national, and county level of government.

4.1.9 The first NCCAP was prepared for the 2013-2017 period, and a new NCCAP has been prepared for the 2018-2022 period. Both the Climate Change Act, and the Policy require the mainstreaming of adaptation, mitigation and other relevant climate change actions into the functions of all public entities at the national and county government, through the NCCAP. This includes implementation of the measures identified in the NCCAP and further outlined in the National Determined Contribution (NDC). County governments must undertake this mainstreaming of the NCCAP into their County Integrated Development Plans, required by law for every five-year period, as the development planning master plans for each county. The CCA provides for climate change duties of public sector entities at both levels of government (including counties) to be designed and imposed by the Climate Change Council on recommendation of the Cabinet Secretary for Climate Change. It also empowers the Climate Change Council to provide annual advice to a county government to mainstream climate change strategies and actions into strategic areas through integration into county functions and budgets of departments and entities of the county government. Further, the Council has a mandate to develop a specific public safety component for disaster risk reduction for incorporation by all levels of government to prevent climate change induced disasters and manage emergency responses. This is a core mandate for the County Government of Elgeyo Marakwet, taking into account challenges such as landslides in the highlands, or drought in the Kerio Valley.

4.1.10 Climate change duties, for public and private entities provide a window through which climate targets for mitigation and adaptation can be clearly defined, in line with the economic agenda, national and international obligations, and the mandatory requirement to adhere to sustainable development by balancing the three dimensions (social,

economic and environment) during decision making. As seen earlier, amendments to EIA regulations to integrate the climate risk vulnerability assessment is being implemented through Draft EIA regulations, and during Environmental Audit, could require a project to report on compliance with national climate change obligations, such as duties, or any GHG emissions reduction targets that could be developed. This is also important for an additional reason. Private sector business and industry is at the heart of research and innovations, especially those towards a low carbon climate resilient pathway. Incentives under section 26 of the Climate Change Act can play a key role in balancing between climate change duties and providing positive incentives to support innovations in mitigation actions. The Climate Change Fund established under section 25 of the CCA, while only one aspect of climate finance, can provide funds to catalyse research, development and innovation that is acutely needed for a just transition.

4.1.11 The Agriculture and Food Authority Act (AFA) was enacted in 2013 to replace the 1995 Agriculture Act. It governs agriculture, and related land use in Kenya. Its definition of agriculture includes the use of land for agroforestry, when its ancillary to the use of land for other agricultural purposes. The AFA law defines the functions of both the national government, and county governments. It empowers the national government to make general rules for the preservation, utilization and development of agricultural land. These are in addition to land preservation guidelines, to be developed by the Cabinet Secretary for Agriculture for purposes of the conservation of the soil, or the prevention of the adverse effects of soil erosion on, any land. The scope of these guidelines includes requiring, regulating or controlling the afforestation or re-afforestation of land. The AFA law specifies the mandate of County governments to include the issuance of land development orders and land preservation orders on any land in order to ensure implementation of good land husbandry standards. The Agriculture (Farm forestry rules) 2009 require every land owner or occupier of agricultural land is required to plant, and maintain a minimum 10% tree cover on the land.

4.1.12 Article 66(1) of the Constitution provides for the power of the State, including county governments to regulate the use of land for various purposes including land use planning. The 2016 Land Use and Physical Planning Act specifies that county governments have the power to prepare county-level land use and physical plans, as well as inter-county land use and physical plans in cooperation with neighbouring counties. Additionally, the County Governments

Act requires counties to prepare Spatial Plans as part of the CIDP. Under the 2016 physical planning law, the counties have the power to control development through issuance of development permissions, including change of user and approval of development permits. This power is important to forestry because land use and physical plans can be utilized to determine the spaces and areas of the county that are suitable for enhancement of tree planting and growing in order to establish forestry, urban spaces, arboreta and green zones. Under the Water Act, it is mandatory for every person intended to develop an area of land adjacent to a river to obtain the approval of the Water Resources Authority on the limits of that land abutting the river that is riparian land.

4.2 Governing forests in Elgeyo Marakwet county

4.2.1 As highlighted earlier, the mandate and functions of the County Government on forestry is defined in Part 2 of the Fourth Schedule to the Constitution. This mandate is to implement specific national government policies on natural resources and environmental conservation including forestry, as well as soil and water conservation. Additionally, the county context requires expansion of forestry function to other areas of public land (held by the county), private and community land. This is important in order to expand the scope of ecosystem services and socio-economic and environmental benefits available to the county and its residents. For that reason, this Policy will focus on forestry and associated county functions including agriculture, land use planning and development permitting, water resources management, among others. The County government has already developed various laws and policies that impact forestry as reviewed below.

4.2.2 The 2017 Elgeyo Marakwet County Charcoal Act was enacted to establish a County Environment Committee with a mandate to to ensure enhanced and effective forest conservation, protection and sustainable charcoal production in the provision of economic, social and environment goods and services. This law aims to regulate charcoal production; and entrench sustainable management of forests and trees through sustainable land use actions including soil, water and biodiversity conservation, tree planning, promoting community participation, promoting dryland forestry to produce wood fuel, charcoal and non-wood forest products. It also aims to promote forest extension to enable farmers and other forest stakeholders to benefit from forest management approaches and technologies; and to promote climate change adaptation and mitigation efforts.

4.2.3 The 2017 Elgeyo Marakwet County Public Participation Act was enacted to establish modalities and platform for public participation in the governance of the county, in order to implement section 14, Part 2 of the Fourth Schedule to the Constitution. It establishes an office of public participation with the mandate to ensure among other things that the public participation process is inclusive, and the feedback is provided to the consulted public.

4.2.4 The County has also prepared Bills for enactment into law by the County Assembly as follows. The 2019 Elgeyo Marakwet Water Bill is intended to govern water resource management in the County. The 2019 Elgeyo Marakwet Cultural Heritage Bill is intended to regulate the protection of cultural heritage and to govern cultural practices. The 2019 County Disaster and Disaster Management Bill is intended to provide for the the management of disasters and emergencies in Elgeyo/Marakwet County by effective planning and risk reduction, response and recoyery procedures and the promotion of co-ordination amongst the response agencies.

4.2.5 The Governor has appointed a County Executive Committee (CECM) member with responsibility over forestry and part of this mandate is development of this policy. Since the scope of actions in the policy will go beyond the forestry sector, the policy will include policy directions calling for the mainstreaming of forestry actions in key sectors such as agriculture and water resources management. Equally, the integration of relevant national laws and policies, within the meaning of the Constitution will be undertaken. A law has been drafted, in a participatory manner, and its implementation will be informed by the provisions of this policy.

4.2.6 The County has prepared a County Integrated Development Plan (CIDP) for the 2013-2017, and the 2018-2022 period as required by the County Governments Act. The CIDP integrates forest actions, including expansion of county forest cover, enhancing farm forestry, agroforestry as a climate change response, dryland forestry, among others.

4.2.7 Nonetheless, the county has lost 14,600 ha of tree cover (13.6%) over the past 15 years. Environmental degradation has continued in all parts of the county and especially in the escarpment, the water catchments and in the wetlands. The degradation of the environment and natural resources has compromised the livelihoods of upstream and downstream communities that have led to resource-based

conflicts in the county. This is also evidenced by recurrent landslides in the escarpment, and in the Kerio valley. The recent Chesogon floods disaster, for instance led to the loss of many lives and massive destruction of the infrastructure.

4.2.8 As pointed out earlier, the escarpment area and hanging valleys, characterized by the upper and lower Spencer lines is a vulnerable area of land due to geological instability that makes it susceptible for landslides, and risk of serious harm to human beings and livestock. The “Spencer Lines” as commonly known, refer to areas of the escarpment identified during the colonial period by William Spencer, a District Agriculture Officer. These areas were classified as vulnerable, and for this reason all forms of human settlement and cultivation were prohibited. In order to ensure disaster risk reduction, protect human life and property and ensure sustainability of forestry and tree growing, human settlement and activities should be removed from these areas after mapping and resettlement. The financial and technical support of the national government, to the county, remains instrumental to attainment of this objective.

5. Goals, Objectives and Guiding Principles of this Policy

5.1 Goal of the Elgeyo Marakwet County Sustainable Forest Management and Tree Growing Policy

The goal of this Policy is to provide for sustainable management of forests and trees; ensure respect, protection and fulfillment of human rights in all forestry and tree growing actions; support expansion of forestry on public, private and community land; enhance integration of forestry and tree growing into rural and urban land management; increase soil and biodiversity protection during land use activities; promote the development of the socio-economic and environmental value of forests and trees; and contribute to the constitutional obligation for Kenya to maintain a minimum national tree cover of ten percent of the land area.

5.2 Objectives of the Elgeyo Marakwet County Sustainable Forest Management and Tree Growing Policy

The objectives of this policy are to:

1. Provide a mechanism to enhance increase in the county tree and forest cover, in line with the constitutional obligation, and to reverse forest degradation.
2. Enhance forest-based economic, social and environmental benefits within the framework of sustainable management of forests and trees.
3. Ensure respect, protection and fulfillment of human rights in all forestry and tree growing actions;
4. Provide a county-level framework to guide and govern the implementation of sustainable management of forests and trees with meaningful public consultations and awareness.
5. Recognize that most of the land in the County is owned by private individuals and community (private and community land), and the role this land plays in expansion of the county tree and forest cover.
6. Put in place and strengthen institutional structure at the county level to support coordination, mainstreaming and implementation of forest activities.
7. Provide mechanisms to increase soil and biodiversity protection during land use activities;
8. Put in place strategies, actions and interventions to reduce vulnerability to the impacts of climate change by building adaptive capacity, enhancing climate change resilience through forestry activities.
9. Map out and catalyse the County's transition to cleaner energy

sources to lower pressure on forests and trees.

10. Set out a county tree planting and growing strategy, including land use and management planning for forests and trees outside protected areas, in order to enhance the benefit from ecosystem services provided by trees and forests.
11. Incentivize the public, communities and private sector involvement in taking up forestry and tree planting activities.
12. Facilitate widespread and participation, ownership and oversight of the County's forestry activities and integrate implementation of meaningful public consultation and awareness in all elements of forestry decision by the county government and provision of feedback to the public on the impact the consultation had on decision making.
13. Provide a framework for the County to enhance investments and mobilise financial resources, including incentives to private and community landowners, for its forestry actions and ensure effective and transparent utilisation of the resources.
14. Mainstream intergenerational, equitable, inclusive, and gender mainstreaming across all aspects of the County's forestry actions.
15. Enhance research and use of science and technology in policy decisions and sustainable management of forestry resources.
16. Ensure the continuous protection of indigenous and traditional knowledge, its preservation for posterity, and integration with scientific knowhow to inform policy decisions.
17. Support the collection of scientific and other information, data, impacts, actions, mainstreaming, effect of climate change interventions and other relevant aspects to inform county decision making, and for sharing with the national government.
18. To enhance development of capacity for landowners, communities, and county public officers through research and adoption of technologies to enhance sustainable management of forests, trees and land.
19. Integrate national values and principles of good governance in management of forests and trees.
20. Provide the mechanisms through which the County can contribute to Kenya's constitutional obligation to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya

5.3 Guiding principles for the Policy

The governance and management of forestry by the Elgeyo Marakwet County Government will be informed by the mandatory national values and principles of governance set out in article 10 of the Constitution, together with principles stipulated in articles 43, 60, 69 and 232 of the

Constitution. More specifically, the following principles shall apply:

1. **Right to a clean and healthy environment:** under the 2010 Constitution every person in Kenya has a right to a clean and healthy environment and a duty to safeguard and enhance the environment.
2. **Sustainable development** as a principle of national governance in Kenya and as normative basis for observing equity. The Constitution of Kenya creates a duty on every person to cooperate with the State, and with other persons, to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources
3. **The mainstreaming of climate change considerations into forestry activities,** including during planning, budgetary and expenditure processes.
4. **Affirmative action, equity, inclusivity and equality:** The implementation of affirmative action is important in order to enhance opportunities for vulnerable members of our population, including the marginalized such as indigenous peoples, local communities, the youth, persons with disability. Gender mainstreaming in order to enhance equity in participation, or consideration of the interests of the disadvantaged gender, more often women, is important. Decision making concerning forestry should internalize the need for equality, while taking into the account constitutional requirements for affirmative actions in favour of vulnerable and marginalized groups, and the obligation for gender mainstreaming.
5. **Decentralization** of forestry activities to the lowest levels of county government administration.
6. **Implementation of meaningful public consultation and public awareness** in all elements of forestry decision by the county government and provision of feedback to the public on the impact the consultation had on decision making. This will also ensure giving an enhanced voice to indigenous peoples and local communities within the county in terms of consultations during forestry and tree growing decision making.
7. **Transparency, accountability and good governance** in the selection forestry conservation and management options for the County.
8. **Effective public administration structures** for implementation of forestry conservation and management actions and interventions by the County.
9. **Human rights** approach in the design, financing and implementation of all forestry activities including tree planting and growing taking into account the private and community land rights, including the

rights of indigenous peoples within the county. The County, as part of the Kenyan State, bears the constitutional obligation to respect, protect, fulfil and promote the human rights guaranteed in the Bill of Rights.

10. **Integrated planning and resource management:** Planning of forestry activities should take into account national, cross-county, county and local level requirements in order to be sustainable, and take into account socio-economic and environmental needs, including competing interests of groups and the needs of the environment.
11. **Precautionary principle:** The precautionary principle requires that remedial measures be taken in situations of scientific uncertainty where evidence of harm cannot be proven but potential damage to human or environmental health is significant. It therefore requires the County to implement vital actions to prevent harm to the environment and human health in management of forest resources, and various land uses that impact or are impacted by forestry and trees.
12. **Mainstreaming climate change:** Climate change presents a major risk to the forestry sector due to adverse impacts. Additionally, forests and trees provide regulating ecosystem services which include carbon sequestration and storage therefore reducing Greenhouse Gas (GHG) emissions in the atmosphere. There is need to mainstream climate change actions for adaptation and mitigation, including established concepts such as Reducing emissions from deforestation and forest degradation (REDD+), while while leveraging climate finance.
13. **Integrating disaster risk reduction:** Natural disasters often occur when hazards, such as extreme weather events combine with vulnerabilities such as weak infrastructure. Land degradation, and improper land uses including poor husbandry in cultivation of steep hills using inappropriate techniques can create vulnerabilities which became hazards during extreme weather events such as heavy rainfall and floods. It is important for the county, which is hilly and experiences poor land uses and landslides, to integrate disaster risk reduction in, such that activities address the disaster risk, and put in place systems for disaster management if prevention is not possible.
14. **Good governance:** Good governance, integrity, transparency and accountability are mandatory constitutional principles set out in article 10 and should be mainstreamed across all forestry activities undertaken by the county.

6. Land and Sustainable Management of Forests and Trees

6.1 Policy Statement:

The County Government will put in place and mainstream the implementation of sustainable land management practices across all land uses on public, private and community land in the County.

6.2 County Context:

6.2.1 Land in the County is classified as public land, private land and community land. Public land in the County includes public forests managed by the national government through the Kenya Forest Service (KFS), land held or used by various national government agencies through the public trust doctrine. Public land also includes land held and owned by the County Government, including in urban areas. Public land also includes rivers and other water sources. Private land includes any land owned by individuals or private entities (companies, etc.), either as freehold or leasehold. This is mainly found in the highlands. Community land is found in the lowlands of Kerio Valley, and most of this community land has not been adjudicated but has been occupied and used by communities over a long time.

6.2.2 Most parts of the highlands have been adjudicated and titles issued. The escarpment, due to its fragile nature has most of the parts differed for adjudication for environmental conservation purposes. Areas of the escarpment with fairly gentle topography have been issued with title deeds. Most of the Kerio Valley has not been adjudicated due to incidences of insecurity and intra and extra clan issues. On average, the percentage of farmers holding titles stand at around 50 percent.

6.2.3 Land in the County is an important resource to which individuals and communities attach significant cultural and social value. Landlessness is viewed as a blemish on social status. Since the main economic activities are agriculture and livestock keeping, land is an important factor of production. In the highlands, the County is experiencing significant challenges resulting from unsustainable management of land such as cultivation on steeps hills without applying principles of good land husbandry. This is resulting in reduced productivity, and disasters such as landslides. The absence of biodiversity, including suitable trees and bushes as part of mixed use of farmland weakens soil formation making the often steep and hilly land amenable to landslides.

6.2.4 Community land is located in the lowlands of Kerio Valley where the environment and local climate is dry and harsh. The communities in this part of the County rely on pastoralism and subsistence farming of food crops to supplement diets and income. The sustainability and continued viability of pastoralism is under threat due to diminishing levels of pasture as a result of land degradation and biodiversity loss, as well as inadequate and unpredictable rainfall as a result of climate change. The deteriorating quality of the land impacts the resilience and fertility of the soil, with impacts of availability and quality of pasture, reliability of surface water from rivers, and the quality of life of the communities. The absence of a systematic programme for dryland forestry exacerbates the shortage of pasture and contributes to higher levels of vulnerability which results in disasters during extreme weather events such as droughts. Starvation of livestock, wildlife and people is a negative consequence; and this has been attributed to recurrent violence through cattle rustling as communities attempt to replace decimated livestock.

6.2.5 Sustainable land management is critical where the land is vulnerable from improper husbandry practices and long-term deterioration that has brought low soil resilience, biodiversity loss and land degradation. The County has not put in place a disaster risk reduction methodology for mandatory integration into land management guidelines and orders which the county is empowered to implement under the Constitution.

6.2.6 Soil erosion presents a continuing challenge for land manage ment and is exacerbated by poor land husbandry practices at farm level, and on community land. This is attributed to, among others, over grazing, cultivation practices, lack of biodiversity and trees at farm level, the failure of transhumance practices for pastoralism. Severe gulley erosion, in some instance, has rendered farmland unusable in the highlands, and in extreme cases result in landslides. Extensive land degradation and biodiversity loss in the lowlands mean that community land is facing increasing challenges of soil erosion, including loss of any fertility during flooding. This is contributing to expansion of desertification and increasing vulnerability of land and communities to further challenges. The use of fire as a land clearing tool is an impropriate mechanism that is contributing to additional biodiversity loss, injury to livestock and wildlife, and contribution to pollution including Greenhouse Gas (GHG) emissions. Invasive species, such as Cestrum Aurantiacum, contribute to the stress levels on the land as they compete for nutrients with crops and pasture.

6.2.7 In the rainy season, floods are common, mostly occurring during between April to August affecting the escarpment and the low Lands of Kerio Valley. During the rainy season also, landslides are experienced along the escarpment causing property damages and loss of lives. Drought is commonly experienced along the Kerio Valley in the dry months of January to March. Forest/bushfires occur in these dry months. These fires are caused by Arsonists and farmers during bush clearance and incidental fires.

6.2.8 There is a gap in the planting and growing of trees on private and community land within the County. At farmland and community land, people prefer exotic tree plantations as they grow faster and can be converted to timber for sale. Indigenous trees are not preferred as they take longer to mature but they provide more socio-economic and ecological benefits including soil fixation through groundwater recharge, controlling soil erosion, soil stabilization and improving soil fertility.

6.3 Policy Directions:

The County Government will:

1. Undertake a mapping of all county public land in urban and rural areas in order to determine suitability for conversion to forests, or urban open spaces.
2. Carry out an inventory of all private and community land in order to determine the level of land degradation, and the requirements for soil fixation in order to rehabilitate the land.
3. Develop, in a participatory manner, a county-level sustainable land use manual for use by landowners engaged in farming and livestock keeping in the highlands and lowlands, including sustainable alternatives to chemical fertilizers, pesticides and use of fire as a cultivation tool.
4. Engage with the national government Ministry responsible for lands to undertake and finalize a comprehensive programme of adjudication of all community land in the County.
5. Develop guidelines for land use planning and environmental management of community land, including setting aside parts to be managed as community forests.
6. Provide extension services to community landowners in the lowlands on development and management of indigenous dryland forests including fruit trees, bee keeping and other options that provide direct economic benefit.
7. Invest in scientific research together with indigenous and traditional

knowledge for sustainable land management, elimination of invasive species, and ensuring successful reforestation and re-afforestation.

8. Implement a research programme on reversing biodiversity loss, land degradation, expansion of desertification and invasive species throughout the county.
9. Develop a programme to rehabilitate all land in the county that has been damaged by soil erosion, including financing a special intervention for extreme cases of gulley erosion.
10. Coordinate with national government agencies responsible for public forests, water towers, agriculture and forestry research, to obtain technical knowledge and financing for forestry and tree-growing on private and community land.

7. Sustainable Forests and Trees Conservation and Management

7.1 Policy Statement:

The County Government will implement measures and programmes to integrate expansion of forests and tree growing on public, private and community land in a sustainable manner.

7.2 County Context:

7.2.1 The County is home to important national forests ecosystems, as part of the Cherangany forest system. These includes Embobut, Kaptagat, Kiptaberr forests, among other forests. These are public forests managed by the Kenya Forest Service, which regulates access by the local communities through participatory forestry management. The lack of clear definition of benefits under national law undermines the utility of participatory forest management of the local community. The Forest Conservation and Management Act, in terms of community participation in management of public forests, does not define how communities will participate in benefits generation; and only assigns Kenya Forest Service the role of establishing and implementing benefit sharing arrangements. Under the permit system and through Community Forests Associations, forest adjacent communities can access defined benefits, including non-consumptive forest products. There is a challenge is regulating livestock grazing within the public forests and overgrazing together with illegal logging is resulting in creating of artificial glades (grasslands) within the forest, thus contributing to deforestation, and lowering resilience of the forests.

7.2.2 Most of the land in the county is owned as private or community land. The County has not implemented any systematic process of tree planting and growing at farm level including mechanisms to enforce compliance. Where landowners implement the minimum standards of tree growing prescribed by the county, it is important to put in place incentives to enhance tree growth, survival and cover. This is important to support ecosystem services needed for land regeneration, and the related socio-economic and environmental benefits. There is no county level mechanism to support landowners in land use planning to develop tree growing into private and community forests, including registration by the County, and the Kenya Forest Service in order to contribute to the national tree cover targets, and the forest cover targets.

7.2.3 The main products from forests in the county include timber, tree-nursery soils, honey, firewood, building materials, herbal medicine, pottery clay, grass, pine gum. The beneficiaries of these forest products are not only the locals who live along the forests but also multi-national companies who depend on forest produce for the manufacture of various wood products including paper, furniture, boards, mattresses, matchsticks among others. The farmers who practice agro- forestry, although not fully developed in the county, sell timber to companies for further processing into power poles and fencing materials. Apart from the direct products harvested from the forests, livelihoods are also supported through the water catchment areas rehabilitation, environmental conservation and other income generating activities undertaken by the county government since its inception in 2013.

7.2.4 The main sources of household cooking energy in the county are firewood, charcoal and paraffin. This has however contributed to vegetation degradation and increase in related health complications amongst the population.

7.2.5 Charcoal burning is endemic in the county, and it results in extensive deforestation through indiscriminate cutting down of trees on private and community land, and illegal logging in public forests. The technology applied in charcoal burning, through traditional kilns, is inefficient in terms of biomass utilization and contributes to GHG emissions, and air pollution of the local environment. There is no policy guideline or requirement that charcoal burning should utilize only trees planted and grown for that purpose as woodlots. It is important to put in place mandatory requirements that woodlots utilized for charcoal burning must be replanted within a period of three (3) months, and certification issued by the County government on the planting and growth. To regulate this, the County should develop a licensing regime based on the origin of the trees/wood for charcoal burning, making it unlawful to trade in charcoal whose origin is unauthorized wood. It is important to have a timeline within which traditional kilns will be replaced with modern improved kilns with higher efficiency, low GHG emissions and without air pollution. A policy on household improved energy access and use is required, including improved cooking stoves, firewood from woodlots, and progressive introduction of clean cooking energy at household level.

7.2.6 The County has a rich heritage of customary, traditional and indigenous knowledge on appropriate indigenous tree species, tree growing techniques, methods of protecting trees from (illegal) logging, mitigating or preventing soil erosion, and preventing or managing fires. This knowledge is however being lost without being formally recorded, and interwoven with modern or scientific knowledge, as maybe appropriate.

7.2.7 Farmers practice farm forestry so as to increase the percentage of forest cover on their land and also for commercial purposes. The types of trees planted include Eucalyptus, Gravellia, Nandi Flame, Mexican green ash, Pinus, Hekea saligna, d. caffra, acrocarpus fraxinfolia, cupressus lustanica and cypress. Eucalyptus is used as a source of energy by the tea factories and as a source of electric poles while a cypress has varied usage which includes construction, furniture making among others. The indigenous species are dombeya geotzenii, olea africana, sizygium spp, croton spp, and markhamia lutea and prunus africana. Other uses of tree products include medicinal herbs, handcraft, construction of traditional homes and furniture.

7.2.8 The county is home to important high value and nearly extinct species which require protection and conservation. This include the Lebanon cedar, mutarakwa, and the sandalwood tree which are threatened by illegal harvesting. A programme to identify all appropriate indigenous tree species and exotic trees for timber, charcoal or other uses, which are suitable for preventing biodiversity loss and land degradation is required. The county government should develop, in a participatory manner with local communities, tree nurseries that provide seedlings for tree planting and growing across the county. A programme for tree planting, which includes indicators for tree growing, should be put in place by the county for tree planting at the onset of rainy seasons; and the ownership and monitoring and tree growing by county forest agencies together with communities. County level regulations to restrict planting of unsuitable exotic trees, such as eucalyptus, should be put in place and widely disseminated with appropriate alternatives indicated.

7.2.9 With second highest forest cover in the country, the county has a high potential for GHG emissions abatement. Investments in private forestry at farm level and community forestry and tree growing will increase carbon sequestration capacity of the county, and Kenya. Soil fixation, and prevention of leakages through widespread tree harvesting will increase carbon storage by trees and forests in the county. The

county should ensure that tree planting and growing takes into account indigenous species that provide extensive non-wood forest products such as fruits, forage for livestock, or bee keeping habitats to provide critically needed adaptation co-benefits for landowners. Adoption of adaptation practices for farming, such as climate smart agriculture, will support carbon sequestration and storage.

7.2.10 Development and implementation of forestry and tree growing by landowners on private and community land requires the county to implement a framework for management planning of forests and tree growing. This should be harmonized with other land uses such as agriculture and settlement.

7.2.11 The County does not have a policy or guidelines for prevention of forest fires. Adoption of an enhanced tree planting and forestry programme will require introduction of policy and practical safeguards including public safety guidelines to prevent fire and during forest fires, fire breaks, public awareness of fire risks, prevention and firefighting skills. Mainstreaming of indigenous and traditional knowledge on preventing forest fires and responding to fire outbreaks will be imperative.

7.3 Policy Directions:

The County Government will:

1. Carry out assessment on the viability of conversion of all the public land on the escarpment into a protected public forest owned by the County.
2. Undertake a total economic valuation of forestry resources within the County.
3. Identify, in a participatory manner, the indigenous tree species endemic to the County that are suitable for planting and growing at farm level and community land to support regeneration of the land through groundwater recharge, soil fixation, and provide economic benefits.
4. Collaborate with the Kenya Forest Service to review participatory forest management in public forests within the County and develop a system of collaborative forest management that clearly defines benefits, benefit generation, benefit sharing, and provides medium term to long term limited tenure rights to communities to conserve, manage and utilize public forests.
5. Put in place clear minimum compliance standards for tree planting and growing by landowners on private and community land.

6. Implement incentives for landowners who fulfil and exceed minimum standards, indicators and targets for tree growing and forestry on private and community land.
7. Put in place a legal framework, including incentives, to guide and encourage registration of private and community forests, including incentives and technical support provided to landowners.
8. Develop a legal framework to guide establishment of tree plantations and woodlots for firewood and charcoal burning on private and community land, including prescribing proportional percentage of the land for planting exotic and indigenous species respectively.
9. Develop a legal framework to enforce compliance of requirements, including certification and licensing procedures, that charcoal burning is only permissible when utilizing wood specifically grown for that purpose.
10. Implement mechanisms for protection of tree species threatened with extinction, and for the conservation of high-value tree species that are threatened by illegal harvesting.
11. Develop a legal framework specifying acceptable parameters of charcoal kilns including efficiency, GHG emissions and air pollution standards.
12. Develop, and continuously update, a compendium of cultural heritage, traditional and indigenous knowledge on local forestry and tree growing.
13. Proclaim specific days through notice in the County Gazette, immediately before or during rainy seasons, as County Tree Planting and Growing Days during which the government and public engage in tree planting.
14. Develop and disseminate a manual for use by the public to monitor and report in tree growing and survival rate of trees planting during Tree Planting Days.
15. Develop a methodology to ensure that all tree planting within the County takes into account the contribution to GHG emissions abatement through carbon sequestration and storage and ensure integration of adaptation co-benefits.
16. Implement a programme for preventing and fighting forest fires including through training and awareness of landowners, community, a firefighting corps, and procurement of equipment.
17. Develop and implement a framework for management planning of forests and tree growing on community and private land which enables harmonization with other land uses.

18. Investigate and develop mechanisms to ensure payment for ecosystem services for landowners who adopt land use practices and forestry that result in enhanced ecosystem benefits utilized by those inhabiting downstream land.

8. Integrated Management of Water Resources and Forestry

8.1 Policy Statement:

The County Government will put in place and implement mechanisms for integrating water resources management, including water towers, with sustainable management of forests and trees growing.

8.2 County Context:

8.2.1 The county water resources are classified as surface water (rivers, streams, dams and pans), groundwater, sub-surface and surface runoff. The County has three major geological areas of volcanic rocks, Pre-Cambrian (both metamorphic basement rock and intrusive rock) and with varying availability of Sedimentary rock, which influences the water retention and permeability.

8.2.2 The average groundwater potential varies significantly in the highlands, escarpment and the low lands. Whereas the lower areas of Kerio Valley have boreholes with average yields of between 5m^3/hour to 20m^3/hour and depths of 50-120 meters, the escarpment has even lower yields of water of between 1m^3/hour to 7m^3/hour with average depths of 110-200 meters and the highlands have the highest yields of up to 22m^3/hour with average depths of between 80-220 meters, according to records derived from existing boreholes.

8.2.3 The County is a source of two major water basins namely; Lake Turkana and Lake Victoria. There are no permanent gauging stations on the rivers though temporary ones do exist at designated sites, installed and maintained by the Water Resources Authority (WRA). Land degradation and soil erosion in the County will continue to adversely impact resilience its role as a catchment area for these basins. Riverbank protection should be enhanced. The County is an important part of the national system of forest ecosystems and hills referred to as water towers, including outside of public land.

8.2.4 The main water sources within the county are rivers, shallow wells, piped water system from constructed water supplies, roof catchment, pans, dams, protected catchment areas and boreholes. The average walking distance to the nearest water points vary considerably across the county but the average is 2.5 kilometres.

8.2.5 The County has not implemented county legislation or policy for exercise of its constitutional mandate on soil, water conservation

and forestry. This has left a gap in ensuring integration of catchment management, and riverbank protection requirements into land management, as well as development permitting procedures.

8.3 Policy Directions:

The Government will:

1. Develop a county-level catchment management plan, in consultation with the Water Resources Authority, in order to integrate these actions into decisions by landowners.
2. Develop a county water policy to guide implementation of the county mandate on soil and water conservation and harmonize with farm forestry on private and community land.
3. Develop regulations for riverbank management including appropriate indigenous tree species for protection.
4. Map out and identify all water towers in the County and in collaboration with the Kenya Water Towers Agency, develop a programme for tree planting, forestry and catchment management, including on private and community land.
5. Enact a County Water legislation that provides mechanisms for water resources management, soil conservation and integrates farm forestry and tree growing.

9. Land Use and Physical Planning and Development Control

9.1 Policy Statement:

The County will implement a programme for enhancing agriculture land use and soil protection through sustainable agroforestry practices.

9.2 County Context:

9.2.1 The County is agriculture based with more than 80% of the households deriving their livelihood from the sector. There are two categories of farming in the county, i.e. small- scale and large-scale farmers. The average farm size is determined by household farm size, such that the small-scale farmers own an average of 1.36 ha while the large-scale farmers own 17.3 ha**.**

9.2.2 Farming produces both food and cash crops that vary with the agro-ecological zones. The major food crops include maize, beans, wheat, bananas, green grams, groundnuts, sorghum, millet and cowpeas. Horticultural and industrial crops which are mostly grown for sale include Irish potatoes, avocado, passion, mangoes, tea, coffee and pyrethrum. Food crops account for more acreage than cash crops. However, about 25% of the population experiences seasonal food insecurity caused by over-reliance on rain- fed agricultural production coupled with poor storage and distribution systems.

9.2.3 There are five irrigation schemes in the County with a capacity to irrigate 1,120 hectares. However, only two are operational currently irrigating about 680 hectares. Other irrigation development initiatives include farmer and community-based irrigation systems. These are mainly traditional furrows which irrigate about 3,000 hectares in the valley and 1,200 hectares in the escarpment and highland zones. These traditional furrows ferry water from the highlands downstream but face degradation of the canals and sluices (kapnamdaz) intended to control water to prevent downstream damage. Most of the irrigation projects are gravity-fed except for a few group/individual based projects that use portable pumping systems.

9.2.4 Farm forestry / agroforestry has been practised across the county particularly in the highlands. Nonetheless, this has not been successful resulting in degradation and erosion of the farmland that sits on steep hillsides. Although agroforestry is practised in Kerio Valley, it is done

on small scale levels due to drought and termite challenge, particularly during dry seasons. The only successful tree species in such climatic conditions is Gmelina arborea and Mangoes.

9.2.5 Fertilizers and pesticides are common agriculture outputs in the county. The use of fertilizers together with land tillage for a long time through successive seasons is resulting in soil damage. Fertilizers are used as basal dose and in the form of top dressing. This means that soils, especially in the highlands, rely on the use of fertilizers for productivity. There is widespread use of pesticides for instance in potato cultivation and livestock rearing which, like fertilizers contain chemical substances with a long latency period in the soil, animals and human bodies. This persistence, cumulatively, has a negative polluting impact on the ecosystem and the food system.

9.2.6 Options for enhancing agroforestry include include boundary planting, woodlot establishment, plantation establishment, indigenous trees on terraces, among others. These techniques can enhance tree growing on private and community land, and when successful, create land use connectivity across the entire landscape as more landowners adopt agroforestry. However, the relatively small farm sizes in the highlands present a challenge as landowners balance between agriculture, settlement and tree planting. Adoption of climate smart agriculture practices that minimize land tillage will help with soil fixation and stability and reduce GHG emissions from farming. The development and implementation of an extension programme by the county government, which integrates peer-learning by landowners will assist in uptake of the new methods.

9.2.7 Livestock keeping is an important social and economic activity in the County. Dairy cattle are mainly kept in the highlands, while indigenous breeds, Zebu and Sahiwals are reared in the lowlands through pastoralism. Goat and sheep breeds are important for milk and meet across the county. Land degradation, biodiversity loss, deforestation and loss of soil resilience have negatively impacted pasture and water availability for livestock, which results in lower productivity and higher mortality rates. Introduction of farm forestry in the highlands and lowlands, on community and private lands, should take into account biodiversity options that supplement pasture, soil fixation, prevention of soil erosion and groundwater recharge.

9.2.8 Bee keeping has been practiced in the County over generations through traditional hives and KTBH. The expansion of settlement and agriculture across the county, and the resulting land use change has impacted the natural habitats for bees. The enhanced introduction of forestry, tree growing and biodiversity enhancement on private and community land should take into account habitat needs for bees and determine appropriate tree and biodiversity species for this purpose. This should be guided by extension services provided by the county government, including through technical support from relevant national government agencies.

9.3 Policy Directions:

The County Government will:

1. Develop and implement strategies to ensure that farm forestry and tree growing contributes to the livelihoods and food security of landowners.
2. Develop, in a participatory manner, an agroforestry strategy to guide the growing of trees on farms alongside food and cash crops, taking into account indigenous and traditional knowledge.
3. Ensure that the design and operation of new and existing irrigation projects in the county is screened for integration of appropriate species of indigenous trees.
4. Develop regulations to guide mandatory implementation of farm forestry on private and community land including percentage range of coverage on land.
5. Implement the adoption of climate smart agriculture methods to support soil fixation and growth of trees on farmland.
6. Ensure that farm forestry should takes into account biodiversity options that supplement pasture, soil fixation, prevention of soil erosion, groundwater recharge and habitat requirements for bees.
7. Develop a programme for re-introduction of organic fertilizers (including manure) for farming in order to support soil fixation and the growth of trees and biodiversity on farmland.
8. Review the toxicity of pesticides and chemical fertilizers utilized in the county, and collaborate with the national government for their removal and replacement.
9. Build the capacity of county agriculture and livestock officers to ensure they undertake mainstreaming of this policy in undertaking their mandates

10. Land Use and Physical Planning And Development Control

10.1 Policy Statement:

The County Government will integrate sustainable forestry and tree growing into physical and land use planning and development permission processes.

10.2 County Context:

10.2.1 The County, in terms of the Constitution, has the power to regulate the use of land for purposes of land use planning. This is undertaken through spatial planning, land use and physical planning, and development control.

10.2.2 The County government is required by the Physical and Land Use Planning Act, No. 13 of 2019 to prepare a County Physical Land Use and Physical Plan in every 10-year period. This plan is intended to provide an overall physical and land use development framework for the county, including to guide the use and management of natural resources, and to enhance environmental protection and conservation. Therefore, in preparation of this Plan the County should integrate the implementation of forestry and tree growing on private and community land, where there is agricultural, livestock and settlement land uses. This should also include urban forests, public open spaces (e.g. parks), arboreta, botanical gardens, and green zones.

10.2.3 The County government is required by the Physical and Land Use Planning Act to prepare a Local Physical and Land Use Development Plan for a town or urban area. This Plan will, among other purposes, regulate zone, urban renewal or redevelopment; as well as regulating land use and land development. In the urban areas across the county, there is need to review physical planning to ensure the establishment and maintenance of urban forests, arboreta, urban open spaces such as parks, as maybe appropriate.

10.2.4 On private land in urban areas, the Forest Conservation and Management Act requires the county, in providing development permissions for buildings, to requiring the planting of trees on any land less than 0.5ha, at the rate of at least five percent of the total land area of any housing estate or home intended to be developed. This should be included in the appropriate Local Physical and Land Use Development Plan for the urban area. Subsequently development

permitting procedures for urban areas should comply with the Local Physical and Land Use Development Plan in ensuring no development application is approved unless it incorporates a green zone. County legislation should specify that in urban areas, even where land size exceeds 0.5ha, it will be mandatory to establish a green zone at the rate of at least 15 percent of the total land area of any housing estate or home intended to be developed.

10.3 Policy Directions:

The County Government will:

1. Integrate the implementation of forestry and tree growing on private and community land into the County Physical and Land Use Development Plan.
2. Ensure every Local Physical and Land Use Development Plan integrates establishment and maintenance of urban forests, arboreta, and public open spaces.
3. Require that development permissions for housing estates and homes in urban areas include establishment and maintenance of green zones at the rate of 5 percent for land area less than 0.5ha, and fifteen percent for land area exceeding 0.5ha.
4. Build the capacity of county physical planning and development permitting officers to ensure they undertake mainstreaming of this policy in undertaking their mandates.

11. Sustainable Forest and Tree Management During Mining

11.1 Policy Statement:

The County Government will ensure that mining activities integrate measures to protect and conserve forests, trees and biodiversity.

11.2 County Context:

11.2.1 There are several mineral deposits found within the county, including fluoride deposits in Kimwarer. Tullow Oil Company has conducted several surveys and feasibility tests in Kerio Valley for oil prospecting. Scanty gold deposits are available along river Arror and Embobut. Kerio Valley Development Authority has been mining Marble stones in Arror area for their own local construction requirements. The full potential of mineral resources will require further exploration.

11.2.2 The county's southern region has great quarrying potential for beautiful building stones, in areas of Kipsaos, Kamwosor and Kimwarer. Sand harvesting is carried out along river Kerio and a major source of county revenue. Large deposits of Murram are found in the areas of Sergoit, Kimnai and their adjacent areas, while stone crushing quarries are being constructed in Rokocho to serve the upcoming construction industry within the county. Oil drilling is currently ongoing, and already one borehole has been drilled in Chepsigot. Mining of fluoride in Kimwarer by Flourspar Company has stalled because of inadequate market targets locally and internationally.

11.2.3 Mining activities, especially sand harvesting, stone quarrying, and murram harvesting are undertaken using open cast method which involves stripping the land surface of trees and biodiversity. Sand harvesting interferes with riverbank protection, while clearing of trees and biodiversity contributes to soil erosion, downstream run-off. There has been challenges in rehabilitation of stone quarries and murram harvesting sites, which contributes to long-term deforestation in the county.

11.2.4 In order to avoid mining activities resulting in deleterious outcomes for sustainable forestry and tree growing, the county should implement mandatory requirements for biodiversity mitigation hierarchy, prior to commencement of a mining project, in order to eliminate biodiversity risk

to the maximum extent possible through avoidance and minimization. If that does not work, the rules should require implementation of corrective measures, including offsets. Therefore, the relevant biodiversity offsets must have a connection to an extractives project and should aim to achieve a no-net loss outcome, or a biodiversity net-gain outcome.

11.2.5 Where mining activities fall within the Second Schedule of the Environmental Management and Coordination Act (EMCA) and require an EIA, the county as a leady agency should emphasize on mitigation hierarchy, then offsets being part of the EIA licence and Environmental Management Plan. For artisanal mining activities, or those that do not require EIA licensing, the county should require a biodiversity conservation and/or replacement plan prior to licensing. It is important to ensure the mining activities do not cause harm to biodiversity, including forests and trees, and exacerbate vulnerability of the county, population, economic and environment to the adverse impacts of climate change such as floods, and droughts.

11.3 Policy Directions:

The County Government will:

1. Implement regulations to ensure that mining activities do not result in net deforestation or loss of biodiversity and tree cover.
2. Require that any mining activities that result in significant net biodiversity loss must, prior to commencement, implement biodiversity mitigation offsets including through Environmental Impact Assessment process.
3. Regulate sand harvesting along riverbanks to protect ecosystem integrate and rehabilitate damaged riverbanks through tree planting and biodiversity conservation.
4. Ensure that burrow pits excavated for any form of mining or extractive removal of resources such as sand, stone are not left with accumulation of stagnant water to remove risk to life and health.
5. Ensure that artisanal mining activities that do not require EIA licensing implement biodiversity and tree cover conservation and/or replacement.
6. Build the capacity of officers approving and regulating mining activities to ensure they undertake mainstreaming of this policy in undertaking their mandates.

12. Mainstreaming Human Rights in Sustainable Forestry and Tree Growing

12.1 Policy Statements:

The County Government will ensure the mainstreaming of human rights into forestry and tree growing to ensure sustainability.

12.2 County Context:

12.2.1 The Constitution of Kenya guarantees human rights in the Bill of Rights. Property rights in land are protected, but the county government is permitted to regulate land use which must balance the right of every person to a clean and healthy environment with the socio-economic rights of landowners, and persons utilizing forest resources. Public participation, including through consultation and access to information relating to decisions are mandatory principles and values of government stipulated under article 10 of the Constitution.

12.2.2 The County is home to various indigenous people communities: Sengwer, Cherangany, Kiptani and Ogiek. These communities are recognized as part of marginalized communities by the Constitution. The Sengwer community have laid a claim that Embobut, Kiptaberr, Kaisungor, Sogotia, Kerer, and Chemurgoi forests are their ancestral home. The claim, put forward as a historical injustice, asserts a right for the Sengwer community to settle in three glades of Embobut forest, and conserve the other forests. The claim by the Sengwer includes seeking conversion of these forests into community land/forest in terms of article 63(2)(d)(ii) of the Constitution.

12.2.3 Historical land claims over public forests within the County have also been made by the Marakwet community, over Embobut forest. The Cherangany community has also raised historical land claims. However, there are differences of identity with some members of the Sengwer community indicating that they are one indigenous people with the Cherangany, while representatives of the latter disagree with this assertion. The Marakwet community has also made historical land claims that Embobut forest is their ancestral home.

12.2.4 Additionally, there has been complaints by the various indigenous communities about violation of human rights especially in terms of access to public forests managed by the Kenya Forest Service. As the County is the local governing authority, there is an inherent

responsibility to intervene on behalf of the complaining communities and support investigative and other efforts to resolve these complaints and promote the protection of human rights.

12.2.5 The County government should formally engage with the National Land Commission to advocate for priority admission of Sengwer historical land injustice claims over Embobut forest, and support implementation of the remedy given by the Commisison. This action by the County government should include supporting any historical land claims made by other indigenous and local communities, including the Cherangany, Kitani, Ogiek and Marakwet.

12.2.6 In accordance with article 56 of the Constitution of Kenya, the County should put in place affirmative action programmes to support the indigenous communities to fully integrate into county and national social and economic activities including education, employment, empowerment and other opportunities. This includes taking specific steps to protect culture, and indigenous knowledge. Interventions should also take into account that other local communities maybe marginalized, through historical political circumstances and should be covered by affirmative actions.

12.2.7 The implementation of the county forestry and tree growing programmes successfully and in a sustainable manner will, on a large part, depend on active participation of the public, and landowners and experts as stakeholders. The county must ensure that all county forestry activities including public consultation during decision making, access to information, provision of awareness to the public on important information, and access to dispute resolution mechanisms including traditional or local mechanisms, and the courts.

12.2.8 Mainstreaming gender considerations in the forestry activities and plans will be important in order to disaggregate how women and men are impacted, and their respective contributions. Women, due to the division of responsibilities at household level, bear the larger burden of land cultivation, collection of firewood or water. This is worse where there is land degradation due to deforestation and poor agricultural land use practices. It is therefore important to ensure constructive participation of women in decision making concerning farm-level forestry.

12.2.9 The youth have an important role to play in society and are entitled to consultation during decision making on matters relating to forestry and tree growing. The role of the youth is related to cultivating a new cohort of skilled individuals who have the capacity to refine and develop implementation of county forestry and tree growing strategies and plans in the medium, and, long term periods.

12.3 Policy Directions:

The County Government will:

1. Ensure that all forestry and tree growing plans, measures and activities respect, protect, fulfil the human rights set out in the Bill of Rights.
2. Proactively engage with the National Land Commission to facilitate the formal admission, and hearing of the historical land claims of the indigenous communities in the County (Sengwer, Cherangany, Ogiek, Kitani) and the Marakwet & Keiyo communities over Embobut and other forest, and support implementation of the granted remedies.
3. Engage with national government human rights and investigative agencies to ensure credible investigations and inquiries are undertaken concerning any complaints of human rights violation by communities regarding access to public forests.
4. Put in place affirmative action programmes to support the full integration of all indigenous communities in the county into county and national social and economic activities including education, employment, empowerment and other opportunities.
5. Ensure all forestry and tree growing decisions take into account specific gender issues affecting women and men, including through collection of dissagregation data to ascertain roles and needs of women and men, and amongst women in forestry.
6. Implement a programme to develop and increase the capacity of women and their participation in forestry and tree growing actions, including participation and leadership.
7. Develop programmes for training and participation of the youth in county forestry and tree growing programmes, including employment and entrepreneurship.
8. Develop and implement a public participation strategy, including consultation, access to information and dissemination of relevant information on forestry, taking into account the unique needs and higher thresholds of consultation with indigenous peoples and local communities.

13. Actions for Enabling Implementation of Sustainable Forestry and Tree Growing

13.1 Policy Statement:

The County Government will implement the necessary enabling actions, including building resilience, low emissions development and mobilizing climate financing to ensure forestry and tree growing measures, plans and activities are sustainable.

13.2 County Context:

13.2.1 In order for forestry and tree growing to be sustainable, the County government will put in place and implement enabling actions that support and complement policy measures and implementation steps.

13.2.2 Climate change presents a major threat to the county. Kenya has enacted the Climate Change Act, No.11 of 2016 together with Sessional Paper No.5 of 2016 on Climate Change Policy Framework. This require the county government to mainstream adaptation actions, to build resilience and adaptive capacity, in all forestry activities. Similarly, it is required to integrate mitigation actions that contribute to reduction of GHG emissions through carbon storage and sequestration. Forestry and tree growing activities, when screened for climate risk vulnerability, and GHG abatement potential, can contribute significant benefits to the community through resilience and adaptive capacity, and to Kenya's GHG reduction commitments under the Paris Agreement. Contributions to GHG emissions reductions can be quantified as carbon emissions credits which can be traded internationally, bringing additional financing benefits to the communities. However, this must comply to the global rules relating to carbon credits. Important mechanisms that are compatible to forestry and tree growing include Reducing emissions from deforestation and forest degradation (REDD+) programmes, as well as other carbon credits programmes that are independently verified and certified. This however requires, among other key elements, that land tenure rights of individuals or communities are ascertained and secured to avoid disputes on the ownership of carbon credits. The Elgeyo Marakwet County Forest Policy takes a jurisdictional approach to promoting low-emissions development that will reduce deforestation at the County level while also contributing to the national policies, frameworks and targets for reducing greenhouse gas emissions from the land-use, land-use change and forestry sector. The jurisdictional approach recognises the advantages of cross-policy platforms

and multi-stakeholder approaches to reducing emissions at the subnational scale, where decisions on land-use and forestry are made and comprehensive policies can be effective. Yet this approach also promotes alignment with national and international commitments to climate mitigation, including national REDD+ strategy and Investment plan and the United Nations Framework for Climate Change Convention (UNFCCC). For a subnational jurisdiction to participate in a compliance market, a national nesting framework will be required. This framework will ensure that emissions reductions generated at a subnational scale are of high integrity and comply with national targets (including NDC accounting) as well as international standards.

13.2.3 Children represent the bridge between present and future generations. The County should invest in forestry extension education to be provided to school children in basic education as a co-curricular activity by extension officers, including practical activities.

13.2.4 Implementation of forestry and tree growing activities will require financing. The county should determine that, at a minimum, a percentage of its annual budget will be set aside to finance forestry and tree growing activities with clear actions, outputs and outcomes. Transparency and good governance should be integrated into this participatory process. This should include provision of direct and indirect incentives to landowners who implement sustainable land management and other measures beyond the minimum standards required by law. Direct incentives, provided by the county government could include free or subsidized farm inputs, local infrastructure, grants, relief from property taxes (where applicable), exemption from Cess, or concessional rates, subsidized loans, and minimum price guarantees for certain products such as fruits. The national government could provide concessional tax rate on income generated from forestry and tree growing activities on private and community land. Indirect incentives include concessional interest rates on loans, access to loans and grants from special funding mechanisms (e.g. a county forestry fund), land tenure security through adjudication and registration, extension services, forestry research and development.

13.2.5 A key justification for this policy, and promotion of sustainable forestry and tree growing is to integrate disaster risk reduction in land use activities. The county has experienced, over a long period, the loss of tree cover and biodiversity as more land was opened up for settlement and farming. The challenge of settlement, farming and livestock keeping

on the escarpment and the hanging valleys creates the imminent risk of mudslides which results in tragic loss of life, property and injuries to people. It is important that functions of the county government are undertaken with cognizance on the need to identify disaster risks and vulnerability, and to take action to integrity preventive actions. As the process of reestablishing farm forests, trees and biodiversity will happen over the medium-term period, the county requires a public safety system such that citizens are aware of rules and protocols to follow during disasters. This includes moving from vulnerable locations, first aid procedures, and survival packs where possible or viable.

13.2.6 Implementation of the proposals in this policy will be a complex exercise, undertaken either through administrative action or legislation. The County requires properly designed, clear and measurable compliance standards to ensure citizens can implement without challenges. Incentives and enforcement mechanisms, including sanctions, will be required. Equally, a mechanism for supporting landowners, such as through extension services, and local level peer learning amongst residents remain critical.

13.2.7 A grievance redress mechanism, which includes conflict management and dispute resolution mechanisms is required. This is because the scope and extent of forestry and tree growing actions proposed by this policy may result in disagreements between landowners, or disagreement with instructions or guidance given by public officers. In line with the Constitution, it will be important to promote alternative dispute resolution mechanisms, including negotiation and mediations. Integration of traditional mechanisms remains important so long as they abide by the Constitution. Formal dispute resolution mechanisms, including tribunals and access to court are important to ensure firm resolution of disputes that escalate.

13.3 Policy Statements

The County Government will:

1. Ensure that forestry and tree growing activities are screened for climate change risk vulnerability and GHG emissions and appropriate mitigation and adaptation actions are mainstreamed.
2. Integrate the relevant provisions of the National Climate Change Action Plan into the county forestry programmes.
3. Establish and maintain tree nurseries including collaboratively with landowners and national government agencies to develop

appropriate seedlings of indigenous and exotic trees.

4. Identify a GHG emissions reduction target from the Land Use, Land-Use Change and Forestry (LULUCF) sector in the county.
5. Put in place appropriate forestry and tree growing activities for certification and trade in carbon credits including REDD+ activities.
6. Implement low emissions development programmes that will reduce deforestation and land degradation and contributing to Kenya's GHG reduction targets under NDC and in accordance with the REDD+ strategy.
7. Coordinate with the Ministry responsible for Education to design and implement a forestry extension co-curricular programme for school children undertaking basic education in the county.
8. Annually allocate not less than ten percent (10%) of the total county development budget for forestry and tree growing plans, measures and activities.
9. Design and implement direct and indirect incentives to support uptake and implementation of sustainable forest and tree growing and management.
10. Put in place and disseminate a public safety manual that guides citizens on how to behave during natural disasters such as mudslides in order to protect life and property.
11. Build the capacity of all county officers responsible for implementing this policy to ensure the mainstreaming of disaster risk reduction measures in decisions.
12. Annually allocate not less than ten percent (10%) of the total county development budget for climate change interventions.
13. Ensure appropriate and optimal compliance standards, technical support and extension mechanisms and enforcement systems are put in place administrative or through legislation.
14. Develop and disseminate a county manual on forestry and tree growing grievance redress mechanisms including conflict management, and alternative dispute redress mechanisms including appropriate traditional systems.

14. Institutional and Legal Arrangements Sustainable Forestry and Tree Growing

14.1 Policy Statement:

The County Government put in place institutional mechanisms to steer sustainable forestry and tree growing, and for mainstreaming of forestry activities in relevant sectoral areas.

14.2 County Context:

14.2.1 An appropriate institutional mechanism is required to ensure implementation and compliance with this policy and any legislation developed thereunder. There is a County Environment Committee enacted through the 2017 County Charcoal Act. The mandate of the committee is restricted to dealing with charcoal production. This committee, as designed, is unsuited for implementing a broad-based policy and legal framework whose objective is achieving sustainable forest management and tree growing to restore and protect land, biodiversity and ecosystems in the county.

14.2.2 The scope of technical actions and interventions proposed by this policy is widespread and requires change in attitudes across the county public service. Many of the actions involve mainstreaming sustainable forestry and tree growing into existing and traditional modes of implementing mandates. For this reason, county-wide oversight is required through an institutional mechanism that possesses extensive political authority, technical capacity, and broad-based representation and participation of communities and stakeholders. This Policy proposes the establishment of a County Forestry and Tree Growing Council, headed by the Governor and comprising membership from county technical departments and relevant stakeholders. This body would exercise overall oversight on implementation of this Policy**.**

14.2.3 In terms of technical capacity and mechanisms for coordination, it is important for the County to put in place a civil service level technical department under the authority of the CECM responsible for forestry. It is proposed that a Forestry and Tree Growing Directorate be established for that purpose, reporting to the Chief Officer responsible for forestry. This Directorate will, on behalf of the Forestry and Tree Growing Council, be responsible for ensuring that all relevant county departments and agencies, whose mandates impact forestry and tree growing, are mainstreaming this policy into their plans, budgets and actions. It will serve as the Secretariat and provide the headquarters

and all technical functions for the County Forestry and Tree Growing Council, including coordination with national government agencies on forestry for technical support, and the sharing of data and knowledge.

14.2.4 Implementation of county forestry and tree growing actions will require decentralization of actions, and the active participation of landowners, local communities and stakeholders. This requires establishment of appropriate local-level institutional mechanisms to enable their participation in these activities, including as means for peer-to-peer extension education. Enactment of one or several legislations, including amendments to existing county legislation will be necessary over time and based on need to realize objectives of this Policy.

14.3 Policy Directions:

The County Government will:

1. Establish a county forest and tree growing council to provide oversight and approval of forestry and tree growing including the mainstreaming in relevant sectors.
2. Establish a Forestry and tree growing Directorate within the Office of the CECM responsible for forestry, in order to ensure that all relevant county departments and agencies, whose mandates impact forestry and tree growing, are mainstreaming this policy into their plans, budgets and actions.
3. Ensure there is sufficient financial and human capacity for the Forestry and Tree Growing Directorate.
4. Establish and facilitate local-level forestry and tree growing forums to facilitate decentralization and active participation of landowners, local communities and stakeholders.

15. Implementation, Monitoring and Evaluation Framework for the County Sustainable Forestry and Tree Growing Policy

15.1 Policy Statement:

The County government will put in place a strengthened implementation framework for effective and efficient deliver, monitoring, evaluation, and reporting on progress on the implementation of this policy.

15.2 County Context:

15.1.1 This policy will guide all county institutions in the planning, coordinating, financing, development and mainstreaming the implementation of sustainable forestry and tree growing in Elgeyo Marakwet county.

15.1.2 Effective implementation of this Policy will require clarity in understanding of its goals, guiding principles, the policy statements and directions, and the county institutional framework. This will need to be sufficiently disseminated, and the capacity of all staff enhanced.

15.1.3 The County government will need to build up on the current stakeholder engagement and enhance public participation during forestry and tree growing decision making processes. It is therefore important for the County government to design and implement a program of induction for all staff, on this policy upon its approval by the County Assembly.

15.1.4 The implementation of the policy will be guided by the responsible CECM, the County Environment Committee with the Forestry Coordination Secretariat performing technical functions. undertaken by multiple departments and agencies of the county government, as well as private sector, civil society and communities. Sectoral departments whose mandates impact or are impacted by forestry and tree growing will require to mainstream this policy. For this reason, there is need for harmonization and coordination of their respective activities to provide synergy, eliminate duplication, and minimize risk of deleterious outcomes.

15.1.5 The County government will enact county level forestry and tree growing legislation, that can legally anchor the policy statements, directions and institutional framework. This includes amendments to existing county legislation will be necessary over time and based on

need to realize objectives of this Policy.

15.1.6 In order to implement this policy, the County government will develop a detailed implementation matrix that will identify all key actions required for each policy direction, the timelines, the pubic officers responsible, the outputs, budget, the manner of reporting, and any other relevant details. The actions identified in the strategy will be integrated into the public contracting provisions for the various county state and public officers.

15.1.7 Monitoring and evaluation of this policy is an important safeguard to ensure it is appropriately interpreted and fully implemented. It will provide reliable and timely data on progress, results and shortcomings of the Policy implementation to inform decision makers, stakeholders and the public. Performance contracting has been identified as a useful tool through which targets, inputs and the resultant outputs can be determined and evaluated, and it will need to be internalized and deployed for climate change and the mainstreaming approach. This includes formalizing county systems for sharing data, information and knowledge arising from their experiencing implementing this climate change policy.

15.2 Policy Statements

The County Government will:

1. Establish and operationalize, with adequate financing and staff, a county forest and tree growing council with mandate to oversee implementation of this policy.
2. Develop and implement a sensitization program for the dissemination and communication of the policy to key stakeholders and the public.
3. In consultation with other county departments and agencies, develop and operationalise a stakeholder engagement and public participation strategy and plan to disseminate and monitor implementation of this policy.
4. Implement appropriate system for the coordinated data and information collection, monitoring reporting on this policy.
5. Require each county department with a responsibility under the Policy to undertake continuous Monitoring and Evaluation and report to the county forest and tree growing council through the Directorate.
6. Ensure the implementation of this policy is guided by an Implementation Matrix that identifies all key actions required for

each policy direction, the timelines, the public officers responsible, the outputs, budget, the manner of reporting, and any other relevant details.

7. Integrate the implementation of this policy into performance contracting process and indicators for all state and public officers in the county.
8. Provide adequate financial resources for development, implementation and monitoring of the policy implementation matrix.
9. Enact and operationalize and County legislation on sustainable forestry and tree growing.
10. Undertake a review of existing county laws and undertake required amendments to support the objectives of this policy

Bill Technical Working Group

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7.	Anthony Musyoka	EC, Kenya Forest Service
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9.	Emmy Kosgei	MD Chemawasco
10.	Paul Yator	MD Itwasco
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12.	Elias Kimaiyo	Community Representative
13.	Paul Kibor Kitum	Community Representative
14.	Philemon Cheptarus	Community Representative
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18.	Brenda Cheboi Jepkore	Community Representative
19.	Albina Cheboi	Community Representative
20.	Joseph Kiprotich	Community Representative
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Comments and views are invited from the public

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