

REPUBLIC OF KENYA

MINISTRY OF ENVIRONMENT AND FORESTRY

NATIONAL STRATEGY FOR ACHIEVING AND MAINTAINING OVER 10% TREE COVER BY 2022

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1. NATIONAL FOREST COVER MAP, 2010

Kenya's forest cover was 6.99% in 2010. This status was according to the comprehensive National Forest Resources Assessment and Mapping report (KFS 2013).



Figure 1 Distribution of the Kenya's forest cover (KFS 2010)

1. BACKGROUND

1.1. Rationale for this strategy

This strategy, which is aligned to the National Forest Program, is a cross-sectoral framework that provides for:

- Broad Institutional and multi-stakeholder participation in accelerating the achievement of the Constitutional target of 10% tree cover of the national land area as provided under Article 69 (1) (b);
- (ii) Implementation of Presidential Directives that the Constitutional target of 10% national tree cover should be achieved by 2022 through among other initiatives the revival of Chief's tree nurseries with technical support of Kenya Forest Service and allocation of 10% Corporate Social Responsibility (CSR) to tree growing;
- (iii) Opportunity to achieve national and global commitments with respect to climate change, biodiversity conservation, and land degradation. The government has committed to restore 5.1 million Ha of degraded landscapes as a contribution to the Africa Forest Landscape Initiative (AFR100), 50% reduction of green house gases from the forest sector by 2030 as part of its Nationally Determined Contribution (NDC) to climate change, and to achieve land degradation neutrality by 2030 as a commitment to United Nations Convention to Combat Desertification (UNCCD);
- (iv) Shared responsibility towards addressing public concerns with regard to continued deforestation, forest degradation and the need for enhanced protection, conservation and sustainable management of forest resources ;
- (v) Enhancing the contribution of the forestry sector towards implementation of the Big 4 Agenda. The environment and forest sector is the foundation upon which the performance of the key primary sectors of the economy is anchored including, manufacturing, energy, health and agriculture.

The strategy provides for a series of interventions towards achieving and maintaining 10% tree cover by 2022.

1.2. Extent of national forest cover

- (i) The last comprehensive forest cover assessment, "wall-to-wall", 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.
- (ii) Gazzetted public forests managed by Kenya Forest Service cover 2.59 million Ha. Their distribution is as contained in *annex 1*.
- (*iii*) In 2015, the forest cover was estimated at 7.2% based on the national projection from the 2010 forest cover data. This is according to the Global Forest Resources Assessment Report, 2015 (FAO, 2015).
- (iv) The forest cover is below the recommended minimum global standard of 10%. Kenya has set the goal of increasing and maintaining the national tree cover to at least 10% by 2022.
- (v) Analysis of land-use change over the period 1990-2015 has established that Kenya lost 311,000 Ha of forestland. Forest cover loss is mostly due to conversion to settlements, crop farming and infrastructure developments. This is summarized in table 1.
- (vi) The increasing and largely rural population and high dependency on rain-fed agriculture also explains the expansion of the croplands at the expense of the forestland.

Land use	1990	2000	2005	2010	2015
Forest land	4,724	3,557	4.047	4,230	4,413
Crop land	9,258	9,661	9,868	10,072	10,276
Grassland	41,522	41,654	41,496	41,080	40,664
Settlement	57	87	109	126	143
Other lands	1,004	1,574	1,035	1,044	1,053
Wetlands	1,472	1,504	1,482	1,485	1,488
Total area	58,037	58,037	58,037	58,037	58,037

Table 1: Land-use area changes in Kenya ('000 Ha), 1990-2015

Source: FAO, 2015

1.3. Forest types

(i) Forests in Kenya are classified into four (4) major forest types and eight sub-types. Table 2 presents information regarding the forest types, sub-types and the approximate area for each category as at 2010.

Table2: Forest types

Forest type		Forest sub-types	Approximate	% of total
			area (Ha)	forest area
1.	Western rainforest	Natural forest (mixed indigenous)	144,615	3.5
		[Kakamega, Nandi forests]		
2.	Montane forests	Natural forest (mixed indigenous) which	1,359,860	32.9
		include Mt. Kenya, Aberdares, Mau,		
		Cherangany, Mt. Elgon, Matthews Ranges		
		and Chyulu Hills		
		Bamboo	85,693	2.1
3.	Coastal forest	Natural forest (mixed indigenous trees)	295,871	7.2
		[Arabuko sokoke, Dakatcha, Boni, Shimba		
		Hills, Kayas]		
		Mangroves	48,522	1.2
4.	Dryland forests	Natural forest (mixed indigenous trees)	1,875,316	45.4
		[Hilltops in Eastern and Northern Kenya		
		and Lake Victoria regions]		
		Riverine forest	135,231	3.3
5.	Forest plantations	Public and private forests	186,716	4.5

Source: KFS 2013, based on the forest cover mapping of 2013 using 2010 satellite imageries

2. NATIONAL POLICIES AND LEGAL FRAMEWORKS

The following laws and policies have direct relevance in supporting this strategy of increasing the tree cover to 10%;

(i) The Constitution of Kenya

The Constitution requires the Country to increase and maintain tree cover at a minimum 10% of the total land area. Article 69 (1) (b) emphasizes on the need to "work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya".

(ii) The Kenya Vision 2030

The Vision places the environmental sector in the social pillar and emphasizes the need to conserve natural resources to support economic growth. For forests, the goal is to increase area under forest to 10% by 2030 and sustainably manage natural forest resources for environmental protection and enhanced economic growth.

(iii) Medium Term Plan III (2018-2022)

Under the Medium Term III, the government has committed to protect natural forests in the water towers and continued rehabilitation of landscapes to increase and sustain water flow and ecological integrity.

(iv) Forest Conservation and Management Act 2016

Section 6(3)(a)(iii) highlights the need to develop "programmes for achievement and maintenance of tree cover of at least 10% of the land area of Kenya".

Section 37(1) requires every County Government to, establish and maintain arboreta, green zones or recreational parks for use by persons residing within its area of jurisdiction. In this regard, every County shall cause housing estate developers within its jurisdiction to make provision for the establishment of green zones at the rate of at least 5% of the total land area of any housing estate intended to be developed.

(v) Environmental Management and Coordination CAP 387 and (Amendment) Act, 2015

The Act Provides for protection of forests and environmental impact assessments of forestrelated developments.

Section $9(2)(\mathbf{r})$ of the Act requires NEMA to work with other lead agencies to issue guidelines and prescribe measures to achieve and maintain a tree cover of at least 10% of the land area of Kenya.

Section 44 of the Act requires that NEMA in consultation with other relevant lead agencies, develop, issue and implement regulations, procedures, guidelines and measures for sustainable management of hilltops, hillsides and wetlands.

(vi) Agriculture (Farm Forestry) Rules 2009

These Rules shall apply for the purposes of promoting and maintaining farm forest cover of at least 10% of every agricultural land holding and to preserve and sustain the environment in combating climate change and global warming. Part II Section 6 of the Rules specifically deals with the maintenance of 10% tree cover.

3. THE ROLE OF FORESTS IN ENHANCING ECOLOGICAL INTEGRITY AND NATIONAL DEVELOPMENT

The environmental, economic and social development of any country is centred on its environment, natural resources and the choice of appropriate conservation and management strategies, (MENR, 2016).

3.1. Ecological functions of forests

Forest ecosystems are important in supporting ecological integrity and provide a wide range of services including;

(i) Foundation for the success of other productive sectors such as agriculture, tourism, infrastructure, livestock, wildlife, industry, water, health and energy;

- (ii) Support to a wide variety of ecological niches with about 7,000 indigenous plant species;
- (iii) Reservoirs for biodiversity and critical habitats for wildlife. Mangrove forests for example are essential breeding grounds for fish and protect the coastal areas from degradation;
- (iv) Dryland forests are critical to human existence and drought resilience in the ASALs.
- (v) Climate change mitigation and adaptation;

For example, an assessment done in Mau Forest Complex, Cherangany Hills, and Mt. Elgon ecosystems estimated that the total economic value (TEV) of the three water tower ecosystems is estimated to be **KES 339 billion** per year which translates to about 5.0% of Kenya's GDP (2017) as shown in table 3.

Type of Ecosystem	Ecosystem Services	Annual (KES)	Contribution to TEV
Services			(%)
Provisioning	Timber and Non-timber	22,941,590,363	6.33
	Food Production	634,770,000	0.18
	Water	3,427,027,000	0.95
	Hydropower	11,983,679,000	3.31
	Biodiversity	5,712,786,000	1.58
	Tourism	9,300,000,000	2.57
Subtotal		53,999,852,363	14.90
Regulating	Water Flow	2,960,143,000	0.82
	Water-Quality Regulation	1,155,366,000	0.32
	Carbon Sequestration	176,657,067,000	48.75
	Oxygen Generation	118,461,049,000	32.69
	Microclimatic Regulation	2,099,161,000	0.58
Subtotal		301,332,786,000	83.16
Supporting	Soil Conservation	1,060,000,000	0.29
	Nutrient Conservation	4,499,000,000	1.24
	Pollination	930,564,000	0.26
Subtotal		6,489,564,000	1.79
	Cultural and Spiritual	235,358,000	0.06
	Bequest	297,905,000	0.08
Subtotal		533,263,000	0.15
Grant Total		362,355,465,363	100.00

 Table 3: Total Economic Value for Mau, Cherangany, and Mt. Elgon ecosystems

3.2. Contribution of forests to the economy

i) The contribution of the forest sector to the GDP is estimated at USD 365 million (3.6%) annually, excluding environmental services, non-timber products, and contributions to other sectors and household wood energy (FAO, 2014). This represents an under

valuation of the sector contribution to the national economy, largely due to the subsistence nature and informal marketing of most of the forest products (UNEP, 2012).

ii) The Current Economic Survey (2019) estimates the contribution of environment and natural resources at 3.2% of the GDP in 2018.

3.3. Forests and the Big 4 agenda

Forests are enablers of the big 4 Agenda whose contributions are described as follows;

i) Housing: The success of the government's plan to provide at least 500,000 affordable and decent housing by 2022 will depend strongly on the inputs from the forest sector, including; timber, poles, pulp, veneer, parquets. The furniture industry, which strongly depends on inputs from forests, has an estimated annual production value of KES 23 billion (Creapo Oy, 2014).

Kenya is a net importer of sawn timber, panel products paper, furniture and transmission poles. In 2011; these imports, mainly from D.R. Congo, Tanzania, South Sudan, Malawi and Mozambique were worth USD 50 million. Between 2009 and 2013, Kenya imported Timber from DRC and Tanzania worth Kshs 15.6 billion.

ii) Health: Forests play critical roles in the achievement of 100% Universal Health Care (UHC) by supporting; production of raw materials for the pharmaceutical industry, absorption of pollutants, water purification, herbal medicine, and improved nutrition. There is significant clinical evidence that deforestation has significant impact on the mosquito vectoral capacity by increasing the number of new mosquito infections from one infected individual by 77%.

World Health Organization (WHO) estimates that 80% of the population of developing countries relies on traditional medicine, originating from forests, for their primary health care needs. It is further estimated that 60 % of anticancer and antihypertensive drugs are of plant origin. Forests and trees serve as natural air conditioners, filter harmful pollutants and act as carbon sinks.

- iii) Manufacturing: Forests provide raw materials, energy sources for the industries, power transmission, and water sources. The assessment, of Mau Forest Complex, Cherangany Hills, and Mt. Elgon ecosystems valuation, established that they provide 35 million m3 of water valued at KES 3.4 billion per year for irrigation, industry, and commercial uses by various stakeholders.
- **iv) Food Security**: Source of food, fodder for Livestock, soil and water conservation, household incomes, and employment. The Mau, Cherangany and Mt. Elgon ecosystem contribution towards production of fodder, food (fruits, game meat), planted food crops (maize, potatoes, peas, etc) is estimated at KES. 634,770,000. The rivers and

streams that emanate from these ecosystems support the irrigation of 52,030 hectares of agricultural land in Kenya, thus making invaluable contributions to food security. They support soil and nutrient conservation, provision of water and habitat for pollinators.

3.4. Forests and water

- i) Under Article 43(1)(d) of Constitution of Kenya, every person has the right to clean and safe water in adequate quantities. However, the country is classified as a water scarce country where the renewable water resource is 647 m³ per capita which is below 1,000 m³ threshold.
- ii) Forests have capacity to store water during the rainy seasons and release it slowly, ensuring water flow during dry periods, thus providing resilience to seasonal weather variations.
- iii) Of great importance also are the five critical montane forests, (Mt Kenya, Aberdare Ranges, Mau Complex, Cherangani Hills and Mount Elgon). These montane forests serve as water catchments for major rivers draining into the major water bodies in Kenya and the East African Region. 'investment in sustainable forest management and conservation of water catchment is critical to Kenya's rural and urban water supplies, and hydropower generation.
- iv) Ecological functioning of forests is threatened by agricultural expansion, overexploitation and unsustainable use. Between 2000 and 2010, deforestation in the water towers amounted to an estimated 50,000 hectares per year, leading to reduced water availability by approximately 62 million cubic meters per year (UNEP, 2012);
- v) The continued existence and sustainability of irrigation schemes and water reservoirs, which are a major investment by government and the private sector are dependent on the ecological stability of the water catchments;

3.5. Forests and energy

 i) Over 80% of Kenyan rural households rely on wood fuel either as firewood or charcoal. The charcoal industry is a leading contributor to job creation, employing approximately 700,000 people, and estimated to support between 2.3–2.5 million dependents (MENR, 2016);

- **ii)** The Country will need to invest heavily in alternative energy sources for cooking and lighting, to address the over reliance on woodfuel which is associated with deforestation and forest degradation.
- iii) Hydro power generation in Kenya is derived from the forested catchments of Kenya's water towers and principally from the Aberdares Mt. Kenya, Mau, and Charangani forest ecosystems. Forests are the main source of water for hydropower electricity generation, currently estimated at 282.8 megawatts valued at KES 11.9 billion per year but with a potential of 508 megawatts once the full capacity is exploited.

3.6. Forests and Climate Change

- Forests, due to their capacity to act as carbon sinks and by providing key environmental services, are globally recognized as critical in climate change mitigation and adaptation. This capacity can be enhanced through conservation, rehabilitation of degraded areas, afforestation and reforestation activities;
- **ii)** By providing important environmental goods and services, including water, biodiversity conservation, soil erosion control, maintenance or improvement of landscape, forest landscapes are credited with strengthening community resilience to climate change;
- iii) Analysis in the Kenya's National Climate Change Action Plan (NCCAP), the second National Communication (SNC) and nationally determined contribution (NDC) indicates that the forestry sector has the highest potential to reduce greenhouse gas emissions and therefore the highest potential to deliver on Kenya's NDC;
- iv) Kenya has made a commitment to the UNFCCC, to participate in REDD+ as a global mechanism to reduce greenhouse gas emissions from deforestation and forest degradation while protecting available forest resources and promoting afforestation and reforestation activities. This also provides an opportunity for the forest sector to tap into global funding mechanisms. There exists a potential for carbon trading using credits from REDD+ and other forestry related activities.

4. INTERNATIONAL CONVENTIONS AND OBLIGATIONS

4.1. Commitments to global initiatives and Multilateral Environmental Agreements (MEAs)

 i) Restoration of 5.1 million Ha by 2030 of degraded landscapes as part of its contribution to the Africa Forest Restoration Initiative (AFR100) and the Bonn challenge, both of which contribute to the Paris Agreement goals and the United Nations declaration of forests;

- ii) Reduction of 11 million tons of greenhouse gas emissions every year upto 2030 from the forest sector as an obligation to the Paris Climate Change Agreement. This will require huge investments in restoration of degraded landscapes and new afforestation and reforestation programmes.
- **iii**) Land Degradation Neutrality (LDN) by 2030 as its contribution to the United Nations Convention to combat desertification (UNCCD).

Kenya has also ratified the following MEAs:

- i) Convention on Biological Diversity (CBD) in relation to biodiversity and the Nagoya Protocol on access to generic resources and benefit sharing (ABS) most of which resources in Kenya occur in forests;
- ii) United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement identifies forestry as a key vehicle for delivering global climate change goals. Under the obligation Kenya has developed; the climate change policy and Act, and the National Climate Change Action Plan. The implementation of the action plan will contribute to the achievement of the 10% tree cover;
- iii) United Nations Convention to Combat Desertification (UNCCD) recognizes afforestation as key in arresting the spread of deserts. Kenya has committed to land degradation neutrality by 2030. National action plan for restoration of degraded sites in ASALs, and Climate Smart Agriculture Strategy exist to support the national efforts;
- iv) United Nations Forum on Forests (UNFF) which has developed a Strategic Plan for Forests (2017-2030) that operationalizes the Global Forest Goals on sustainable management of all forests and trees outside forests;
- v) Convention on International Trade in Endangered Species (CITES). Forest provide habitat for a wide verity of endangered species of fauna and flora.
- vi) Convention for the protection of world cultural and natural heritage (UNESCO). Forests, because species diversity harbor most of the country's natural and cultural heritage, such as Kayas, indigenous resources and knowledge.

4.2. Forests and SDGs

Sustainable forest management positively impacts on several SDGs: SDG 1 (poverty eradication) by forests providing income to fight poverty; SDG 2 (zero hunger) through the provision of fruits, employment, reducing soil erosion, dry season grazing lands; SDG 3 (good health and well-being) through the provision of medicinal plants, ; SDG 6 (clean water and sanitation) through the provision of fresh water for drinking and irrigation; SDG 13 (climate action) through carbon capture and storage (CCS) and SDG 15 through contributions to biodiversity.

5. DRIVERS OF TREE COVER LOSS

While forests are recognized for their social, economic and environmental importance, deforestation, forest degradation and fragmentation of forests have undermined their capacity for sustainable delivery of these key services.

The major causes of tree cover loss include;

- i) Weak forest governance, coordination and collaboration in the management of public, community and private forests;
- ii) Increasing population and overreliance on forests for production of wood energy especially for charcoal. The gap between supply and demand for wood is estimated at 13 million m³;
- iii) Inadequate land and forest tenure security to support conservation and forest investments especially in community and private forests;
- iv) Forest and grassland fires and overgrazing in forest reserves, national parks, game reserves, community and private forests;
- v) Conversion of forest land to agriculture, settlements and infrastructure development arising from lack of implementation of national and CGs spatial plans;
- vi) Wastage in wood utilization especially in timber conversion and charcoal production; and
- vii) Climate change and associated impacts.

Reduced water levels in rivers and dams, declining economic activities arising from water rationing, loss of wildlife habitats, conflicts over water and pasture and increased soil and water erosion in catchment areas are major manifestation of deforestation and landscape degradation.

Strengthening of institutional capacities of Kenya Forest Service and County Governments to enable them implement their respective mandates, and providing incentives to catalyze community and private sector investment in tree growing and conservation efforts are critical in halting deforestation and forest degradation and driving positive transformation in the forest sector.

6. PRESIDENTIAL DIRECTIVES

The following Presidential Directives have been issued to support achievement of the 10% tree cover;

i) Accelerated attainment of 10% National tree cover by 2022;

- **ii**) Commitment at One Planet Summit during the UNEA4 Conference to achieve and surpass Constitutional target of 10% National tree cover by 2022;
- iii) Review of teaching curriculum to include sustainable forest management ;
- iv) All Chiefs to revive Chief's tree nurseries; and
- v) Allocation of 10% CSR budget for tree growing by all Ministries, Department and Agencies (MDAs).

7. AREA AND SEEDLINGS REQUIREMENTS FOR 10% TREE COVER

This strategy is premised on total seedling production of 1.8 billion over a period of 4 years

Table 5: Intervention areas (Ha)

Intervention Areas	Area	No of
	(Ha)	seedlings
1. Rehabilitation of degraded natural forests in gazzetted forests and	300,000	330,000,000
water towers		
2. Rehabilitation of degraded water towers and wetlands outside gazetted	100,000	110,000,000
forests		
3. Rehabilitation of degraded national parks, game reserves and wildlife	816ha	Natural
conservancies		regeneration
4. Rehabilitation of degraded mangrove ecosystems	17,036	18,739,600
5. Industrial forest plantation areas, restocked	31,000	34,100,000
6. Commercial private forests plantations established	150,000	165,000,000
7. Bamboo plantations established	50,000	55,000,000
8. Trees in farmlands established	350,000	385,000,000
9. Woodlots, botanical gardens, boundary planting established	70,000	77,000,000
10. Rehabilitation of degraded dryland forest landscapes	543,000	597,300,000
11. Greening of infrastructure (Roads, a long railway lines, dams), schools,	14,000	15,400,000
cooporates and MDAs		
12. Total	1,625,036	1,787,539,600

8. THE STRATEGY

8.1. Strategic Goal

The overall goal of the strategy is to accelerate actions towards the achievement of Constitutional, Vision 2030 and the Presidential Directives of 10% national tree cover, for environmental integrity and social economic development.

8.2. Strategic Objectives

This strategy will deliver on the following objectives;

- 1. Produce 1.8 billion quality tree seedlings by 2022 needed to increase tree cover to 10%;
- 2. Implement National policies, legislations and rules that require increased tree planting by 2022;
- 3. Strengthen institutional capacity of Kenya Forest Service to implement its mandate, including fire management and law enforcement and compliance strengthened;
- 4. Enhance conservation and protection of Natural forests on public, community and private lands and rehabilitation of degraded areas;
- 5. Strengthen Coordination and collaboration in the governance of the forest sector;
- 6. Establish commercial forest plantation on public, private and community lands to provide adequate and sustainable timber, poles and fuelwood for industrial and domestic consumption;
- 7. Implement innovative restoration programs, including the Greening Kenya Initiative; Greening of infrastructure and Institutions, the "Adopt a forest" concept and the Environmental Soldier Programme (ESP) of the Kenya Defence Forces to support seedlings production and rehabilitation of degraded forest areas;
- 8. Enhanced national tree planting campaigns through national and county tree planting events, public education, awareness, sensitization;
- 9. Adopt use of alternative Energy Sources and Efficient wood conversion and utilization technologies by institutions, industry and households;
- 10. Strengthen Forest resources assessment, monitoring and reporting capabilities of forest sector institutions.

9. STRATEGIC INTERVENTIONS

This strategy will be delivered through the following strategic interventions

9.1. Produce 1.8 billion quality tree seedlings by 2022 needed to increase tree cover to 10%.

9.1.1. Improved seed production

To achieve the 10% tree cover the country requires 1.8 billion seedlings in the next four years. This translates to a total collection and distribution of 90 tons of assorted tree seeds. To achieve this, the following interventions will be implemented;

- i) Enhance seed collection, processing and distribution;
- ii) Registration and regulation of seed collection by the private sector
- iii) Establish and maintain seed sources in all the eco-regions;
- iv) Develop and implement seed standards;
- v) Support tree breeding programs to enhance quality of planting materials.

9.1.2. Production of high quality seedlings

Sustainable supply of high quality tree seedlings is fundamental to the success of any tree planting. To facilitate production of 1.8 billion high quality seedlings in the next four years the following interventions will be implemented;

- i) Secure quality tree seeds;
- ii) Enhance capacity of KFS tree nurseries;
- iii) Establish model tree nurseries for seedlings for production of 20,000 seedlings each per year;
- iv) Implement the Greening Kenya Initiative by National Prisons Service and National Youth Service;
- v) The Ministry of Interior and Coordination of National Government, through the County Commissioners to establish 8,500 Chiefs' tree nurseries with an annual capacity of 20,000 seedlings each;
- vi) Incentivize production of quality seedlings by County Governments and the private sector;
- vii) Registration and certification of all tree nurseries;

9.1.3. Avail information on site species matching

To optimize on the survival of trees and establishment of forests, the species site matching guidelines will be updated and availed to the public. To achieve this, the following interventions will be implemented;

- i) Translate and disseminate the guidelines to the tree nurseries operators, county governments and the private sector;
- ii) Conduct awareness campaigns for the stakeholders;
- iii) Upload the guidelines on KEFRI, KFS and the Ministry's websites.

9.2. Enhance conservation and protection of natural forests on public, community and private lands and rehabilitation of degraded areas

This strategy seeks to protect, conserve and rehabilitate all natural forests and water towers. The following interventions will be employed;

- i) Enhance protection of the existing 4.18 million Ha of natural forests and water towers, of which 2.59 million Ha are public and managed by Kenya Forest Service;
- ii) Use of technology for establishment, surveillance and protection;
- iii) Rehabilitate 300,000 Ha through enrichment planting;
- iv) Fence 1,500 Kms of natural forest boundaries;
- v) Rehabilitate 200,000 hectares through natural regeneration;
- vi) Rehabilitate 50,000 hectares of degraded community and private forests;
- vii) Promotion of alternative livelihood enterprises;

9.3. Rehabilitation and conservation of mangroves

This strategy will enhance protection and conservation of mangroves to ensure continuous provision of goods and services. The interventions will include;

- i) Implementation of the Mangrove Management Plan (2017-2027);
- ii) Rehabilitation 17,036 ha of degraded mangrove through partnerships;
- iii) Enforcement of regulations in licensing of mangrove harvesting;
- iv) Development and implementation of guidelines on mangrove restoration.

9.4. Establish commercial forest plantations on public, private and community lands

9.4.1. Improve productivity and management of public forest plantations

Public forest plantations cover 135,000 Ha. The strategy will seek to enhance the productivity of these plantations through the following interventions;

- i) Develop and implement a sustainable management strategy with an institutional framework for public forest plantations;
- ii) Restock 31,000 Ha of planting backlogs;
- iii) Maintain 5,240 Km fire breaks
- iv) Maintain 8,236 Km of forest roads;
- v) Implement silvicultural operations (pruning and thinning) in 54,000 Ha;

9.4.2. Establish commercial forests on private land

Commercial private forest plantations provide the best opportunity to offset the national wood supply deficit, and supplement the wood supply from public forests. This strategy seeks to promote establishment of commercial forest plantations through the following interventions;

- Private sector and farmers to establish 300,000 Ha of plantations, including commercial charcoal production belts;
- ii) Provide technical support to the Tree Growers Associations for establishment and management of high value plantations;
- **iii**) Appropriate policy, fiscal and other incentives provided to commercial private forest enterprises, including access to forest financing facilities;
- iv) Establish private forest register by mapping the established plantations;
- v) Upscale innovative funding for sustainable farm forestry and livelihood enterprises.

9.4.3. Promote bamboo growing

Bamboo presents diverse opportunities that broadly supplement forest products. This strategy seeks to establish 50,000 Ha of bamboo largely through private sector investments. The following interventions shall be used;

- i) Develop and implement the bamboo policy;
- ii) Support establishment of bamboo by farmers and the private sector;
- iii) Support production of high quality bamboo seedlings by KFS and other stakeholders;
- iv) Develop bamboo value chains with reliable markets;
- v) Strengthen the capacity of Bamboo Association of Kenya / cooperatives.

9.5. Implement the Agriculture (Farm Forestry) Rules, 2009

This intervention will be targeted at planting of appropriate trees and fruits in the 10.5 million Ha of agricultural land using appropriate technologies. This will be achieved through;

- i) Support establishment of 350,000 ha of trees on farm forestry;
- ii) Adopt and promote high value fruit tree species such as avocado, mangoes and Macadamia for increasing tree cover;

- iii) Kenya Forest Service and the Agriculture Development Corporation (ADC) to establish and maintain 70,000 ha of forests within the ADC farms, which is equivalent to 10% of its total land area;
- iv) County Governments to revitalize forest and agricultural extension services.

9.6. Restoration of degraded landscapes in the Arid and Semi Arid Lands (ASALs)

ASALS face severe land degradation arising from unsustainable charcoal burning, overgrazing and erratic weather patterns. This strategy will rehabilitate 543,000 Ha over the next four years through the following;

- i) Impose a moratorium on unplanned settlements in the Arid and Semi-Arid areas;
- ii) Implementation of appropriate livestock grazing systems that promote tree growing;
- iii) Rehabilitation of degraded national parks, game reserves and wildlife sanctuaries;
- iv) Development and implementation of woodlands management plans;
- v) Promote natural regeneration of degraded forested landscapes;
- vi) Invasive Prosopis species controlled and managed by implementing the Strategic management plan;
- v) Pilot use of aerial seeding of grass and appropriate tree species.

9.7. Implementation of national forest policies, legislations and Strategies

All the non-gazetted public forests which include; community forests, green spaces and urban forests are managed by county governments. County governments are required to implement specific national policies on forestry which include; provision of forest extension services to communities, farmers and private land owners. The County governments will be expected to;

- i) The Ministry of planning and County Governments to integrate spatial development plans into County Integrated Development Plans (CIDPs) to identify areas for forestry and tree development;
- ii) County Governments to develop policies and legislation to implement the devolved forestry functions as detailed in the Transition Implementation Plans (TIPs);

- iii) The National Environmental Management Authority to implement the National action plan for restoration of degraded sites in Arid and Semi Arid Lands,
- iv) The Ministry of Agriculture and County Governments to implement the Climate Smart Agriculture Strategy;
- v) Kenya Forest Service and County Governments to implement the Forest Act 2016 requirement for establishment of Arboretta in urban centres and the Forest (Charcoal) Rules, 2009;
- vi) The Ministry of Tourism and Wildlife and Kenya Wildlife Service to implement the National Wildlife Conservation Strategy 2030 which calls for protection, rehabilitation and restoration of wildlife habitats, including forests, savannas and mountains.
- vii) Ministry of Agriculture, Kenya Forest Service, and County Governments to implement Agriculture (Farm Forestry) Rules, 2009.
- **viii**) County Governments to implement the physical planning rules that require 5% of all residential premises are covered by appropriate tree species

9.8. Urban Forests and Green Spaces

This strategy will seek to increase urban forests and green spaces in all the urban centers in the 47 counties. The following initiatives will be implemented;

- i) County Governments to promote avenue tree planting and establishment of green parks, arboreta and botanical gardens;
- ii) Establish 100 ha of forest within the Naivasha dry port;
- iii) Securing and rehabilitation of riparian areas and wetlands;

9.9. Implementation of the Greening Kenya Initiative

The Ministry of Environment and Forestry, Ministry of Interior and Coordination of National Government, the National Prisons Service, the National Youth Service and UNEP will implement this initiative as follows;

i) Production of 50 million tree seedlings annually;

- ii) Rehabilitation of 1,000 Ha of degraded areas in South Marmanet Forest Station;
- iii) Establish 2,000 Km of boundary planting within the Prison Services land;
- iv) Establish 700 Ha of commercial woodlots within Prison Services land;

9.10. Greening infrastructure

Government land and other un-alienated public land provide opportunities for increasing the tree cover in the country. These include; railway lines, road network, large settlements, large mining sites and dams. The strategy will seek to;

- i) enforce compensatory planning for infrastructure developments that lead to deforestation;
- ii) Enforce the Environment and Social Impact Assessment (ESIA) licensing provisions;
- **iii**) Institute a deposit bond mechanism to ensure compliance with requirements for restoration.

9.11. Greening of Institutions including, Ministries Departments and Agencies (MDAs)

This strategy seeks to ensure that;

- i) MDAs identify land and invest in tree growing as their contribution to the 10% tree cover;
- ii) MDAs to set aside 10% of their CSR budget for tree growing.

9.12. Greening of schools and other Institutions of learning

There are 12,322,253 students in primary, secondary schools and teachers training colleges in Kenya (2014, Basic Education Statistical Booklet, by the MoEST). This strategy will leverage on the pupils and students to enhance the tree cover through;

- i) Establishment of woodlots and boundary planting
- ii) Creation of environmental awareness;
- **iii**) Planting and adoption of at least two trees by the students;

9.13. Strengthening of the institutional capacity of Kenya Forest Service , including fire management and law enforcement and compliance

This strategy will involve;

- i) Recruitment and training of more staff and forest rangers;
- ii) Acquisition of equipment for enhanced surveillance and protection of forest resources;
- i) Acquisition of modern equipment for surveillance and firefighting;
- ii) Training of foresters and forest rangers on fire management;

9.14. Adoption of forests and strengthening of Environmental Soldier Progam (ESP)

MDAs, NGOs, corporate and the private sector will be encouraged to partner with the MoEF, KFS and CGs to adopt forest blocks within public and community forests for rehabilitation and conservation as part of their CSR. Kenya Defence Forces have adopted several forest blocks, including Ngong Hills, Ngong Road forest and Ololua forest under the Environmental Soldier Program.

All disciplined forces, including Kenya Police Service, Kenya Prisons Service, Kenya Wildlife Service and the National Youth Service will adopt Forests for purpose of rehabilitation and enhanced protection and conservation.

9.15. Public education, awareness and sensitization on tree growing

This strategy seeks to educate, sensitize and create awareness to the public for the uptake of tree growing. The following interventions will be undertaken through;

- i) Develop and implement a comprehensive communication strategy on tree growing;
- ii) Media campaigns through print, electronic and social platforms;
- i) The Ministry of Education will review the teaching curriculum of primary and Secondary schools to include sustainable forest management;
- iii) Organizing field days, exhibitions and showcasing events;
- iv) Leveraging on other national and global events for tree growing e.g. World Environment Day, World Day to Combat Desertification, World Wetlands Day and World Meteorological Day;

9.16. National tree planting campaigns

This strategy seeks to mobilize the public for the uptake of tree growing. The following interventions will be undertaken through;

- i) Ministry of Interior and Coordination of National Government to direct Chiefs to Mobilize citizenry to plant 100,000 seedlings each planting season;
- ii) Chiefs and Assistant Chefs to use Government machinery to promote tree planting for soil and water erosion control;
- iii) Launch the national and county level tree planting seasons;
- iv) Marking of the International Day of Forests
- v) Creation of partnerships with the private sector to support the campaigns;

9.17. Efficiency in wood conversion, utilization and alternatives energy sources

This strategy seeks to ensure that;

- i) Licensing of saw-millers by Kenya Forest Service to operate in public forest plantations to be based on investment in efficient wood conversion machinery;
- ii) Eco-labeling of charcoal produced from efficient technologies is done for market access;

- iii) Efficient cook stoves are affordable and available for use in schools, prisons, hospitals and households;
- iv) Industries invest in efficient boiler technologies.
- v) Ministry of Energy to increase use of alternative energy sources such as; solar, wind, Liquid Petroleum Gas (LPG), biogas, briquettes

9.18. Provision of incentives and awards

Incentives will be provided to support sustainable conservation and management of forests as identified in the Environment Management and Coordination Act, 2015, Forest Conservation and Management Act, 2016, Climate Change Act, 2016 and others. These include;

- i) The Ministry of Environment and Forestry and the National Treasury to provide economic and fiscal incentives e.g. tax rebates that promote efficiency in wood conversion and utilization.
- ii) Payment for Ecosystem Services, including water, carbon, and tourism levies;
- iii) Provision of affordable credit facilities to businesses engaged in forest development;
- iv) Provision of grants to communities for forest development.

Other incentives directed at counties, institutions, schools, media houses, communities, individuals and institutions who excel in forestry conservation and management include;

- i) Trophies;
- ii) Certificates;
- **iii**) Cash and in-kind prizes;
- iv) Recommendation to the Head of States for decoration

9.19. Research, technology and innovations for forest restoration

This strategy seeks to deploy the latest technologies in forest regeneration, protection, and planting and will be implemented through;

- i) Enhance capacity of KEFRI and other relevant agencies to undertake research;
- ii) Identification and promotion of innovative technologies for forest restoration;
- iii) Application of indigenous technical knowledge on conservation;

9.20. Enhance forest resources assessment, monitoring and reporting capability

This strategy seeks to strengthen capability of forest institutions to effectively monitor and report on forest sector performance. It will be implemented through;

- ii) Implementation of a full national forest inventory;
- iii) Establishment of a National Forest Monitoring System with reporting capabilities;

iv) Periodic monitoring and reporting on performance on tree planting, survival rates and status of protected forests.

9.21. Mobilization of resources

Forestry is a long term, capital intensive investment that mainly generates common goods and services. In order to sustainably conserve, manage, promote forestry activities, the National and County Governments should explore opportunities for increased financing of forestry sector development, in addition to incentivizing private sector investment.

The National and County Governments should take responsibility for financing of forestry development in addition to exploring opportunities for.

This strategy will be achieved through;

- i) Enhanced funding from the National Treasury;
- ii) Establishment of joint coordination Committee for mobilization of Resources with participation of National and County Governments, NGOs, Development Partners and the private sector;
- iii) Diversified revenue streams by Kenya Forest Service, including from sale of mature and over-mature trees in public forest plantations, eco-tourism and Payment for Ecosystem Services (PES);
- **iv**) Development and operationalization of climate finance policy and strategy to support access to International Climate Finance and a framework for issuance of green bonds;
- v) Operationalization of the Forest Conservation and Management Trust Fund (FCMTF);
- vi) Formulation of the REDD+ Strategy and investment plan to facilitate carbon trading and access to other global carbon finance sources ;
- vii)Establishment of Public Private Partnerships: Seedlings production and infrastructure development are potential targets under this arrangement;
- viii) Conservation levies particularly water and tourism levies;

10. GOVERNANCE STRUCTURE

In order to effectively coordinate the implementation, monitoring and reporting of this strategy, the Ministry of Environment and Forestry will strengthen its coordination function and enhance capacity of its SAGAs, MDAs, county governments and other stakeholders. This will be achieved through;

- i) A National inter-ministerial Steering Committee based at the Ministry of Interior and Coordination of National Government to provide oversight and policy guidance for implementation of the Strategy;
- An inter-Ministerial Technical Committee chaired by the Principal Secretary , Ministry of Environment and Forestry to Coordinate and supervise implementation of activities ;
- iii) A multi-institutional Technical Team with a Secretariat at the Ministry of Environment and Forestry with representatives from relevant government agencies, Council of Governors, NGOs, Private sector and development partners representatives;
- iv) County implementation Coordination Committees co-chaired by County Commissioners and County Governments with Kenya Forest Service as the Secretary;
- v) Sub-county level coordination committee

11. MONITORING AND REPORTING

The Ministry of Environment and Forestry will establish a Secretariat to coordinate implementation of the strategy and report on performance. In this respect, the Ministry will develop a framework for monitoring and reporting by Ministries, Department and Agencies (MDAs), County Governments, private sector and other stakeholders.

12. COSTS OF IMPLEMENTING THIS STRATEGY

The cost of implementation of this strategy is estimated to be **KES 48 Billion**, which will be shared between ministries, agencies, departments, CGs, private sector, farmers, CSOs and other stakeholders.

13. COST OF NOT TAKING ACTION

Implementation of this strategy is expected to yield numerous economic benefits to the country. Under the strategy, 1.8 Billion seedlings will be produced and planted for purposes of rehabilitation of degraded natural forests and commercial public forest plantations, establishment of private forests, bamboo, tree planting in schools and greening of institutions and infrastructure. In the event that these interventions are not implemented, the consequences will manifest in form of reduced supply of important products and ecological services emanating from forested landscapes.

The cost of inaction is estimated at KES 168 Billion over the four- year period.

14. IMPLEMENTATION MATRIX

Strategy /	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance
Intervention						indicator (KPI)
Improved seed	Establish and maintain seed sources in all the	На	50	60,000,000	KEFRI, KFS, KALRO	Ha of seed sources established &
production	eco-regions					Maintained
	Enhance seed collection, processing and distribution	Ton	90	200,000,000	KEFRI, KFS, KALRO	% increase in species diversity & quantities of seeds produced
	Registration and regulation of seed collection by the private sector;	No.	50	2,000,000	KEFRI, KFS, KALRO, KEPHIS	No. of private sector players registered
	Develop and implement seed certification standards	No.	1	5,000,000	KEBS, KEPHIS, KEFRI, KFS	Certification standards adopted
	Establish and capacity build association of private tree seed collectors / dealers	No	1	5,000,000	KEFRI, KFS, KARLO, CGs, Private sector	% of association members conforming to the certification standards.
C	Establish tree breeding programs to enhance quality of planting materials	No	1	60,000,000	KEFRI, KFS, Universities	Number of programs established
	Update and avail information on site species matching to the general public	No	1	5,000,000	KEFRI, KFS and MoEF	Guidelines on site species matching uploaded to MoEF, KEFRI & KFS web sites
Produce high quality seedlings	Production of 1.80 billion seedlings	No	1.8 billion	18,000,000,000	KFS, CGs, KEFRI, KWTA, National Prisons Service, National Youth Service,	No of seedlings produced

Strategy / Intervention	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance indicator (KPI)
					Private Sector,	
	Refurbish & expand KFS central tree nurseries in each county/ region for mass seedlings production	No	47	141,500,000	KFS	Number of quality seedlings produced
	Establish model tree nurseries for seedlings	No	12	80,000,000	KFS	Number of model nurseries produced
	Provide incentives to enhance quality seedlings production.	No	1	5,000,000	MEF, KFS, KWTA, Private sector, Nursery owners	Number of incentives provided and adopted
	Develop certification standards for tree nurseries	No	1	5,000,000	KFS, KEFRI, private sector, Nursery owners	Adoption of certification standards by the stakeholders
	Develop and maintain an electronic database for all tree nurseries	No	1	5,000,000	KFS, KEFRI, private sector,	No of private tree nurseries registered
Enhance protection and rehabilitation of natural	Protect the existing natural forests and water towers	На	4.18 Millio n	3,000,000,000	MEF, KFS, KWS, KWTA, CGs, CFAs	Enhanced delivery of important forest products and services
forests and water towers	Develop water tower ecosystem management plans	No.	30	120,000,000	KWTA, CGs, NEMA, KFS	No. of management plans developed
	Fence of natural forests (Mt. Kenya, Kakamega, and Mau forests)	Km	1,500	5,000,000,000	KFS, KWTA, UTaNRMP, NEMA, Rhino Arc, CGs	Area of forest protected by the fence.
	Protection of public natural forests for	На	200,00 0	3,000,000,000	MEF, KFS, KWS, KWTA,	Area of forest regenerating

Strategy /	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance
Intervention						indicator (KPI)
	natural regeneration				CGs, CFAs	naturally
	Rehabilitation of public natural forests through enrichment planting	На	50,000	2,000,000,000	MEF, KFS, KWS, KWTA, CGs, CFAs	Area rehabilitated
	Rehabilitation of degraded wetlands, community and private forest	На	50,000	2,000,000,000	KFS, CGs, KWTA, NEMA, Private sector	Area rehabilitated
	Rehabilitation of degraded national parks and game reserves	На	816	190,500,000	KWS	Area rehabilitate
	Reclamation of forest areas from invasive species	На	10,000	300,000,000	KFS, KWS, CGs	Area reclaimed
	Reservation and gazettement of new forest areas & water towers	Ha	10,000	5,000,000	KFS, KWTA, CGs,	Forest areas gazetted
	Support Community groups in alternative livelihood enterprises	No	50	200,000,000	KFS, KWTA, NETFUND, NEMA, CGs,	Number of enterprises established
Conservation and rehabilitation	Implement Mangrove Management Plan (2017-2027)	No	1	200,000,000	KFS, CGs, KEMFRI, KEFRI, KWS	Benefits accruing,
of mangrove forest areas/	Rehabilitate degraded areas of mangrove forests	На	17,036	150,000,000	KFS, CGs, KMFRI, KEFRI, KWS	Area of mangrove forest rehabilitated
Improve productivity and	Establish new plantation in the un- stocked areas	На	31,000	310,000,000	KFS, CFAs	stocked plantation area
management of public forest	Maintain fire breaks to protect plantations	Km	5,240	56,200,000	KFS, CFAs	Length of fire breaks maintained

Strategy / Intervention	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance indicator (KPI)
plantations	against fires					
	Maintain forest roads	Km	8,236	611,800,000	KFS, CFAs	Length of the roads maintained
	Implement silvicultural operations (pruning and thinning)	Ha;	54,000	208,000,000	KFS, CFAs	Total areas thinned and pruned
	Develop and implement a management strategy for efficient management of public forest plantations	No	1	10,000,000	MEF, KFS, CFA, NEMA, Private sector	Increased revenue, Improved governance,
Establish commercial forests on private land	Establishment of commercial private plantations by farmers and Tree Growers Associations	На	150,00 0	150,000,000	KFS, CGs, TGAs, Farmers	Area under commercial private plantations
	Provide technical support to the Tree Growers Associations & farmers	No	47	150,000,000	KFS, CGs, TGAs, Farmers	No. of TGAs supported per county
C	Provide incentives to commercial private forest plantations,	No	100	200,000,000	KFS, CGs, TGAs, Farmers	No. of beneficiaries
	Establish private forest register by mapping the established plantations	No	47	80,000,000	KFS, CGs, TGAs, Farmers	Forest areas registered
	Upscale innovative funding for commercial forestry, farm forestry and	No	47	300,000,000	NETFUND, KFS, CGs, TGAs, Farmers	No. of households supported per county

Strategy /	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance
Intervention	11 111 1					indicator (KPI)
	livelihood enterprises					
6. Promote bamboo growing	Develop and implement the bamboo policy	No	1	20,000,000	KFS, KEFRI, KWTA, MEF, Private sector	Bamboo policy approved by parliament
	Support bamboo planting by farmers, private sector & communities	На	50,000	150,000,000	KFS, KEFRI, KWTA, MEF, Private sector	Area established
	Support production of high quality bamboo seedlings	No	20 Millio n	140,000,000	KFS, KEFRI, MoEF, Private sector	No of seedlings produced
	Strengthen the capacity of Bamboo Association of Kenya	No	1	2,000,000	KFS, KEFRI, MEF, Private sector	Functional associations
Implement the Agriculture (Farm	Support tree growing on farms	На	350,00 0	205,000,000	KFS, KEFRI, TGAs, CGs, CSO	Area established
Forestry) Rules, 2009	Promote adoption of high value agro forestry tree species;	No	47	47,000,000	KFS, KEFRI, TGAs, CGs, CSO	No. of species promoted
	Development of incentives for farm forestry by CGs	No	47	94,000,000	KFS, KEFRI, TGAs, CGs, CSO	No. of CGs providing incentives
C	Revitalize forest extension services by CGs	No	47	15,000,000	KFS, KEFRI, TGAs, CGs, CSO	No. of CGs providing extension services
	Establish and maintain forests within ADC farms	На	70,000		KFS, ADC	Area established and maintained
Restoration of degraded landscapes in	Awareness creation on appropriate stocking capacity of livestock	No	23	46,000,000	KFS, Interior Ministry, NDM, CGs, CSO	No. of county meetings held
the ASALs	Enforcement of charcoal rules by the	No	23	320,000,000	KFS, Interior Ministry, NDM,	No. of counties enforcing the

Strategy /	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance
Intervention						indicator (KPI)
	CGs				CGs, CSO, NEMA	charcoal rules
	Promote planting of appropriate tree species	No	23	46,000,000	KFS, Interior Ministry, NDM, CGs, CSO	% survival rates
	Pilot use of aerial seeding of grass and appropriate tree species	No	2	200,000,000	KFS, Interior Ministry, NDMA, CGs, CSO	Area covered
Implementation of national forest policies and legislations by County governments	Support Implementation of the Transition Implementation Plans (TIPs) in all the counties	No	47	100,000,000	MEF, KFS, CGs, COG	No. of Counties signing and adopting TIPs
Implementation	Review of teaching	-	-	-	MoEF, MoEST,	Level of
of Presidential	curriculum to include				KICD	curriculum review
Directives	forest conservation					& implementation
	Revival of Chief's tree	No.	8,500	425,000,000	Ministry of	No. of tree
	nurseries;				interior, KFS	nurseries revived
	Capacity building of	No.	100	5,000,000	Ministry of	No. of operators
Implementation	tree nursery operators				Interior, MEF,	trained
of the Greening	for the production of				UNEP, NYS,	
Kenya Initiative	tree seedlings				Prison Service, KFS, KEFRI	
	Rehabilitation of identified degraded forest areas	На	1,000	30,000,000	Ministry of Interior, MEF, UNEP, NYS, Prison Service	Area rehabilitated
	Establish 2,000 Km of boundary planting within the Prison Services land	Km	2,000	10,000,000	KFS, KEFRI	Length of boundary planting
	Establish 700 Ha of commercial woodlots	На	700	21,000,000		Area established

Strategy / Intervention	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance indicator (KPI)
	within Prison Services land					
Greening infrastructure	Rehabilitate degraded areas arising from infrastructure development	На	14,000	20,000,000	KFS, NEMA, KeNHA, KURA, KeRRA, Kenya Railways, KPA, CGs, CoG	Area rehabilitated
	Establish 100 ha of new forests within Naivasha Dry Port Facility	На	100	10,000,000	KFS, MEF, KEFRI, KPA	Area established
Greening by MDAs and the Private Sector	Rehabilitate natural forest areas by the Government MDAs and the Private Sector, in line with the Presidential Directive	На	50,000	2,000,000,000	MEF, MDAs, Private sector	Increase in the forest cover
Greening of Institutions of learning	Support schools and various other institutions in planting of trees	На	20,000	600,000,000	MoEF, KFS, KWTA, MoE, Interior Ministry	Increase in tree cover
Strengthen the enforcement and compliance capacity of KFS	Recruitment of professional and technical staff	No.	600	2,000,000,000	MoEF, KFS	No. of staff recruited
C	Recruitment of more staff and forest rangers;	No.	2,500	3,000,000,000	MoEF, KFS	No. of staff recruited
Enhance KFS capacity for forest fires management and response	Acquisition of modern equipment for surveillance, forest protection and fire management;	-	-	1, 500,000,000	MoEF, KFS	No. of equipment
	Training of foresters and forest rangers on	No.	3,000	300,000,000	MoEF, KFS	No. of foresters and forest rangers

Strategy / Intervention	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance indicator (KPI)
	fire fighting;					trained
	Training of community forest associations on fire fighting	No.	150	50,000,000	MoEF, KFS	No. of community forest associations trained
Adoption of forests and strengthening Environmental	Rehabilitation of degraded areas through tree growing;	На	-	-	Ministry of Defence, MoEF, KFS	Areas rehabilited
Soldier Program (ESP)	Adoption of degraded forest areas for rehabilitation	No.	-		Ministry of Interior	No. of forests
Promote the concept 'adopt a forest" as a sustainable rehabilitation method	Support various MDAs, Embassies, and private sector in adopting forests	На	10,000	5,000,000	MEF, KFS, KDF, Embassies, MDAs, private sector, CSOs	Increase in the forest cover
National tree planting campaigns	Develop and Implement a communication strategy to promote tree planting	No	1	10,000,000	MEF, Interior Ministry, Government Spokesman,	Enhanced public education, awareness and increased tree planting activities
	Conduct national launches for IDF and long and short rainfall tree planting season campaigns	No	9	450,000,000	MEF, NETFUND, Interior Ministry, KFS, All MDAs, CGs, CSO, Private sector	Areas planted
Efficiency in wood conversion, utilization and alternatives	Charcoal producers associations adopt and utilize improved charcoal production, and briquetting technologies.	No	150	260,000,000	CG, KFS, Private sector, CPAs	% of increased recovery

Strategy /	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance
Intervention						indicator (KPI)
energy sources	Households and Institutions adopt and utilize energy saving technologies	No	5,000	110,000,000	CG, KFS, Private sector, CPAs	No of Households
	Institutions adopt alternative cooking methods	No	500	100,000,000	KFS, Ministry of Energy, County Governments, Private sector	No of institution
	Saw millers adopt the use of modern efficient sawmilling technologies.	No	800	200,000,000	KFS, CGs, Private sector, CPAs	Number of sawmillers using high efficiency sawmilling technologies
Provision of incentives and awards	development and implementations of incentives & reward schemes	No	1	200,000,000	NETFUND, KFS, MEF, KEFRI, Private sector	Framework for incentives & rewards implemented
Research , technology and innovations for forest restoration	Identification of the technologies and their appropriateness;	No	3	60,000,000	NETFUND, KEFRI, KFS, MEF, Private sector	No of technologies identified
	Piloting of technologies for efficiency and effectiveness.	No	3	500,000,000	NETFUND, KEFRI, KFS, MEF, Private sector	No of technologies piloted
Strengthen institutional	Establish and maintain a Secretariat	No	1	1,000,000,000	MEF, KFA, KEFRI	Progress reports
the MEF and KFS to coordinate and	Strengthen partnerships with print and electronic media	No	10	200,000,000	MEF, KFS	Advertisement in prints & electronic media
monitor the implementatio n of the	Establish a monitoring and reporting framework	No	1	50,000,000	MEF, KFS, KERI, KWTA	Progress reports
strategy.	Conduct regular data	No	12	20,000,000	MEF, KFS	Progress reports

Strategy / Intervention	Activity	Unit	Target	Budget (KES)	Responsibility	Key Performance indicator (KPI)
	collection, analysis and dissemination					
Enhanced Forest Resources Assessment, Monitoring and Reporting capabilities	Implement a full National Forest Inventory and Develop a National Forest Monitoring System; Enhance Remote sensing capabilities of forest sector Institutions.	Estab lish		500,000,000	MEF, KFS, KEFRI, Universities,	Progress Reports
Mobilization of resources	Operationalise the Forest Management and Conservation Trust Fund	No	1	50,000,000	MoEF,	Increased funding to the Forest sector
	Diversify revenue streams for forest management, including tapping into private sector.	No	1	50,000,000	KFS, NETFUND, MoEF, FMCTF	Increased funding for KFS operations
C	Formulate the REDD+ strategy and investment plan,	No	1	400,000,000	MEF, KFS, CGs, CSOs, Private Sector, Development partners.	Reports
	Total (KES)			48,748,500,000		

15. REFERENCES

- 1. Creapo, Oy. 2014. World Bank Group. 2015. Furniture Industry in Kenya: Situational Analysis and Strategy. World Bank, Washington
- 2. FAO (2014). Enhancing the socioeconomic benefits from forests. State of the World's Forests 2014. Rome Italy
- 3. FAO, 2015. Global Forest Resources Assessment, 2015. Kenya Country Report. Rome 2014.
- 4. Kenya National Bureau of Statistics, Economic Survey 2018. KNBS, Nairobi.
- KFS, 2013. Report on National Forest Resource Mapping and Capacity Development for the Republic of Kenya (Volume 2). Forest Preservation Programme, Report No. KEF09/11494/01. Kenya Forest Service, Nairobi.
- 6. Ministry of Education Science and Technology, 2014. Basic Education Statistical Booklet. MoEST, Nairobi.
- 7. Ministry of Environment and Natural Resources, 2016. National Forest Programme of Kenya. MENR, Nairobi, Kenya.
- 8. Mogaka, et al, 2009. Climate Variability and Water Resource Degradation in Kenya. World Bank Publications.
- 9. UNEP. 2012. The role and contribution of Montane forests and related ecosystem services to the Kenyan economy. UNEP, Nairobi.
- 10. Van Breugel et al, 2011. Potential Natural Vegetation of Eastern Africa (Ethiopia, Kenya, Malawi, Rwanda, Tanzania, Kenya, Uganda and Zambia). Vol. 6. An Overview of the Methods and Material used to Develop the Map. Forest and Landscape Working Paper 68-2011.

16. ANNEXES

16.1.	Annex 1:	Forest Areas	managed a	as public f	forests as at	December 2017
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No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
1	Chebartigon	Baringo	103.200	15/1949
2	Chepkuchumo	Baringo	319.700	27/1962
3	Cherial	Baringo	42.500	15/1949
4	Kabarak	Baringo	1,392.100	27/1962
5	Kabiok	Baringo	14.200	15/1949
6	Kaisungor	Baringo	1,085.800	102/1941
7	Kaptimom	Baringo	89.000	15/1949
8	Katimok	Baringo	2,056.040	19/1949
9	Ketnwan	Baringo	46.500	15/1949
10	Kinyo	Baringo	323.700	15/1949
11	Kiptaber	Baringo	2,056.140	49/1967
12	Marop	Baringo	214.720	15/1949
13	Mosegem	Baringo	203.900	15/1949
14	Mtarakwa	Baringo	112.100	15/1949
15	Kiplombe Hills	Baringo	1,554.300	2/1936
16	Mukutani	Baringo	13,195.800	1470/2017
17	Pemwai	Baringo	135.230	15/1949
18	Mukobe	Baringo	748.700	27//1962
19	Perkerra	Koibatek/Baringo	4,358.500	27//1962
20	Saimo	Baringo	750.700	15/1949
21	Saino	Baringo	274.500	15/1949
22	Sekenwo	Baringo	862.000	27//1962
23	Sokta Hill	Baringo	163.500	15/1949
24	Tarambas Hill	Baringo	417.610	15/1949
25	Tutwon	Baringo	12.000	15/1949
26	Mumbaka	Busia	478.500	284/1986
27	Wanga	Busia	76.100	286/1986
28	Namuluku	Busia	8.200	285/1986
29	Nanyungu	Busia	16.000	283/1986
30	Gembe	Homa Bay	2,755.010	141/2017
31	Simenya	Homa Bay	10.020	172/2017
32	Rabour Hills	Homa Bay	3.600	173/2017
33	Ruri Hills	Homa Bay	809.900	144/2017

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
34	Kolosasi	Homa Bay	17.000	174/2017
35	Rangwa Hills	Homa Bay	1,294.740	124/2017
36	Gwassi Hills	Homa Bay	4,835.700	102/1941
37	God Nyaingu	Homa Bay	31.570	125/2017
38	Kodera	Homa Bay	703.900	126/2017
39	God Jope	Homa Bay	30.440	127/2017
40	Asego Hills	Homa Bay	18.980	128/2017
41	Nyasore	Homa Bay	2.650	129/2017
42	Samanga Hill	Homa Bay	10.250	130/2017
43	God Kopalo	Homa Bay	11.540	131/2017
44	Urianda Hills	Homa Bay	18.960	132/2017
45	Aywaya Hills	Homa Bay	126.140	133/2017
46	Nyakayiemba	Homa Bay	44.570	134/2017
47	Lugongo	Homa Bay	227.290	135/2017
48	Homa Hills	Homa Bay	1,010.080	136/2017
49	Chabera	Homa Bay	17.400	137/2017
50	Agai Hill	Homa Bay	14.760	138/2017
51	Kamondi Hill	Homa Bay	2.000	139/2017
52	Onoo Water Point	Homa Bay	0.110	102/1941
53	Mfangano	Homa Bay	553.080	140/2017
54	Maeta	Homa Bay	36.000	102/1941
55	Kegonga	Homa Bay	8.600	139/1995
56	Got Okombo	Homa Bay	2.230	142/2017
57	God Oogo	Homa Bay	2.800	143/2017
58	Wire	Homa Bay	387.300	36/2013
59	Embakasi	Kajiado	573.000	102/1941
60	Loitokitok	Kajiado	763.940	221/1977
61	Namangahill	Kajiado	11,784.000	304/1979
62	Ngong Hills	Kajiado	3,077.000	90/1985
63	Ololua	Kajiado	667.700	102/1941
64	Bunyala	Kakamega	825.600	421/1956
65	Kakamega	Kakamega	19,792.400	14/1933
66	Lugari	Kakamega	2,163.000	3/1977
67	Maragoli	Kakamega	469.500	266/1957
68	Misango	Kakamega	103.700	28/2013
69	Malava	Kakamega	718.800	14/1933
70	Turbo	Kakamega & Uasin Gidhu	10,788.000	145/1968

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
71	Kapchorua 1	Elegeyo Marakwet	145.780	102/1941
72	Kapchorua11	Elegeyo Marakwet	141.600	102/1941
73	Kaptagat	Elegeyo Marakwet	12,801.120	57/1941
74	Kessop	Elegeyo Marakwet	2,347.200	102/1941
75	Kipkabus	Elegeyo Marakwet	920.300	64/1961
76	Kipkabus	Elegeyo Marakwet	5,827.410	57/1941
77	Metkei	Elegeyo Marakwet	1,987.000	26/1954
78	Kapchemutwa	Elegeyo Marakwet	8,945.150	102/1941
79	Cheboyit	Elegeyo Marakwet	2,488.800	102/1941
80	Embobut	Elegeyo Marakwet	21,933.900	26/1954
81	Kaisungor	Elegeyo Marakwet	1,085.800	102/1941
82	Kiptanurr	Elegeyo Marakwet	15,175.700	102/1941
83	Kiptaberr	Elegeyo Marakwet	12,886.400	102/1941
84	Tigwa Hill	Elegeyo Marakwet	914.600	26/1954
85	Toropket	Elegeyo Marakwet	117.400	102/1941
86	Tumeya	Elegeyo Marakwet	366.800	64/1961
87	Sogotio	Elegeyo Marakwet	3,561.200	102/1941
88	Chemurokoi	Elgeyo Marakwet	3,965.900	102/1941
89	Kererr	Elgeyo Marakwet	2,160.200	26/1954
90	Chepalungu	Kericho	4,976.600	360/1956
91	Londiani	Kericho	107.600	102/1941
92	Dagoretti	Kiambu	764.000	104/1938
93	Escarpment	Kiambu	73.700	57/1941
94	Kamiti	Kiambu	169.600	14/1933
95	Kiambu	Kiambu	79.320	44/1932
96	Kikuyu Escarpment	Kiambu	38,311.710	48/1943
97	Muguga	Kiambu	225.300	104/1938
98	Nyamweru	Kiambu	797.200	57/1941
99	Boni Ijara	Garissa	451,430.700	262/2017
100	Ribe(Kaya)	Kilifi	36.000	88/1994
101	Jibana(Kaya)	Kilifi	140.000	88/1994
102	Arabuko Sokoke	Kilifi	41,763.500	48/1943
103	Kambe Kaya	Kilifi	56.500	88/1994
104	Chonyi Kaya	Kilifi	194.500	88/1994
105	Molinduko	Kirinyaga	202.300	385/1994
106	Njukiini West	Kirinyaga	574.870	385/1994
107	Karateng	Kisumu	41.600	175/2017

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
108	Nuu	Kitui	3,532.900	303/1961
109	East Ngamba	Kitui	1,070.410	101/1978
110	Endau	Kitui	6,717.800	102/1941
111	Gaikuyu	Kitui	3,075.600	253/1993
112	Maai	Kitui	515.000	26/2013
113	Imbachakuyu	Kitui	732.100	321/1993
114	Makongo	Kitui	3,431.700	303/1961
115	Mumoni	Kitui	10,440.900	253/1993
116	Mutito Hill	Kitui	1,958.700	25/1962
117	Mutha	Kitui	1,785.000	25/2013
118	Ngamba	Kitui	1,070.400	303/1961
119	Chemorogok	Koimbatek	1,346.800	15/1949
120	Kilombe Hill	Koimbatek	1,554.300	13181
121	Lembus	Koimbatek	12,273.800	280/1959
122	Maji Mazuri	Koimbatek	7,599.500	44/1932
123	Mt. Londiani	Koimbatek/Kericho	29,682.400	44/1932
124	Kamuthetu	Tharaka-Nithi	13.090	181/2017
125	Karagwaru Hill	Tharaka-Nithi	10.020	182/2017
126	Mutaragwa Hill	Tharaka-Nithi	299.500	179/2017
127	Gitugu Hill	Tharaka-Nithi	53.220	180/2017
128	Kaura Hill	Tharaka-Nithi	6.930	183/2017
129	Mariene Hill	Tharaka-Nithi	131.540	184/2017
130	Muugi Hill	Tharaka-Nithi	93.690	185/2017
131	Nkarini Hill	Tharaka-Nithi	77.230	186/2017
132	Rwara Wa Takiutha	Tharaka-Nithi	8.550	187/2017
133	Tunyai Hill	Tharaka-Nithi	51.840	188/2017
134	Karauri Hill	Tharaka-Nithi	31.960	189/2017
135	Kiunguni Hill	Tharaka-Nithi	101.670	190/2017
136	Gambare Hill	Tharaka-Nithi	6.650	191/2017
137	Mukeria Hill	Tharaka-Nithi	145.950	192/2017
138	Kamanyole And Rancha	Tharaka-Nithi	27.350	193/2017
139	Kiamara & Ranchai	Tharaka-Nithi	105.840	194/2017
140	Mwarera &Irigo	Tharaka-Nithi	60.770	195/2017
141	Kaguma & Njiru	Tharaka-Nithi	51.580	196/2017
142	Ntamaini & Inarua	Kwale	13.980	197/2017
143	Buda	Kwale	667.700	44/1932
144	Gogoni	Kwale	824.300	44/1932

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
145	Gonja	Kwale	841.700	304/1961
146	Shimba Hills	Kwale	19,242.800	407/1956
147	Jombo	Kwale	906.500	102/1941
148	Mailuganji	Kwale	1,714.700	107/1941
149	Marenji	Kwale	1,528.500	44/1932
150	Mkongani North	Kwale	1,113.300	406/1956
151	Mkongani West	Kwale	1,365.800	406/1956
152	Mrima	Kwale	376.800	304/1961
153	Mwachi	Kwale	417.200	104/1938
154	Laliak	Laikipia	4,998.200	44/1932
155	Lusoi	Laikipia	259.500	215/1984
156	Muruai	Laikipia	733.100	177/2017
157	Marmanet	Laikipia	22,455.470	44/1932
158	Kirima	Laikipia	527.500	178/2017
159	Rumuruti	Laikipia	6,366.900	44/1932
160	Ol Arabel	Laikipia	9,364.600	107/1941
161	Mukogodo	Laikipia	30,189.500	89/1937
162	Uaso Narok	Laikipia	2,040.960	386/1960
163	Ndare	Laikipia/Meru	5,554.300	44/1932
164	Mangrove Swamps	Tana River Kilifi, Lamu&Mombasa	45,068.100	44/1932
165	Mbalambala	Tana River	4,253.500	40/2013
166	Hirimani	Tana River	98,020.500	196/2017
167	Hewani	Tana River	2,698.200	30/2013
168	Kokani	Tana River	61,495.500	32/2013
169	Mwina	Tana River	3,347.200	31/2013
170	Bangali	Tana River	119,373.000	39/2013
171	Wayu	Tana River	42,512.200	29/2013
172	Witu	Lamu & Tana River	4,639.100	454/1932
173	Ikilisa	Machakos	78.500	532/1960
174	Iveti	Machakos	347.500	14/1933
175	Nduluni-Kalani	Machakos	110.100	532/1960
176	Uuni	Machakos	992.700	532/1960
177	Kalimani	Makueni	179.700	532/1960
178	Katende	Makueni	949.500	532/1960
179	Kemeto	Makueni	210.400	15/1949
180	Kenze	Makueni	187.800	532/1960
181	Kibwezi	Makueni	5,849.600	80/1936

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
182	Kilala	Makueni	150.900	532/1960
183	Kilungu	Makueni	148.430	14/1933
184	Kiongwani	Makueni	33.600	532/1960
185	Kioo	Makueni	45.300	532/1960
186	Kiteta Hill	Makueni	22.300	14/1933
187	Kithendu	Makueni	218.900	532/1960
188	Kitondu	Makueni	1,085.400	532/1960
189	Kitoo	Makueni	37.200	532/1960
190	Kitumbuuni	Makueni	76.100	532/1960
191	Kiu(Ngungu)	Makueni	83.400	532/1960
192	Kyai	Makueni	106.000	532/1960
193	Momandu	Makueni	139.200	20271
194	Mutuia	Makueni	566.600	532/1960
195	Nzaui	Makueni	967.200	532/1960
196	South Mbooni	Makueni	207.600	14/1932
197	Kyemundu	Makueni	140.800	532/1960
198	Tulimani	Makueni	325.800	532/1960
199	Utangwa	Makueni	55.400	532/1960
200	Utunene	Makueni	165.900	532/1960
201	Nthangu	Makueni	843.800	532/1960
202	Nthoani	Makueni	1,387.000	27/2013
203	Mataa	Makueni	42.900	532/1960
204	Ndatai	Makueni	13.800	532/1960
205	North Mbooni	Makueni	39.700	14/1933
206	Waiya	Makueni	263.000	532/1960
207	Makongo	Makueni	166.300	532/1960
208	Makuli Nguuta	Makueni	1,653.100	532/1960
209	Mandunguni	Malindi	951.850	109/2004
210	Boni Lungi	Lamu	39,925.700	261/2017
211	Panda Nguo	Lamu	41,316.000	263/2017
212	Marsabit	Marsabit	15,280.900	44/1932
213	Lowdour Town	Turkana	17.770	198/2017
214	Kakuma	Turkana	5.320	149/2017
215	Loima Hill	Turkana	19,739.200	264/2017
216	Kiagu	Meru	1,366.200	335/1959
217	Kibithewa	Meru	206.400	335/1959
218	Kieiga	Meru	546.300	335/1959

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
219	Kierera	Meru	793.200	335/1959
220	Kijegge	Meru	3,296.200	335/1959
221	Kikingo	Meru	1,234.300	335/1959
222	Maatha	Meru	639.400	335/1959
223	Meru(Lower Imenti)	Meru	2,462.100	104/1938
224	Meru(Upper Imenti)	Meru	10,375.800	104/1938
225	Thunguri Hills	Meru	631.300	335/1959
226	Munguni	Meru	194.200	335/1959
227	Mutejwa	Meru	1,375.900	335/1959
228	Mutharanga	Meru	299.500	335/1959
229	Ngaia	Meru	4,139.900	335/1959
230	Njuguni	Meru	2,003.200	335/1959
231	Ntugi	Meru	1,378.800	335/1959
232	Nyambene	Meru	5,391.200	335/1959
233	Thuuri	Meru	734.500	335/1959
234	Timau	Meru	295.400	335/1959
235	Kimanyi	Migori	2.500	34/2013
236	Marabu Magina	Migori	25.000	219/1992
237	Mukuro	Migori	20.500	284/1986
238	Migori Town	Migori	36.300	200/2017
239	God Bim	Migori	9.600	201/2017
240	God Kogalo	Migori	72.100	202/2017
241	Biangongo Hill	Migori	2.300	203/2017
242	Nyangena Hill	Migori	20.500	204/2017
243	Nyamarere	Migori	18.200	205/2017
244	Agongo Hill	Migori	62.200	206/2017
245	Nyandwi	Migori	14.500	207/2017
246	Tigira Hill	Migori	186.000	208/2017
247	Obembo	Migori	18.300	209/2017
248	Otacho	Migori	117.500	219/1992
249	Sagegi Hill	Migori	8.000	219/1992
250	Got Achama	Migori	47.200	210/2017
251	Got Keyo	Migori	9.110	211/2017
252	Got Otaro	Migori	0.180	33/2013
253	Getambwega Hill	Migori	41.000	212/2017
254	Omange Hill	Migori	32.970	213/2017
255	Nyalgwena Hill	Migori	43.800	214/2017

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
256	Makarangwe Hill	Migori	6.930	215/2017
257	Marabu-Magina	Migori	25.000	219/1992
258	Tarangwiti Hill	Migori	36.350	216/2017
259	Kebaroti Hill	Migori	28.500	218/2017
260	Kwa Hill	Migori	2.400	219/1992
261	Rabour	Migori	50.000	219/1992
262	Giribe	Migori	43.500	219/1992
263	God Agulu	Migori	12.400	139/1995
264	God Kwach	Migori	5.000	139/1995
265	Nyasumbi	Migori	9.200	139/1995
266	Nyaitara	Migori	11.200	80/1997
267	Raga	Migori	16.000	218/2017
268	Ranen	Migori	66.600	37/2013
269	God Kwer	Migori	1.300	37/2013
270	Kuja Bull Camp	Migori	17.500	38/2013
271	Kagure	Muranga	188.200	185/1961
272	Karaini	Muranga	23.870	385/1994
273	Karua(A)	Muranga	27.900	185/1961
274	Karua(B)	Muranga	137.200	185/1961
275	Karua©	Muranga	44.900	185/1961
276	Kiambicho	Muranga	376.400	185/1961
277	Kiamuti	Muranga	182.100	185/1961
278	Karura	Nairobi	956.090	44/1932
279	Arboretum(Nbi)	Nairobi	30.390	44/1932
280	Ngong Road	Nairobi	1,189.520	44/1932
281	Amara	Nakuru	1,050.000	69/2012
282	Bahati	Nakuru	10,186.700	44/1932
283	Eastern Mau	Nakuru	64,970.710	57/1941
284	Eburu	Nakuru	8,715.300	44/1932
285	Kijabe Hill	Nakuru	706.030	184/1980
286	Mau Narok	Nakuru	772.030	110/1967
287	Menengai	Nakuru	5,989.900	127/1977
288	Likia Extension	Nakuru	544.500	68/2012
289	Nakuru	Nakuru	618.900	128/1977
290	South Western Mau	Kerich,Bomet & Nakuru	83,395.510	44/1932
291	Western Mau	Nakuru &Kericho	22,885.280	44/1932
292	West Molo	Nakuru	275.200	44/1932

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
293	Transmara	Narok	35,270.300	102/1941
294	Olposimoru	Narok	36,947.700	196/1957
295	South Western Mau	Narok	136.000	44/1932
296	Bonjoge	Nandi	2,150.000	371/1984
297	Nandi North	Nandi	10,500.710	76/1936
298	South Nandi	Nandi	17,960.500	76/1936
299	Ururu	Nandi	433.400	76/1936
300	Kaptaroi	Nandi	327.000	76/1936
301	Teressia	Nandi	384.500	76/1936
302	Kipipiri	Nyandarua	5,019.300	218/1956
303	Ol Bolossat	Nyandarua	3,326.900	104/1938
304	Magumo North	Nyandarua	241.500	253/1978
305	Magumo South	Nyandarua	368.900	305/1979
306	Muruai	Nyandarua	733.100	177/2017
307	Kirima	Nyandarua	527.500	178/2017
308	Aberdare	Nyandarua/Nyeri/Muranga	103,024.930	48/1943
309	Kiganjo	Nyeri	302.200	44/1932
310	Nyeri Municipality	Nyeri	7.880	200/1987
311	Nyeri Hill	Nyer	192.100	26/1944
312	Nyeri	Nyeri	1,135.430	44/1932
313	Muringato Nursery	Nyeri	25.000	44/1932
314	South Laikipia	Nyeri	3,232.500	44/1932
315	Mount Kenya	Nyeri, Meru, Embu And Kirinyaga	200,870.880	48/1943
316	Mathews Range	Samburu	93,765.500	454/1956
317	Ndotos Range	Samburu	97,167.140	454/1956
318	Mount Nyiru	Samburu	45,931.700	454/1956
319	Leroghi	Samburu	91,944.400	13181
320	Abiero	Siaya	62.500	42/2013
321	Ramogi	Siaya	399.500	42/2013
322	Lambwe	Suba	724.200	43/2013
323	Insaria	Kisii	4.570	117/2017
324	Nyangweta	Kisii	18.530	119/2017
325	Ndomyo	Kisii	12.590	120/2017
326	Ngeri Hill	Kisii	16.210	121/2017
327	Ritumbe	Kisii	9.570	122/2017
328	Basi/Masige Forest	Kisii	4.650	123/2017
	Nursery			

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
329	Mdengu	Taita Taveta	0.360	235/1991
330	Ngangao	Taita Taveta	139.93	125/1991
331	Choke(Mnjonyi)	Taita Taveta	73.500	235/1991
332	Figi	Taita Taveta	0.400	235/1991
333	Fururu	Taita Taveta	14.120	235/1991
334	Goye	Taita Taveta	8.230	235/1991
335	Kasigau	Taita Taveta	202.300	102/1941
336	Kilulunyi	Taita Taveta	0.250	235/1991
337	Kinyesha Mvua	Taita Taveta	49.500	235/1991
338	Kulundu	Taita Taveta	0.080	235/1991
339	Macha	Taita Taveta	14.570	235/1991
340	Ngomenyi	Taita Taveta	0.200	235/1991
341	Mbili	Taita Taveta	1,025.000	235/1991
342	Mchungunyi	Taita Taveta	8.000	235/1991
343	Modagache(Weni-Tole)	Taita Taveta	3.400	235/1991
344	Mtege	Taita Taveta	0.280	235/1991
345	Mwachora	Taita Taveta	6.400	235/1991
346	Mwakamu	Taita Taveta	1.500	235/1991
347	Weni Mbogho	Taita Taveta	2.000	235/1991
348	Yale	Taita Taveta	22.330	235/1991
349	Susu	Taita Taveta	1.700	235/1991
350	Weni Mwana	Taita Taveta	5.260	235/1991
351	Mwandongo	Taita Taveta	688.000	235/1991
352	Ndiwenyi	Taita Taveta	5.600	235/1991
353	Kapolet	Trans-Nzoia	1,551.600	57/1941
354	Kitalale	Trans-Nzoia	1,848.100	128/1977
355	Sekhendu	Trans-Nzoia	804.100	152/1977
356	Kitale Township	Trans-Nzoia	401.000	44/1932
357	Mount Elgon	Trans-Nzoia & Bungoma	73,705.600	44/1932
358	Eldolet 1 & 11	Uasin Gishu	147.990	258/1966
359	Kapsaret	Uasin Gishu	1,194.200	44/1932
360	Nabkoi	Uasin Gishu	3,014.500	44/1932
361	Timboroa	Uasin Gishu	5,891.000	44/1932
362	Tinderet	Uasin Gishu, Kericho & Nandi	27,869.900	44/1932
363	Tumeya	Uasin Gishu	215.300	57/1941
364	Maragoli	Vihiga	469.500	266/1957
365	Kapkanyar	West Pokot	6,037.400	49/1967

No	FOREST BLOCK	COUNTY LOCATION	AREA (HA)	LEGAL
				NOTICE NO.
366	Lelan	West Pokot	14,820.000	128/1958
367	Mnangei/Siyoi	West Pokot	25.500	22/2013
368	Makunga	Bungoma	252.530	23/2013
369	Mulinduko	Embu	202.300	385/1994
370	Maranga	Embu	218.500	24/2013
	Total		2,585,516.520	

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
I (Over	Ocotea	Camphor	1600-	Volcanic deep	Plantation/mixed	Timber	Medium to
1800 mm	usambarens		2500	loamy soils	systems		long (30-60
rainfall)	is						yrs)
	Acacia	Black	1600.2	Volcanic deep	Woodlot	Fuel wood,	Short (5-10
	mearnsii	wattle	000	loamy soils		tannins	years)
	Polyscius	Mutati	1600-	Variable, red to	Mixed,	Peeler	Medium
	kikuyuensis	(Kik)	2500	loamy clay soils	enrichment and	wood for	(30-40 yrs)
					natural systems	boards	
	Prunus	Muiri	1600-	Variable from	Plantation/	Timber,	Medium to
	africana	(Kik)	2500	highland red	mixed	medicinal	long (30-60
				loamy to	/enrichment		yrs)
				volcanic deep	planting systems		
				soils			
	Pinus	Pine	1600-	Deep wet loams,	Plantation	Timber/pap	Short (16-20
	patula		3000	but adaptable to		er	yrs pulp)
				variable soils			(25-30 yrs
				but not clay and			for timber)
				water-logged			
				soils			
	Vitex	Meru oak	1700-	Deep volcanic,	Plantation/natura	Timber	Medium to
	keniensis		2200	red to loamy	l management		long (30-60
				clay soils	system		yrs)
	Podocarpus	Podo	1800-	Red to loamy	Plantation/mixed	Timber,	Medium to
	gracilior		2400	clay and	/amenity	amenity	long (30-60
				volcanic soils			yrs), (pulp
							16-20 yrs)
							(timber 25-
							30 yrs)
	Cupressus	Cypress	1800-	Well adaptable	Plantation	Timber/hed	Short (25-30
	lusitanica		3000	to variable		ge/ shelter	yrs)
				highland soils		belts	
	А.	Black	2000-	Variable deep	Plantation/mixed	Soil	Short (8 yrs)
	melanoxylo	wood	3000	red to loamy	planting	conservatio	(30 yrs
	n			sandy soils		n, timber,	timber)
						fuel	

16.2. Annex 2: Guidelines for Species Site Matching

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
	Arundinaria	Bamboo	2200-	Deep red to	Plantation,	Building,	Short (6-10
	alpina	(Murangi)	3000	volcanic loamy	boundary,	fencing,	yrs)
				soils	groves, soil	handicraft,	
					protection	soil	
						protection	
II (1400 -	Markhamia	Siala	>1400	Red loam to	Woodlot/amenit	Timber/am	Short (15-30
1800 mm	lutea	(Luhya)		clay loamy soils	y/agroforestry	enity soil	yrs)
rainfall)						nutrient	
						enhanceme	
						nt	
	Chlorophor	Mvule	0-1400	Variable sandy	Plantation/mixed	Timber/Sha	Medium to
	a excelsa			to deep soils	planting	de	long (30-60
							yrs)
	Grevillea	Mukima	0-2500	Mostly variable	Plantation, hedge	Timber,	Short (6 yrs
	robusta	(Kik)		but loves deep	planting,	fuel,	for pole)(30
				red soils	agroforestry,	fodder,	yrs for
					woodlot,	poles	timber)
					shelterbelt		
					system		
	Phoenix	Wild date	0-3000	Swampy and	Mixed system	Water	Medium to
	reclinata	Palm		riparian soils	amenity	conservatio	long (30-60
						n, basketry,	yrs)
						ornamental	
	Croton	Mukindur	1000-	Variable deep	Plantation/mixed	Fuel, poles,	Short to
	megalocarp	i	2000	red to loamy	/enrichment/	constructio	Medium
	US			sandy soils	natural systems	n, peeler	(15-25 yrs)
						wood	
	Syzygium	Mukoe	1000-	Swampy and	Mixed system in	Water	Medium to
	species	(Kik)	2500	riparian soils	water courses	conservatio	long (30-60
						n, timber	yrs)
	Bischofia	Bishop	1200-	Deep red/loamy	Plantation,	Timber	Short (30-40
	javonica	wood	1600	soils	enrichment		yrs)
					planting		
	Maesopsis	Mutere	1200-	Deep red/loamy	Plantation/mixed	Timber	Short (25-50
	eminii		1600	soils	/enrichment		yrs)
					systems		

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
	Fagara	East	1200-	Deep red to	Plantation,	Timber	Medium(30-
	microphylla	African	1900	sandy loamy	enrichment		40yrs)
		satinwood		soils	planting		
		,					
		Munyeny					
		e (Kik)					
	Cordia	Muringa	1400-	Variable and	Plantation	Timber/sha	Medium to
	abbyssinica		2500	wide spectrum		de	long (30-60
				but deep			yrs)
	Е.	Blue gum	1400-	Variable,	Plantation/woodl	Fuel,	(Short 15-25
	saligna/gra	U U	2500	medium to deep	ots	transmissio	yrs for
	ndis			soils		n posts,	timber) 5-12
						constructio	yrs for other
						n, timber,	uses)
						pulp	
	Sesbania	Sesbania	1400-	Variable	Agroforestry/mi	Firewood,	Short (2-3
	sesban		2500		xed system	soil	yrs)
					conservation	enrichment,	-
						water	
	Olea	Elgon	1600-	Deep loamy	Plantation/mixed	Timber	Long (80-
	welwitschii	Teak	2400	soils	natural system		120 yrs)
	E. regnans	Mountain	2500-	Deep highland	Plantation/woodl	Fuel, poles,	Short (4-6
		ash	3000	forest soils	ots	building,	yrs-poles)
						timber	(10-20 yrs
							for timber)
	A. mearnsii	Black	1600-	Deep to medium	Plantation/woodl	Tanning,	Short - (6-10
		wattle	2000	red to red loam	ot	fuel	yrs)
III –	Brachylean	Muhugu	200 -	Red loamy to	Mixture/enrichm	Timber,	Long (60-
HIGHLAN	a huillensis	(Kik)	1850	clay loam sandy	ent/ natural	fuel,	100 yrs)
D				soils	system	carvings,	
REGION						constructio	
(800-1400						n, fencing	
mm	Phoenix	Wild date	0-3000	Swampy and	Mixed system,	Water	Medium to
rainfall)	reclinata	palm		riparian soils	amenity	conservatio	long (30-60
						n, basketry,	yrs)
						ornamental	
	Acacia	Olerai	1000-	Riparian soils	Mixed systems	Water &	Medium
	xanthophloe	(Maa)	2000			soil	(30-40yrs)

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
	а					conservatio	
						n, soil	
						enrichment	
	Croton	Mukindur	1000-	Well adaptable	Mixed, woodlot,	Fuel,	Short (10-25
	megalocarp	i	2000	to variable	boundary	shelter	yrs)
	us			highland soils	agroforestry	wood,	
					managements	charcoal,	
						hedge,	
						boundary	
						planting	
	Syzgium	Mukoe	1000-	Swampy and	Mixed system in	Water	Medium to
	species	(Kik)	2500	riparian soils	water courses	conservatio	long (30-60
						n, timber	yrs)
	Cordia	Muringa	1400-	Mainly red	Plantation/mixed	Timber,	Medium to
	abyssinica		2500	loamy soils	, woodlots,	amenity,	long (30-60
					amenity,	fuel	yrs)
					agroforestry		
	Eucalyptus	Sydney	1400-	Highland loamy	Plantation/woodl	Fuel, poles,	Short (5-12
	saligna	blue gum	2500	Soils	ots/shelterbelts	posts,	yrs for
						fencing,	poles) (15-
						timber	25 yrs –
							timber)
	Eucalyptus	Blue gum	1400-	Highland loamy	Plantation/woodl	Fuel, poles,	Short (5-12
	grandis		2500	Soils	ots/shelterbelts	posts,	yrs for
						fencing,	poles) (15-
						timber	25 yrs –
							timber)
	Sesbaniases	Sesban	1400-	Variable soils	Agroforestry/mi	Firewood,	Short (2-
	ban		2500		xed systems	soil	5yrs)
						enrichment,	
						water	
						conservatio	
						n	
	Schinusmoll	Pepper	1500-	Variable red to	Boundary/ornam	Amenity,	Short (8-20
	e	tree	3000	cotton loamy	ental planting	fuel	yrs)
				soils			

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
	Juniperuspr ocera	Cedar	1600- 2000	Red loam to rocky shallow	Planation/woodl ots /mixed	Timber, posts,	Long (60- 100 yrs)
				drained soils		fencing, protection	
	Macheriatip pu	Tipuanati pu	1600- 2000	Red loams to black cotton soils	Plantation/mixed	Timber	Medium (30-40 yrs)
	Olea africana	Mutamaiy u	1600- 2000	Red to clay loamy soils	Mixed planting	Beams, posts, carvings, fencing, wood fuel	Long (80- 120 yrs)
	Jacaranda mimosifolia	Jacarand a	1600- 2500	Variable soils	Single tree management	Amenity	Short (4-10 yrs)
	Brachylaen ahuillensis	Muhugu	200- 1850	Mainly red loamy and sandy soils	Woodlot, mixed, enrichment system	Timber, fencing, carving	Long (60- 100 yrs)
	Aberiacaffr a	Kei apple	1400- 2200	Variable Soils	Hedge management	Hedge	Short to medium (8- 25 yrs)
IV- LOWLAN DS (400 - 800mm rainfall)	Borassusaet hiopum	Borassus palm	0 - 1400	Variable but mainly riparian	Mixed systems	Water conservatio n, palm wine, basketry	Medium to long (30-60 yrs)
	Calliandrac alothyrus	Calliandr a	0-1400	Variable	Agroforestry system	Fuel, soil nutrient enhancing	Short (4-10 yrs)
	Cassia siamea	Senna	0-1400	Sandy to sandy- loam	Plantation/mixed	Timber, fuel, fencing	Short (4-10 yrs)
	Casuarina equisetifolia	Whisperin g pine	0-1400	Sandy soils	Plantation /agroforestry	Timber, fuel, amenity	Short (4-6 yrs)
	Chlorophor aexcelsa	Mvule	0-1400	Red caly-loamy to sandly loamy soils	Plantiation/mixe d system	Timber	Medium to long (30-60 yrs)

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
	Dalbergiam	Mpingo	0-1400	Variable, sandy	Plantation/mixed	Timber,	Long (80-
	elanoxylon			to sandy-clay		fuel,	120 yrs)
						fencing,	
						wood	
						carving, etc	
	Е.	River red	0-1400	Red clay-loamy	Plantation/shelte	Fuel, poles,	Short (6-8
	camaldulen	gum		to sandy-loamy	r-belt woodlot	constructio	yrs)
	sis			soils	system	n	
	Е.	Blue gum	0-1400	Sandy to clay	Plantation/woodl	Fuel, poles,	Short (5-
	europhylla			loams	ots	posts	12yrs)
	Gmelinaarb	Gmelina	0-1400	Sandy to sandy	Plantation	Timber,	Short (15-
	orea			loam soils		paper,	25yrs)
						match box,	
						constructio	
						n	
	Leucaenale	Leucaena	0-1400	Clay-loamy to	Woodlots/agrofo	Fuel,	Short (4-10
	ucocephala			sandy soils	restry systems	fodder,	yrs)
						nutrient	
						enhanceme	
						nt trees	
	Markhamial	Muu	0-1400	Red loam to	Plantation/ameni	Timber/am	Short (15-30
	utea	(Kik),		clay loamy soils	ty agroforestry	enity/soil	yrs)
		Siala			system	nutrient	
		(Luhya)				input	
	Terminalia	Mururuku	0-1400	Sandy to	Woodlots, mixed	Fuel,	Short (6-15
	brownii	(Kik)		sandy/clay	plantings	fodder,	yrs)
			2	loams		posts	
	Azadirachta	Mwarobai	0-1400	Sandy to sandy-	Mixed/enrichme	Timber,	Short 15-25
	indica	ni		clay soils to	nt planting	fuel, posts,	yrs
				riverine	system	fodder	
				clay/sandy soils			
	Dalbergiam	Mpingo	0-1400	Sandy to sandy-	Woodlot/mixed	Timber,	Medium to
	elanoxylon			clay soils to	enrichment	fuel, poles,	long (30-60
				riverine	systems	carvings	yrs)
				clay/sandy soils			
	Е.	River red	0-1400	Sandy to sandy-	Plantation/woodl	Fuel, poles,	Short (6-8
	camaldulen	gum		clay soils to	ot/boundary	posts	yrs)
	sis			riverine	plantings		

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
				clay/sandy soils			
	Prosonis	Algaroha	0-1400	Sandy to sandy-	Mixed/agroforest	Fuel poles	Short 15-25
	chilensis	111801000	0 1 100	clay soils to	rv systems	fodder	vrs
	chillensis			riverine	19 898001118	10 4401	<i>J</i> 10
				clav/sandv soils			
	Gliricidiase	Gliricidia	0-1600	Clay-loamy to	Woodlots/agrofo	Fuel,	Short (4-10
	pium			sandy soils	restry systems	fodder,	vrs)
	1			5	5.5	nutrient	5
						enhanceme	
					$\boldsymbol{\wedge}$	nt trees	
	Ficussycom	Mukuyu	0-2000	Riparian soils 🤇	Mixed systems	Water	Medium to
	orus	(Kik)				conservatio	long (30-60
						n, fodder	yrs)
	Leucaenale	Leucaena	0-2000	Variable but	Mixed,	Fuel,	Short (4-10
	ucocephala			prefers slightly	agroforestry	fodder,	yrs)
				alkaline	systems	agroforestr	
						y, benefit	
	Acacia	Olasiti	1000-	Sandy to sandy-	Mixed, woodlot,	Fuel, poles	Short (6-15
	albida	(Maa)	1400	clay soils to	riverine		yrs)
				riverine	plantings		
				clay/sandy soils			
	A. senegal 🤇	Gum	1000-	Sandy to sandy-	Woodlot/mixed	Fuel, poles,	Short 15-25
		arabic,	1400	clay soils to	enrichment	gum arabic	yrs
		Enderkesi		riverine		production	
		(Maa)	1000	clay/sandy soils		F 1 1	<u> </u>
	A. tortilis	Sagarara	1000-	Sandy to sandy-	Mixed	Fuel, poles,	Short 15-25
		m (Maa)	1400	clay solls to	enrichment	Iodder	yrs
				clay/sandy soils	/agroiorestry		
	Λ	Falcon's	1000	Sandy to sandy	Mixed/woodlot	Fuel poles	Short 15 25
	n. nolvacantha	claw	1400	clay soils to	systems	ruei, poies	vrs
	poryacanina	acacia	1400	riverine	systems		y15
		ucuciu		clay/sandy soils			
	A. seval	Olierai	1000-	Sandy clay to	Woodlot/mixed	Fuel, poles	Short 15-25
		(Maa)	1400	sandy loam soils	enrichment	posts	vrs
			-	,	planting system	L	

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
	Melia	Mkau	1000-	Sandy to sandy-	Mixed/agroforest	Fuel, poles,	Short 15-25
	volkensii		1400	clay soils to	ry systems	fodder	yrs
				riverine			
				clay/sandy soils			
	Tamarindus	Tamarind	1000-	Sandy to sandy-	Mixed/agroforest	Fuel, poles,	Short 15-25
	indica		1400	clay soils to	ry systems	fodder,	yrs
				riverine	amenity	fruits	
				clay/sandy soils			
	Croton	Mukinduri	1000-	Sandy to sandy-	Woodlot/mixed	Fuel,	Short to
	megalocarp	(Kik)	2000	clay soils to	enrichment	Agropoles	Medium
	us			riverine	systems		(15-25 yrs)
				clay/sandy soils			
	Balanitesae	Desert	500-	Sandy to sandy-	Mixed/enrichme	Timber,	Short 15-25
	gyptiaca	date	1400	clay soils to	nt planting	fuel,	yrs
				riverine	system		
				clay/sandy soils			
	Azadirachta	Mwarobai	0 -	Sandy to sandy-	Plantation/mixed	Timber,	Short (6-15
	<i>indica</i> (Mwa	ni, Neem	1400	loam		fuel,	yrs)
	robaini)					fencing,	
						amenity,	
						medicinal	
V-VI	Brachystegi	Mrithi	0-200	Red loamy to	Mixture/enrichm	Timber,	Long (60-
(Under 400	aspiciformis			clay loam sandy	ent/natural	railway	100yrs)
mm				soils	system	sleepers	
rainfall)	Hyphaeneci	Doum	0-1000	Sandy riparian	Mixed systems	Water	Medium to
	riacea	palm		soils		conservatio	long (30-60
						n, basketry	yrs)
	A. senegal	Gum	1000-	Sandy clay to	Woodlot/mixed/	Fuel, poles,	Short 15-25
		arabic,	1400	sandy loam soils	enrichment	gum arabic	yrs
		Enderkesi			planting		
		(Maa)					
	Prosopis	Algaroba	1000-	Sandy clay to	Enrichment/agro	Fodder,	Short 15-25
	chilensis		1400	sandy loam soils	forestry systems	fuel, soil	yrs
						protection	
						and	
						nutrient	
						enhanceme	
						nt	

ECO-	Species	Common	Altitu	Preferred Soil	Management	End Use	Rotation
ZONE		Name	de (m)	Туре	Options		
	Cordia	Oseki	1000-	Sandy clay to	Woodlot/enrich	Fuel, poles,	Short to
	sinensis	(Maa)	1500	sandy loam soils	ment systems	fodder	Medium
							(15-25 yrs)
	Salvadorap	Toothbrus	1000-	Sandy clay to	Woodlot/enrich	Fodder,	Short to
	ersica	h tree,	1500	sandy loam soils	ment systems	soil,	Medium
		mustard				protection,	(15-25 yrs)
		tree,				amenity	
		mustard					
		bush					
	Syzyphusma	Chinee	1000-	Sandy clay to	Hedge planting	Live	Short to
	uritiana	apple,	1500	sandy loam soils	management	fencing,	Medium
		jujube,				fruits	(15-25 yrs)
		Indian					
		plum					
	Acacia	Sagarara	1000-	Sandy clay to	Mixed,	Fuel, poles,	Short 15-25
	tortilis	m (Maa)	1400	sandy loam soils	enrichment,	fodder	yrs
					agroforestry		
					systems		

	Water Tower	Immediate Bordering Counties
A.	GAZETTED WATER TO	WERS
1.	Aberdare Range	Nyeri, Muranga, Kiambu, Nyandarua and Laikipia
2.	Cherangani Hills	Elgeyo Marakwet, West Pokot, Trans Nzoia, Uasin Gishu
3.	Chyulu Hills	Makueni, Taita Taveta and Kajiado counties
4.	Huri Hills	Marsabit
5.	Kirisia Hills	Samburu
6.	Loita Hills	Narok
7.	Marmanet	Laikipia, Nakuru, Baringo and Nyandarua
8.	Matthews Range	Samburu
9.	Mau Forest Complex	Nakuru, Baringo, Kericho, Narok Bomet, Nandi and Uasin Gishu counties
10.	Mount Elgon	Bungoma and Trans Nzoia
11.	Mount Kenya	Embu, Tharaka Nithi, Meru, Laikipia, Nyeri, Kirinyaga
12.	Mount Kipipiri	Nyandarua
13.	Mount Kulal	Marsabit
14.	Mount Marsabit	Marsabit
15.	Mount Nyiru	Samburu
16.	Ndotos	Samburu
17.	Nyambene Hills	Meru
18.	Shimba Hills	Kwale
B.	UNGAZETTED WATER	TOWERS
	Ngong Hills	Kajiado
	Namanga Hills	Kajiado
	Emali Hills	Kajiado
	Maparasha Hills	Kajiado
	Gwassi Hills	Migori&Homabay
	Kaptagat Hills	Elgeyo Marakwet/Uasin Gishu
	Loima Hills	Turkana
	Kalapata	West Pokot
	Lorusuk	West Pokot
	Kachakalau	West Pokot
	SekerrMtelo	West Pokot
	Kprer	West Pokot
	KawukKamchoror	West Pokot
	Psakas-Poito	West Pokot
	Karasuk Hills	West Pokot

16.3. Annex 3: List of Gazetted &Ungazetted Water Towers in Kenya

Imenti hills	Meru
Mkogodo Hills	Laikipia
Manga Hills	Nyamira
Karima Hills	Nyeri
 Tumutumu Hills	Nyeri
Kiamucheru Hills	Nyeri
Nyana Hills	Nyeri
Nyeri Hills	Nyeri
Taita Hills	Taita Taveta
Kasigau Hills	Taita Taveta
Maungu Hills	Taita Taveta
Iyale hill	Taita Taveta
Susu hill	Taita Taveta
Ngangao Hill	Taita Taveta
Wesu Area (To Be Identified)	Taita Taveta
Vura Hill	Taita Taveta
Shigharo Area (Irido)	Taita Taveta
Chawia Forest Area	Taita Taveta
Mwang'ea Hills	Kilifi
Iltilal Hills	Kajiado
Nkoora Hills	Nyamira
InkoraHills	Nyamira
MageriHills	Nyamira

NyabogoyeHills	Nyamira
RiomegoHills	Nyamira
KiabonyoruHills	Nyamira
IkongeHills	Nyamira
MogusiiHills	Nyamira
NyabisimbaHills	Nyamira
Ol Donyo Orok	Kajiado
Nguruman Escarpment	Kajiado
Machakos Hills	Machakos
Kibauni Hills	Machakos
Kanzalu Hills	Machakos
Matetani Hills	Machakos
Iveti Hills	Machakos
Ol Donyo Sabuk	Machakos
Makuli Hills	Makueni
Mbooni Hills	Makueni
Nthangu Hills	Makueni
Kilungu Hills	Makueni
Mbui Nzau Hills	Makueni
Yekanga Hills	Makueni
Nzaui Hills	Makueni
Makongo Hills	Makueni

Mutito Hills	Kitui
 Kavonge/Museve Hills	Kitui
Mutuluni Hills	Kitui
Mumoni/Ngaikuyu Hills	Kitui
Kyawea Hills	Kitui
 Endau Hills	Kitui
Mutha Hills	Kitui
Nuu Hills	Kitui
Tugen Hills	Baringo
Subukia Escarpment	Nakuru
 Kikuyu Escarpment	Kiambu
 Mt. Suswa	Narok
Leseru Swamp	Uasin Gishu
Ngaya Hills	Meru
 Kirimiri Hills	Embu
Kiang'ombe Hills	Embu
Kianjiru Hills	Embu
Nyangweta Hills	Kisii
Sironga Wetland	Nyamira
Sameta Hills	Kisii
Taracha Hills	Kisii
Nyacheki Hills	Kisii
 Kibirong Swamp	Nandi

 Kingwal Swamp	Nandi
Lake Kenyatta	Lamu
 Mt. Nyiro	Samburu
Kerugoya Hills	Kirinyaga
 Chebuko/Kamalogon	West Pokot
Kamelei & Chesuko Hills	West Pokot
Maeta Hills	Migori
Magaimuya Hills	Migori
Wire Hills	Homabay
Gembe Hills	Homabay
Taragwiti Hills	Migori
Kiera Hills	Tharaka Nithi
Mutarakwa Hill	Bomet
Yaganek Hill	Bomet
Chepalungu Forest	Bomet
Murwangoi/Kembu Hill	Bomet
Longisa Hill	Bomet
Tiroto Hill	Bomet
Koisomoi Hill	Bomet
Chebongi Hill	Bomet

Rotik/Mabwaita Hill	Bomet
Gelegele Hill	Bomet
Terek Hill	Bomet
Bosto Hill	Bomet
Seyanin Hill	Bomet
Kambit/Kaptien Hill	Bomet
South West Mau- Londiani	Kericho (Londiani Forest)
South West Mau- Chepsir	Kericho (Chepsir/Chepseon Forest)
Timbilil Water Catchment	Kericho (Chepseon/Kuresoi)
Kipchorian Water Catchment	Kericho (Kipkelion West)
Yurith Water Catchment	Kericho (Bureti/Belgut/Sigowet)
Tionysoyet Water Catchment	Kericho (Ainamoi/Belgut)
Lemotit Hills	Kericho (Kipkelion East)
Tendeno/Malagat Catchment	Kericho (Kipkelion West)
Tionysoyet Wetland	Kericho (Ainamoi)

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	Kaplutiet/Kiptule Wetland	Kericho (Kabianga-Belgut)
	Kuje Wetland	Kericho (Sigowet/Kaplelartet- Soin Sigowet)
	Tiritab Moita Wetland	Kericho (Cheplanget- Bureti)
	Daraja Sita Wetland	Kericho (Kapkatet-Bureti)
	Tolony Wetland	Kericho (Kapkatet-Bureti)
	Kibukat Wetland	Kericho (Tebesonik-Bureti)
	Kabusienduk/Ngenda Wetland	Kericho (Tebesonik-Bureti)