

REPUBLIC OF KENYA



**MINISTRY OF LANDS AND
PHYSICAL PLANNING**

**Sessional Paper No. 1 of 2017 on
National Land Use Policy**

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FOREWORD

As provided for by Article 260 of the Constitution, Land in Kenya is defined as the surface of the earth and the subsurface rock, any body of water on or under the surface, marine waters in the territorial sea and exclusive economic zones, natural resources completely contained on or under the surface and the airspace above the surface. It represents an important resource for the economic life of a majority of people in Kenya. The way people handle and use land resource is decisive for their social and economic well-being as well as for the sustained quality of land resources. Land use however is not only a realm of those directly using it; it is exposed to part of the wider reality of social and economic development and change. Land use therefore is a highly dynamic process. This implies that policy formulation and development planning need to be based on a sound understanding of these dynamics.

Throughout human history, land has played a significant role in society. Land has been the focus of productive activities and a source of political power in any given society. All nations in the world are land based units, whose boundaries reflect social, cultural and political identity. From a human settlements point of view, land is a principle instrument in fostering social justice, development, provision of decent dwellings and health conditions; and therefore its use should reflect the interest of the society as a whole.

Key challenges face the optimal and sustainable use of land in Kenya. The judicious management of natural resources, land being one, is based on the premise that an equitable and sustainable relationship between human and natural resource is fundamental and essential for stability and progress of the land sector in a nation's development.

The biggest challenge that the country faces is to strike a balance between satisfying the human livelihood needs and sustainable use of resources for posterity. Other challenges include:

- The decline in the supply of pastures and portable water which stirs conflicts among pastoralists and between small and large-scale irrigation farmers.
- Poor quality of air and water which increases disease risks in human beings, livestock, wildlife and extinction of other life forms.
- Destruction of water catchment areas that causes shortage of water and electricity supply necessitating rationing.
- Desertification which reduces the productivity of land leading to food insecurity, reduced income and inhibits the accumulation of economic assets.

These challenges spell a gloomy future for the country unless the status quo is changed. The formulation of a National Land Use Policy will thus seek to balance different, yet related, concerns such as food security, human settlements, environmental protection and climate change; and other economic pursuits. The policy will also take cognizance of social, cultural, economic, political and spatial dimensions of development.

PROF. JACOB T. KAIMENYI, EGH, PHD, FICD
CABINET SECRETARY
MINISTRY OF LANDS AND PHYSICAL PLANNING

EXECUTIVE SUMMARY

The absence of a clearly defined land use policy in Kenya after years of independence has resulted in a haphazard approach to managing the different land use practices and policy responses. Land use continues to be addressed through many uncoordinated legal and policy frameworks that have done little to unravel the many issues that affect land use management.

The Constitution of Kenya 2010, Kenya Vision 2030 and the Sessional Paper No. 3 of 2009 on National Land Policy all justify formulation of a framework for effectively addressing the challenges related to land use. It is in response to this call that this Land Use Policy has been developed, incorporating all activities that are likely to have an impact on the use of land and its resources.

The overall goal of the national land use policy is to provide legal, administrative, institutional and technological framework for optimal utilization and productivity of land related resources in a sustainable and desirable manner at national, county and community levels. The Policy is premised on the philosophy of economic productivity, social responsibility, environmental sustainability and cultural conservation. Key principles informing it include efficiency, access to land use information, equity, elimination of discrimination and public benefit sharing.

The Policy is cognizant of numerous factors that affect land use in Kenya which include geographic and ecological features, population distribution, social, historical, cultural and economic factors. Other key factors are administrative, institutional and policy instruments, investment, urbanization and land tenure.

So as to ensure efficient, productive and sustainable use of land, key measures shall be taken by the government (both national and county) and all land users. These include: sound land use practices, conservation and enhancement of the quality of land and land-based resources and

the proper management of demographic and health parameters. The Government shall institute mechanisms designed to induce land owners to put their land to productive use and encourage the application of efficient technology for the intensification of land use. Urban land use will be improved through measures such as establishing transparent, accountable, sustainable, comprehensive and participatory governance structures and decision-making processes.

Other key measures address issues of land cover, land use data and land use planning. Land use plans shall be developed at both national and county levels with full participation of all stakeholders and strict adherence to them shall be enforced. Mapping and documentation of all land uses in the country shall be undertaken, as well as developing a framework for incentives to encourage maintenance of forest cover, land banking for industrial, commercial, agricultural, residential and infrastructure development.

In order to fully realize the objectives of this Policy and reduce contradiction between various government sectors and agencies, all sectoral laws and policy frameworks will be revised and harmonised to bring them into accord with the recommendations of this Policy, these include various land and land related acts and sectoral policy frameworks such as; the Physical Planning Act Cap 286, the Land Act 2012, the National Land Commission Act 2012, the County Governments Act, 2012, the Land Registration Act 2012, Wildlife Conservation and Management Act, 2013, Kenya Maritime Authority Act Cap 370, the National Land Policy, the National Urban Development Policy, Maritime policies and Environmental Conservation policies.

Acronyms

AFA	Agriculture and Food Authority
AFFA	Agriculture, Fisheries and Food Act
ASAL	Arid and Semi-Arid Land
DRSRS	Directorate of Resource Survey and Remote Sensing
EMCA	Environmental Management and Coordination Act
GDP	Gross Domestic Product
KENHA	Kenya National Highways Authority
KNBS	Kenya National Bureau of Statistics
KURA	Kenya Urban Roads Authority
KWS	Kenya Wildlife Service
LAPSSET	Lamu Port South Sudan Ethiopia Transport Corridor
MDAs	Ministries, Departments and Agencies
MEA	Multilateral Environmental Agreement
NEMA	National Environmental Management Authority
PRSP	Poverty Reduction Strategy Paper
SEZ	Special Economic Zones
TBNRM	Trans-Boundary Natural Resource Management

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1.1 Background

1.1.1 Land and Land Use in Kenya at a glance

Land is the most important factor of production, besides labour and capital in Kenya. It is not only a critical resource, but also the foundation of economic development for the country.

The major land-cover types in Kenya are forests, savannahs, grasslands, wetlands, fresh and saline water bodies, and deserts. These are used for agriculture, pastoralism, water catchments, nature reserves, urban and rural settlements, industry, mining, infrastructure, tourism and recreation. Other uses include cultural sites, fishing, forestry and energy. A larger population in the country derives their livelihoods from land based activities.

1.1.2 Statement of the Problem

The use of land in urban and rural areas as well as in the land/water interface has been a major area of concern to all Kenyans. Problems of rapid urbanization, inadequate land use planning; unsustainable agricultural and industrial production methods, poor environmental management, poor cultural practices, inappropriate ecosystem protection and management are commonplace and require appropriate policy responses.

The absence of a clearly defined land use policy in Kenya after years of independence has resulted in a haphazard approach to managing the different land use practices and policy responses. In addition, land use issues continue to be addressed through many uncoordinated legal and policy frameworks that have done little to unravel the many issues that affect land use management.

Economic, social and political stability is determined by the extent to which instruments of governance facilitate the productive and sustainable use of land. While Kenya has made important strides towards promoting productive and sustainable use of land, there are still a number of challenges which need to be addressed at policy level. The question of appropriate and beneficial use of land in Kenya has gained prominence in the face of growing population and mounting demand for land resources. This calls for prudent and participatory planning and utilization of these resources in an equitable, efficient and sustainable manner that optimizes production.

1.1.3 Government Initiatives

In the past, efforts on land use and environment management were uncoordinated as Kenya has not had a national land use policy. The colonial period introduced various English Laws and policies such as the Swynnerton-Plan (1954) to manage land use and emerging conflicts which were manifested in form of Land Planning regulations. These regulations were transformed to the Land Planning Act Cap 303 and the Land Control Act Cap 302.

Other government initiatives to address land use planning and facilitate efficient use of land and other natural resources as the foundation for economic development in Kenya included; the Sessional Paper No. 10 of 1965, on African Socialism and its Application to Planning in Kenya, which emphasized the need for planning as the basis for development and growth; Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth that focused on the need for rural urban balance as a way of addressing social economic development challenges facing the country. Others include Poverty Reduction Strategy Paper, 2003-2007, Economic Recovery Strategy for Wealth and Employment Creation 2003-2007 and the Kenya Vision 2030.

The following Acts of Parliament had specific provisions touching on matters of land use and management of land based resources; the Physical Planning Act Cap 286, Land Control Act Cap 302, Agriculture Fisheries and Food Authority Act No. 13 2013, Water Act 2002, Wildlife

Conservation and Management Act Cap 376, Environmental Management and Coordination Act (Amendments) 2015, Forest Act Cap 385, 2005. However, of all the past initiatives the one policy framework that has brought forth the need for a National Land Use Policy is Sessional paper No. 3 of 2009 on National Land Policy.

Following the promulgation of the Constitution of Kenya 2010, the following statutes that have specific matters on land use, were enacted;

- a) Urban Areas and Cities Act, 2011
- b) County Governments Act, 2012
- c) Land Act, 2012
- d) Land Registration Act, 2012
- e) National Land Commission Act, 2012
- f) Land (Amendment) Act, 2016
- g) Community Land Act, 2016

The need for a policy framework to guide matters of land use and development was pronounced further under the provisions of Chapter Five of the Constitution of Kenya, which specifically under Article 60 require that land in Kenya has to be managed and used in a manner that is equitable, efficient, productive and sustainable. In addition Articles 66, 68 and 69 provide for regulation of land uses, revision of sectoral laws on land use and sustainable exploitation, utilization, management and conservation of the environment and natural resources. Furthermore the Constitution also requires equitable sharing of accrued benefits from natural resources.

However, while each of these initiatives have had measurable successes in addressing land use challenges, lack of institutional coordination and harmony in the various statutes pose a challenge in the overall management of land use in the country. Therefore one of the major aims of the National Land Use Policy is to provide institutional coordination in land use planning across all relevant sectors.

In line with the provisions of the Constitution, the objectives of Kenya Vision 2030 and Sessional No.3 of 2009 on National Land Policy, the Land Use

Policy will make proposals on how to promote and develop opportunities for investments and wealth creation. In addition the Policy will seek to support livelihoods and create an enabling environment for agriculture, livestock production, settlements and other production concerns.

The National Land Use Policy (NLUP) is a statement of intent that sets out long term goals on land use management. It addresses issues relating directly to the use of land and its resources. It also incorporates all activities that are likely to have an impact on the use of land and its resources.

The Policy is important in addressing issues of optimal utilization of land and land related resources by providing principles and guidelines for:-

- i) Proper management of land resources to promote public good and general welfare;
- ii) Land use planning to enhance sustainable development;
- iii) Anchoring land development initiatives;
- iv) Mitigating problems associated with poor land use;
- v) Promoting environmental conservation and preservation; and
- vi) Preparation and review of a national spatial plan and integration of various levels of land use planning.
- vii) Land and land related conflicts
- viii) Categorization of land uses in the country

1.2 Vision

A National Land Use Policy that guides Kenya towards an environmentally and socially responsible use of land and land based resources for socio-economic transformation of the people of Kenya.

1.3 Mission

To promote best land use practices for optimal utilization of the land resource in a productive, efficient, equitable and sustainable manner.

1.4 Objectives

The principle objective of the NLUP is to provide legal, administrative, institutional and technological framework for optimal utilization and productivity of land and land related resources in a sustainable and desirable manner at National, County and Sub-county and other local levels.

Specifically the Policy shall offer a framework of recommendations and principles designed to ensure the maintenance of a land use system that will provide for:

- i. Land use planning, resource allocation and resource management for sustainable development to promote public good and general welfare;
- ii. Environmental management and sustainable production in the utilization of land resources;
- iii. Coordination and integration of institutional linkages in planning at sectoral and cross-sectoral levels to foster collaboration and decision making among different land users;
- iv. Equitable utilization of land resources to meet governance, social-economic and cultural obligations of the people of Kenya;
- v. Anchoring land development initiatives that will respond positively to the market demands;
- vi. Integrated framework for the preparation of a National Spatial Plan and review of various land use plans;
- vii. Mainstreaming of gender and special interest groups in land use planning and management;
- viii. A comprehensive and efficient GIS-based national land use information management system;
- ix. An appropriate, independent, accountable and democratic institution for land use conflict resolution; and
- x. Mitigating problems associated with poor land use.

1.5 Philosophy of the National Land Use Policy

This Policy recognizes the central place of land in the production chain and addresses issues that relate directly to the use of land, its resources, and the perceptions held towards land. It incorporates measures and principles to guide all activities, whether proposed or on-going, that may have direct or indirect impact on the use of land and its resources. The Policy takes cognizance of the benefits of planned use of land and its resources; and builds in measures for integrated, equitable and sustainable utilization for optimal production.

This Policy upholds the values of economic productivity, environmental sustainability and the conservation of culture; and seeks to facilitate their protection and optimal use. Through this multi-faceted approach, a comprehensive and integrated land use framework creates the context upon which the opportunities and constraints of the use of land in Kenya are determined.

This Policy and its implementation shall be guided by the philosophy outlined below;

- i. Land is a critical resource and important factor of production.
- ii. Land is the foundation of economic development and transformation that should be managed productively.
- iii. Land is a finite resource that should be utilized sustainably; and
- iv. Land is a cultural heritage which should be conserved for posterity.

1.6 Guiding Principles and Values of the National Land Use Policy

The principles are aimed at guiding the manner in which appropriate use of land can be achieved. The following principles and values will be upheld:

- i. Efficient and sustainable land use management.
- ii. Ecological sustainability.
- iii. Integrity and adherence to the rule of law.
- iv. Food security.

- v. Access to land use information.
- vi. Amicable resolution of land use conflicts.
- vii. Equity, inclusivity and transparency in decision-making
- viii. Effective public participation.
- ix. Elimination of discrimination and respect for human rights in land use.
- x. Public benefit and interest.
- xi. Order and harmony in land use.
- xii. Adoption of technology in land use management.

1.7 Method

This policy was generated from;

- i. The Issues and Recommendation Report produced by thematic groups comprising of state and non-state actors.
- ii. Consultative workshops organized to collect views from stakeholders.
- iii. Reports documenting past initiatives on land use practices.
- iv. Input from experts, research findings as well as reports from the academia.
- v. Submissions from individuals, groups and organizations.
- vi. Benchmarking with best practices within and outside the region.

1.8 Policy Review

The Policy will be reviewed after every ten (10) years to take into account emerging issues and developments in the governance dynamics of the country's social-economic development. In extremis, the policy may be reviewed to deal with exceptional circumstances arising within a period shorter than ten (10) years.

2.1 Geographical Characteristics

The Republic of Kenya comprises of the territory and territorial waters. It has an area of approximately 582,646 sq. km. comprising 97.8% dry land and 2.2% water surface (National Atlas, 2004).

As provided for by Article 260 of the Constitution, land in Kenya is defined as the surface of the earth and the subsurface rock, any body of water on or under the surface, marine waters in the territorial sea and exclusive economic zones, natural resources completely contained on or under the surface and the airspace above the surface. For this reason, the NLUP is formulated to address all the issues, challenges and the proffered policy guidelines and principles as considered appropriate.

It is estimated that 20% of the land of the dry land area is medium to high potential land and the rest of the land is mainly arid or semi-arid. Forests and woodlands occupy about 37,000 sq. km. (6.35%). Some of these form part of national reserves and game parks which together account for 10% of the country's area.

Land Capability

The land capability assessment indicates that virtually, the entire Kenyan territory is capable of supporting livelihoods. However, the capability of land to support livelihoods varies across the country. The rangeland areas (ASAL) which constitute approximately 80% of the country have the capability to support large scale livestock production as well as other economic activities related to the same. The transition areas have the ability to support both livestock farming and crop farming albeit limitations of rainfall scarcity and unreliability.

The prime agricultural areas that constitute approximately 15.78% have

the capability to support different types of mixed farming. Environmentally sensitive areas which constitute approximately 27.62% afford the country huge opportunity to conserve the environment. These areas are also capable of supporting low environmental impact activities such as tourism. The areas with physical limitations which constitute are unsuitable for human settlement but may be utilized for economic activities such as tourism, film making and research.

This analysis depicts that there is no land in Kenya that can be regarded as low potential. This means that all land can be put into economic use.

Topographically, the country may be divided into four distinct geographical and ecological regions or zones with different patterns of land use, namely; the coastal plain, the arid low plateau, the highlands, and the Lake Victoria basin. The rainfall patterns are extremely varied but generally follow those regions, with the Lake Victoria basin receiving the heaviest and most consistent rainfall. The different ecological/climatic zones and their general land uses are briefly discussed below:

- i. The tropical marine coastal climates with the ocean, forested islands and sandy beaches that are ideal for deep sea fishing, prawn farming, horticulture and tourism. The inland lakes' basins provide similar opportunities for subsistence and commercial fishing, irrigation, transport, communication, water sports and tourism;
- ii. The wild and expansive savannah grasslands that host a rich diversity of flora and fauna providing scope for traditional livestock rearing by pastoral communities and safari adventure for tourists;
- iii. The rolling countryside interspersed by small hills with deep volcanic soils that support crop and animal production using seasonal rains and micro-irrigation along the major river basins. This zone hosts low to medium density human settlements with 50-300 people per sq. km;
- iv. The highlands around the mountains with rich agricultural land that support food production by large and small scale farmers mainly using the rain fed system of agriculture. This zone hosts the largest

- concentration of human settlements with densities ranging between 300-800 persons per sq. km;
- v. The mountainous parts of the highlands with equatorial type of forests hosting the remaining forest cover, which provides the only water catchments for the East African region and wildlife sanctuaries and, therefore suitable for conservation. They were out of bounds for human activity until recently, but have now been seriously encroached by small scale farmers resulting in wanton destruction of forest cover.
 - vi. The temperate mountain tops mostly covered by tundra type vegetation and snowy weather around the year, are very attractive to mountain climbers and tourists looking for outdoor adventure and are also suitable for conservation; and
 - vii. The arid and semi-arid lands that cover approximately 80 % of the country's land mass where nomadic communities practice pastoralism raising over fifty percent (50%) of the livestock in the country and hosting a considerable proportion of the country's wildlife. The scarcity of water in these areas has a security aspect as people and animals compete for access to it and very often conflicts arise.

2.2 Population

2.2.1 Distribution

Kenya's population is estimated at approximately 48 million in 2016 at an overall growth rate of 3.4% (KNBS, Population Census Report 2009). Population in the country is unevenly distributed. The population of Kenya is concentrated on the central and the western parts of the country. The most populated counties include; Nairobi, (3,138,369), Kakamega (1,660,651) and Kiambu (1,623,282) while less populated counties include; Lamu (101,184), Isiolo (143,294), Samburu (223,947). Age-

wise the population under the age of 15 constitutes 40% of the total population. The percentage of individuals under the different age groups decreases as age increases this shows that the demand for facilities and services serving the young generation is high as compared to the aged.

Table 1: Current Population Estimation per County

COUNTY	TOTAL POPULATION 2009	ESTIMATED POPULATION 2016
Baringo	555561	702062
Bomet	724186	915153
Bungoma	1375063	1737666
Busia	743946	940124
Elgeyo Marakwet	369998	467566
Embu	516212	652337
Garissa	623060	787361
Homa Bay	963794	1217946
Isiolo	143294	181081
Kajiado	687312	868556
Kakamega	1660651	2098564
Kericho	758339	958313
Kiambu	1623282	2051340
Kilifi	1109735	1402371
Kirinyaga	528054	667302
Kisii	1152282	1456138
Kisumu	968909	1224410
Kitui	1012709	1279760
Kwale	649931	821317
Laikipia	399227	504503
Lamu	101539	128315

Machakos	1098584	1388280
Makueni	884527	1117776
Mandera	1025756	1296247
Marsabit	291166	367946
Meru	1356301	1713957
Migori	917170	1159027
Mombasa	939370	1187081
Murang'a	942581	1191139
Nairobi	3138369	3965955
Nakuru	1603325	2026121
Nandi	752965	951521
Narok	850920	1075307
Nyamira	598252	756011
Nyandarua	596268	753503
Nyeri	693558	876449
Samburu	223947	283002
Siaya	842304	1064419
Taita Taveta	284657	359721
Tana River	240075	303383
Tharaka Nithi	365330	461667
Trans Nzoia	818757	1034663
Turkana	855399	1080967
Uasin Gishu	894179	1129973
Vihiga	554622	700875
Wajir	661941	836494
West Pokot	512690	647886
Total	38,610,097	48,791,556

2.2.2 Population and Land use

Approximately seventy five per cent (75%) of the country's population live within the medium to high potential agricultural areas (20% of land area) and the rest in the vast Arid and Semi-Arid Lands (ASALs). One consequence of this is that size and distribution of individuals' land holdings varies quite widely as does population density which ranges from as low as 2 persons per sq. km. in the ASALs to a high of over 2000 in parts of Kisii, Vihiga, Kiambu and the Eastern slopes of Mount Kenya.

By 2016, the urban population in Kenya is estimated at 11,004,417 which represents 25% of the total population. Most rapid urban growth centres are still confined to Nairobi, Mombasa, Kisumu, Nakuru, Eldoret, Kakamega and their satellite extensions. The urban population growth rate in Kenya is 4.4% as from 2010 to 2015 implying a rapid rural-urban migration pattern. This is further reflected in the country's poverty statistics which indicate that the proportion of those living in absolute poverty in the rural and urban areas now stands at 50.1% and 53.1% of the population respectively.

In the rural areas, the high to medium potential zones are dominated by millions of small farm holdings. In some cases, insecure land-tenure systems have led to low investment in land improvement and productivity. Many smallholder areas are suffering continuous fragmentation of holdings into uneconomic sizes, and farms are getting smaller in the high rainfall areas and in the drier zones as a result of lack of a law prescribing minimum and maximum land holdings for different land uses in Kenya. In addition, many large farms that used to produce seed and breeding stock have been sub-divided and transferred from state to private ownership.

2.3 Land Use and Land Cover

2.3.1 Land Use

Land use refers to the activities to which land is subjected to and is often determined by; economic returns, socio-cultural practices, ecological zones and public policies. In the context of this policy, land use is defined as the economic and cultural activities practiced on the land.

Land cover on the other hand, denotes the physical state of the land and describes the quantity and type of vegetation.

Land use and land cover are interconnected by human actions that directly alter the physical environment such as bio-mass burning, irrigation, deforestation and the application of fertilizer.

The interaction between physical processes and human activities produce land cover changes or alterations of the properties of the land surface, taking either the form of a conversion or modification which leads to secondary environmental impacts (such as soil erosion, micro climatic changes and changes in water quality among others) and reflects human goals mirrored on land use and land use changes.

Key land uses in Kenya include; agriculture, industrial, commercial, infrastructure, human settlements, recreational areas, rangelands, fishing, mining, wildlife, forests, national reserves and cultural sites among others spread across the high, medium and low rainfall areas.

2.3.2 Land Use Data

The existing land use data is outdated and inadequate. The data on land uses was developed during the colonial times and has not been updated to match the changing circumstances.

Access to land use data is limited to a few institutions that generate the data with little dissemination to the public. Despite the importance of land cover and land use to understanding national environmental changes there are challenges related to data availability and access and interpretation and dissemination, other challenges include;

- i. Inadequate useful data,
- ii. Lack of common definitions and standards of land use,
- iii. Lack of systematic and coordinated data collection activities,
- iv. Challenges in data interpretation, and
- v. Lack of comprehensive mechanisms for capturing cumulative change manifested through the geographically dispersed, progressive result of human activity such as soil loss, habitat loss and loss of biological diversity.

2.3.3 Land Cover

There is a low level forest cover with the current level being 7.5% of the total dry land cover. This is below both the national and international standards which stand at 10% and 30% respectively.

There has been consistent loss of forest cover to other competing land uses such as real estate development, agriculture, infrastructure development, industrial and commercial developments and energy requirements.

The forests have been deliberately and illegally reduced to croplands, croplands changed into grasslands and vice versa, while the grasslands are turning into deserts. These changes are noticeable through declining yields in crops and livestock per unit of land and longer distances covered by rural people to get fuel-wood, water and grazing areas.

2.3.4 Land Availability

Land availability for various uses has been hindered by speculative investments which have a negative impact on land use and land markets. Large tracts of land are held for speculative purposes, reducing the stock of available lands and driving the price of land up. This is one of the factors responsible for noticeable distortion between demand and supply. At present there are no mechanisms to prevent or reduce the concentration of land ownership. Particular concerns are incidences of active speculation in and hoarding of land.

2.4 Land Use Policy Themes

2.4.1 Agricultural Development

The importance of land use in the economic and social activities of a society makes it imperative that land is accessible, its potential for productivity is enhanced and sustainability guaranteed. Kenya's economy is largely based on agriculture, which contributes about 30% of the GDP and provides livelihoods to over 80% to the population.

Approximately 80% of Kenya's total dry land surface is classified under ASALs. This land supports 26-30% of the total population, 50% of the livestock sector as well as 70% of the wide variety of wildlife that form the basis for Kenya's tourism. The livestock sector contributes about 12% to the country's GDP.

In several parts of the country, agricultural potential is limited because of erosion, low fertility, rockiness and acidity of the soils, and dangers of landslides. The adverse ecological and climatic conditions limit the available amount of good quality agricultural land. Sustainable land use practices are key to the achievement of food security and for other economic activities for development.

Inadequate consultations and lack of common guiding principles between sectors both in land use determination and formulation of laws has led to each sector or institution pursuing its own objectives when it comes to planning for land utilization.

Cultural practices, urbanization and growth of cities have led to subdivision and conversion of agricultural land into residential, commercial and other uses. These alternative land uses have led to conflict and disharmony over land use allocation and reduced agricultural productivity. It is therefore important that land is made available for different uses, for high production levels to be achieved and maintained and sustainability ensured.

At individual household level, land is supposed to provide basic needs such as food and firewood despite its fixed supply, coupled with the growing population, this has led to a decrease in per capita land holding.

Agricultural land production is largely characterized by subsistence farming where there is low uptake of technology and limited farm inputs resulting in low production and poor quality products. Farming in the marginal lands has also led to the decline in land productivity, loss of biodiversity, environmental degradation and loss of moderation of the microclimate.

Effects of climate change in the form of drought, unreliable rainfall patterns, flooding, and rise in temperatures among others has led to decline in agricultural productivity, social disruption and migration.

Rangelands are severely degraded due to overgrazing, poor animal husbandry practices and conversion of rangeland to crop farming. This has led to shrinkage of land available for wildlife, reduced productivity levels and unsustainability.

Stringent land tenure systems where the government has limited power to control land uses in freehold and community land, have led to subdivisions of land into uneconomic units and under development of infrastructure facilities in some areas.

Lack of value addition to agricultural products and poor marketing strategies have led to lower returns to farmers which have in turn prompted conversion of agricultural land to other land uses. This has led to shrinkage of productive agricultural land, disharmony in land uses, low food production and a higher cost of living.

The success of the National Land Policy will be determined by the extent to which it will facilitate the productive and sustainable use of land. While important strides have been made in Kenya to ensure that the land is productively and sustainably used, there are still a number of problems which need to be addressed at policy level. These are:-

- i. Chronic underutilization of land especially in the large farm sector.
- ii. Land deterioration that has occurred due to population pressure, massive soil erosion arising from poor land use practices and variability in climatic patterns. This has led to rapid depletion of land cover and creeping desertification in ASALs which has in turn affected the capacity for regeneration of the country's water catchment areas.
- iii. Abandonment of agricultural activities due to poor infrastructure for agricultural produce such as rural access roads, marketing facilities, financing and extension services.
- iv. Incompatible land uses have resulted in human - wildlife and resource use conflicts;

2.4.2 Pastoralism and Livestock Development

Commercial livestock production and ranching have enjoyed the benefits of sustained land use planning and support by the State through extension services, market outlets and access to credit by financial institutions.

Pastoralists face a number of challenges including reduced pasture and water shortage during times of drought and poor animal husbandry. Pastoral land fragmentation and conversion to other uses exacerbated by climate change impacts on rainfall has also led to their vulnerability to poverty and insecurity.

2.4.3 Industrial Development

In 2015 the industrial sector contributed 10.3% to the country's GDP and 13% to its employment. Locally manufactured goods comprised 25% of Kenya's exports. Industrial development is majorly in the form of processing and manufacturing. The sector is mainly agro-based with recent shift towards export-oriented manufacturing. Most industries are concentrated in major towns.

Location of industries in Kenya has largely been influenced by availability of raw materials, market for products and provision of infrastructure. Recent initiatives to promote industrial development have leaned towards allocation of large tracks of land for establishment of Special Economic Zones (SEZ), Industrial parks and Industrial Clusters. These initiatives call for the formulation of Land Use Policy to guide in their development.

Challenges facing the growth of the industrial sector in Kenya include land fragmentation, poor infrastructure, and incompatibility of land uses. Further, the industrial, commercial and communications sectors place specific demands on land resources especially for establishment of industrial zones and plants. Conversely, industrial development requires that special attention be paid to environmental impacts and waste management services to mitigate pollution, environmental and land degradation.

2.4.4 Mining and Energy

The mining industry in Kenya is dominated by production of non-metallic minerals such as fluorspar, gemstone, soda ash and stone mining. Most of these mineral deposits lie under property that has been settled or privately owned requiring acquisition, relocation and compensation. In 2015, the sector contributed 0.9% to the country's GDP, which is expected to increase as a result of the recent discovery of coal and oil deposits in the country. These activities are unregulated with little use of technology taking the form of quarrying and direct excavations. These poses a safety risk to mineworkers and people residing near the mining areas as well as general environmental safety.

There are low returns due to the low adoption of technology in mining and wastage of land due to lack of intensification of mining methods. Further, failure to rehabilitate mining fields after depletion of minerals leads to vast waste lands.

Energy generation in Kenya has been dominated by hydro power at 52% of the total energy production. The recent developments in other renewable sources of energy such as geothermal solar, wind and biomass has had impact on land use in the country. The areas with the potential for energy production falls under land privately or communally owned. The process of acquisition, relocation and compensation has in most cases resulted in conflict between the resulting land uses, affected people and the developers hindering exploitation of these resources.

2.4.5 Tourism

The growth of tourism industry in recent years has created new demand for land, generating conflicts in land use and impacting significantly on prices, land markets and land speculation. In 2015, the sector contributed 9.9% to the GDP. However, there is geographical concentration of tourism activities at the coast and in the arid and semi - arid areas. The tourism sector generates high demands for water, solid waste management, and other environmental resources and services. Sustainable tourism development could be threatened by the general degradation of landscape and seascape quality caused by poor-designed urbanization, deforestation, erosion and ineffective waste management.

2.4.6 Transport and Infrastructure

Transport infrastructure requires land both in clustered and linear forms for their development. There is need to continuously develop and upgrade transport infrastructure in the country taking into account current and emerging trends in transportation. The resultant land use conflicts, land acquisition and environmental safety during the development and upgrading process calls for intervention through this Policy.

Most of the human settlement areas are not adequately provided with infrastructure such as safe water, sanitation, drainage, solid waste disposal services, security, recreation, education and health facilities. This is associated with poor planning, inadequate enforcement and implementation of the plans, dispersed nature of development in rural areas, urban sprawl and cases of land grabbing. This phenomenon negatively affects the quality of environment and life in the human settlements. There is therefore a need for development that takes into cognizance the provision of basic infrastructure and services.

2.4.7 Natural Resources and Environment

The environment includes all elements, factors and conditions that have some impact on growth and development of a society while natural resources are the physical non-human factors and components whether renewable or non-renewable. Article 260 of the Constitution of Kenya identifies natural resources to include sunlight, surface and ground water, forests, biodiversity and genetic resources, rocks, minerals, fossil fuels and other sources of energy. According to the National Land Policy, natural resources specifically include wildlife, forests, water and water bodies, minerals, marine ecosystem and the land itself which are important in soil conservation, regulation of micro climate, water catchment and a source of income and livelihoods among others.

Article 69 (b) of the Constitution requires forest cover to be at least 10% of the total dry land cover. However Kenya has only 7.5% forest cover due to deforestation, conversion of forest land into other land uses such as urban land, and climate change among others.

Kenya has given priority to management of the environment and natural resources as articulated in the Constitution and other developmental policies and strategies including the Kenya Vision 2030. Article 42 of the Constitution, provides for a clean and healthy environment which includes the right to have the environment protected for the benefit of the present and future generations through legislative framework. Article 69 (a) provides that the State shall ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources and ensure the equitable sharing of the accruing benefits.

Recent positive developments concerning the environment and natural resource management include the enactment of the following laws: the Environment and Land Court Act (2011), the Agriculture Act (AFFA), the National Land Commission Act (2012), Environment Management and Coordination Act (1999), Wildlife Act, Forest Act, Water Act, Fisheries Act, and various Multilateral Environmental Agreements (MEA).

The emerging societal demands have necessitated the review of utilization and management of natural resources and the environment in a more sustainable manner. Currently, land use and environmental management is guided by multiple sectoral laws and guidelines which are not harmonized. Moreover they are multi-layered and sometimes in conflict, which in turn creates overlapping mandates and affects the operational framework for the application of legislation. In addition, the evolution of the legal framework has not been in tandem with the changes of population and technological needs. Furthermore the introduction of the devolved system of governance and the vesting of community lands in local communities calls for harmonization and review of environmental management and natural resource legislation and policies.

The NLUP shall address the following issues;

2.4.7.1 Environmental Degradation

Environmental and natural resources conservation is key for the realization of any socio-economic development in a country. Environmental degradation entails pollution of water, air and the land resource. It also includes the

destruction of natural resources like the forest through encroachment and deforestation, destruction of wetlands, water catchment areas, cultural areas and additional damaging activities like over mining, quarrying and other excavation activities.

2.4.7.2 Agriculture Environment Management

Challenges associated with agricultural activities include cultivation on slopes, encroachment into wetlands, salinization in ASALs, soil erosion, landslides, eutrophication of water bodies, over grazing, deforestation and use of inappropriate technologies.

2.4.7.3 Coastal Environmental Management and Conservation

The country's coastal region is affected by soil erosion, encroachment of high water marks, destruction of marine breeding sites, destruction of coral reefs and mangrove forests, extinction of species, competition from infrastructure and other development projects, restricted fish landing sites and obstruction of access to the beach among others.

Kenya has an exclusive economic zone totaling to 142,400 square kilometers and an extended continental shelf of 103, 320 square kilometers. In spite of the high potential for exploitation and development of the marine economy not much has been done to tap into it for the mainstream economic development of the country. The high potential for deep sea fishing remains underutilized and has largely been dominated by foreign fishing groups. The potential within this area includes fisheries and aquaculture, renewable ocean energy, sea ports and shipping, seabed exploration and minerals, marine biotechnology and tourism.

2.4.7.4 Rangelands Degradation

Reduction in the sizes of land holdings, fragmentation due to conversion into other land uses, soil erosion and climate change leading to reduction in pastures and water supply as well as over-stocking continuously affect range management.

2.4.7.5 Urban Environment Management

As the country industrializes and the population increases, more people migrate to the urban areas resulting to problems of pollution, informal settlement, strain on infrastructure, waste management, public health and safety among others.

2.4.7.6 Pastoral Lands/ Arid and Semi-Arid Lands

Arid and Semi-arid lands are threatened by land fragmentation, resource conflicts, reduced productivity, and loss of species, desertification and sedentarization resulting in loss of livestock during droughts.

2.4.7.7 Climate Change

Global climate changes have triggered erratic weather patterns across the country. The unpredictable weather patterns have led to floods, droughts, famines, low water levels and melting of snow from mountain tops. The situation is further aggravated by the lack of adequate, systematized information for long term predictions and planning to deal with the challenge of climate change and natural catastrophes.

2.4.7.8 Cultivation on Marginal Lands and Fragile Ecosystems

Cultivation in marginal lands and fragile ecosystems leads to environmental degradation and other challenges among them; loose soils, destruction of ecosystem and the microclimatic, soil erosion, eutrophication and increased rainwater runoff.

2.4.7.9 Bio-diversity Conservation

Kenya is endowed with a rich bio-diversity. However its natural resources and environment are threatened by various challenges such as destruction of the natural habitat, loss of species, desertification and uncontrolled introduction of invasive species.

2.4.7.10 Trans-boundary Issues

The conservation and management of trans-boundary natural resources

is vital for the natural resource and environmental sustainability. Some resources such as lakes, rivers, forests and wildlife are ecologically dependent on elements beyond the national boundaries. The trans-boundary natural resources and environment are affected by conflicting policies and approaches by various stakeholders.

2.4.7.11 Unsustainable Natural Resource Exploitation

The prevalence of inappropriate land tenure systems coupled with the high population growth rate in the high potential areas has pushed a significant part of the population among farming communities away from their traditional areas to less productive lands and forested areas which have been alienated for crop production. This has eaten into the traditional forest areas with resulting deforestation and destruction of indigenous forests and water-towers. It has severely reduced the volume of water that is available in the country and contributed, along with climate change to a changed pattern of rain distribution. Unsustainable farming methods in these sensitive areas have resulted in severe soil erosion and degradation which has reduced the overall capacity for sustainable food production in the country.

2.4.7.12 Information and Knowledge Gap on Natural Resources

There is inadequate information and knowledge on the location, extent, level of exploitation, quality and quantity of natural resources in the country. Natural resource mapping is primarily done by Directorate of Resource Survey and Remote Sensing (DRSRS) while other natural resource mapping is done by different organizations. Therefore, there is need for unified mechanisms for collection, storage and dissemination of environment and natural resources information.

2.4.8 Human Settlement/Housing

Rural settlements are generally characterized by a dispersed pattern of homesteads and low population density while urban settlements are compact and densely populated. The rural population mostly depends on

the natural environment for their livelihood through primary production in agriculture and livestock keeping among others while the urban dwellers are primarily dependent on manufacturing industry and services sector.

While the government is committed to international declarations and best practices (such as the Istanbul Declaration on Human Settlements and the Habitat Agenda), not much has been achieved in the development of adequate shelter for all. The most notable reasons are low levels of income for the majority of the population, high cost of land, shortage of skilled manpower, high cost of building materials, inadequate funding in the housing sectors among others.

Rural areas are characterized by poor social and physical infrastructure which includes roads, education, and health and recreation facilities while the urban settlements are more nucleated with higher population densities resulting in increased human settlement and urbanization challenges. Majority of urban dwellers are low income earners hence face enormous challenges in terms of lack of secure land tenure system, housing, water and sanitation. This shortfall in housing results in proliferation of squatter and informal settlements.

Many settlements and communities have become dysfunctional, either because they have lost critical public functions, or because they have been created without due attention being paid to necessary services, infrastructures and networks, especially in the case of housing partitions. Demands created by these developments on public services and utilities are very costly and taxing on government agencies and utility institutions. The challenges of poor planning, shortfall in supply of housing, poor integration of provision of infrastructure and services in human settlements, inadequate public participation in and awareness of land use issues and unsustainable use of local construction materials continue to affect human settlements. Since land is a limited resource, it calls for a rational human settlement development plan to cater for optimal utilization of land and other natural resource within and around settlements, both rural and urban.

2.4.9 Urban Land Uses

The indiscriminate extension of urban boundaries has brought within them population clusters living in areas of land which are still used predominantly for agricultural and livestock development purposes. Land use in Kenya's urban areas is hardly in conformity with existing zoning sub-division and building regulations. This has led to concentration of urban development in good arable land, the creation of industrial estates in several areas and the conversion of land from agriculture to housing in many parts of the country.

As a result of rapid urbanization, the country is currently experiencing major problems of proliferation of urban informal settlements, insecurity and violence, environmental degradation, urban decay and deteriorating public health standards. The majority of residents in the urban areas are in the low income bracket and they earn their living in the informal economic sector, in small businesses ranging from hawking to service and production enterprises. Informal settlements are therefore an integral part of the urban economy. Since urbanization is an inevitable process, there is need for planned growth on a long term basis.

2.5 Factors that Influence Land Use and Development

2.5.1 Land and Livelihoods

Land is needed to provide basic social services and to support economic activities in all sectors. While there has been significant progress over the past four decades, land ownership and use patterns still contribute to poverty and inequality, as there are inadequate opportunities for poor people to access land. At the same time, good agricultural lands continue fragmented and converted to other uses, threatening the country's productive capacity as well as its long-term food security. Patterns of land use and ownership also cause large areas of land to remain as dead capital, as these lands are not placed into productive use, and are not used as capital in the financial markets.

In addition, the manner of utilization of land determines the volume of food that is available, employment opportunities, commodities available for domestic and export markets.

2.5.2 Socio- Cultural Aspects of Land

The Constitution of Kenya identifies culture as one of the key values and protects citizens from deprivation from enjoyment of such rights. In many communities, land holds high cultural significance and symbolic value. It is a source of prestige, social status, security and power. It is also a critical factor in cultural identity and in the quality of the life of all citizens. People have strong cultural and sentimental attachment to land ownership and use, as a right and as an expression of identity, autonomy and personal achievement. Cultural and heritage sites provide a source of spirituality, artistic inspiration and recreation. The relationship between culture and land use management is expressed in the value attached to historical and archeological sites. Preservation of these sites is therefore an integral component of the overall land use framework.

All the ecological zones provide a means of livelihood for the communities that have settled there over the years. Communities have attachment to the land which they consider to be a cultural inheritance from previous generations and they tend to be highly protective of their spatial jurisdictions from potential migrants. The spiritual life of the different communities is closely connected to land and local geological formations such as mountains, hills, valleys, forests and caves have traditionally been used as religious shrines, burial grounds and places of worship. The Njonjo Commission Report cited one of the fundamental aspects regarding the African perspectives and sociology of land in human relations, which is worth quoting:

“For indigenous Kenyans, land has an important spiritual value, for it is not merely a factor of production; it is first and foremost the medium which defines and binds together social and spiritual relations within and across generations. Land belongs to a vast family of which many are dead, few

are living and countless members are still unborn” (Njonjo Commission Report 2002:19).

The physical and cultural survival of indigenous people is dependent upon the protection of their land and its resources. However, the relationship between the indigenous people and their environment has been eroded because of dispossession or forced removal from traditional lands and sacred sites. Land rights, land use and resource management remain critical issues for indigenous peoples around the world and in Kenya. Development projects, mining, forestry activities and agricultural programmes continue to displace indigenous people.

Modern approaches to land use and management as evidenced in government policy interventions have challenged or contradicted the traditional perception of land resulting in many obstacles in policy and project implementation. Land privatization while positive in its intentions, affects the concept of shared access to land, interferes with people’s livelihoods and introduces further competition for already scarce resources. The Constitution provides for freedom of movement but this can result in invasion and encroachment by intruders onto land which is attached to another community resulting in conflicts. Introduction of projects and implementation of policies without local peoples’ consultation may result in conflicts with their perceptions of land, tenure structures and land use, leading to low productivity, destruction of biodiversity, sacred and historical sites. On the other hand, disaster management is usually hindered by strong attachment to land especially in relocation proposals while land planning and development are subject to traditional perceptions that each person must own a piece of land.

2.5.3 The Land Connection to Poverty

Among the ten main causes of poverty in Kenya that were identified in the Poverty Reduction Strategy Paper (PRSP) nearly half of them had direct linkage with land uses. Low productivity in crop farming and livestock farming, lack of access to land, rural unemployment, general insecurity

couched in ethnic animosity, inadequate access to infrastructure and social services, gender imbalance and the high incidence of HIV/AIDS were identified as direct causes of poverty (PRSP 2001:21).

Poor land tenure systems have been associated with the poor access to land by a large proportion of the population that would wish to make use of land to support their livelihoods. It has been observed that forty per cent (40%) of the large scale farms in the high potential areas are not being optimally utilized as the elite who own them are doing so mainly for social rather than economic reasons. The frequent conflicts over access to water and grazing lands around pastoral communities has affected the utilization of land for food production in large areas raising the specter of widespread hunger and food insecurity. Gender imbalance in the control of productive assets such as land has resulted in women being more vulnerable to poverty among farming communities.

2.5.4 Historical Factors

Patterns of land tenure, use and management are to a large extent the direct product of history and culture. The two factors explain the relationship that exists between people and land resources in Kenya and are responsible, in many respects, for the peculiar patterns of land tenure, ownership and property rights that currently prevail in the country. Colonial policies and laws determined land distribution, ownership and use from which the country has inherited highly unequal patterns of land distribution. Until recently, these laws continued to govern land administration and management, sometimes, with negative consequences.

2.5.5 Legal, Administrative and Institutional Structures

Lack of common guiding principles in planning and coordination among different sectors such as agriculture, livestock, industry, transport, forestry, wildlife, urban development and social services that result in competing and uncoordinated land use practices. There remains however a number of issues that impact negatively on land use development,

management and administration. In particular, there are overlapping institutional responsibilities, insufficient collaboration, and some degree of fragmentation of land use management authority and roles among various Ministries Departments and Agencies (MDAs). This impedes effective and efficient management of land use.

In many respects, land use development and management decisions are highly sensitive, and remain directly and significantly influenced by political considerations. Important land use decisions are still sometimes being made outside established management procedures, in order to accommodate investors or to satisfy local demands from particular interest groups. There is a need to move land use development, management and administration from the realm of politics to the realm of policy.

2.5.6 Land Management Systems

Land use administration is a complex process that requires effective and efficient systems and organizations. While there have been significant improvements in recent years, land use management systems remain inefficient, resulting in the distortion of property markets, the degradation of land resources, and the failure of land development schemes to live up to the expectations of developers and users. Land speculation, land ownership structure, conflicts created by family lands and the absence of tenure individualization, and the frequent absence of physical demarcation are among the many issues that need to be addressed through improved land use administration system. The importance of these issues is reflected in the current escalation in the number of disputes, and in the negative impacts that conflicts often have on land use development. This necessitates retention of an independent and publicly accountable administration.

2.5.7 Policy and Legislative Frameworks

Land use administration is currently governed by a range of legal instruments and policies. Generally, there is a lack of coordination between land use policy instruments. There is lack of proper administrative and legal

framework on national land and of an information system that can provide accurate, reliable and up-to-date information. There is also need for up-to-date digital maps and land use data that allows sharing of information among Ministries Departments and Agencies. Weak enforcement of, and compliance with existing policies and legislation also plagues effective land use regulation and planning.

2.5.8 Land Market and Taxation Regimes

There is very little public sector intervention in the management and operation of land markets. In particular, taxation is not being used intentionally to guide those land markets and land uses in a significant way. Land property taxes, which used to be payable to local government authorities, are now collected by Kenya Revenue Authority.

In the field of protected area planning and management, there are scattered management responsibilities. There is need for harmonization of the functions of the various institutions and authorities in the planning and management of national parks, reserves and other protected areas in the country.

2.5.9 Land Tenure Systems

Land in Kenya is public, communal or privately owned. The country has inherited highly unequal patterns of land distribution. The peculiar patterns of land tenure, ownership and property rights that currently prevail in Kenya have to a large extent determined the use and management of land.

Observed trends in agricultural land ownership indicate that family and the community continues to be the dominant form of agricultural land tenure, but with a significant increase in the number of parcels under individual ownership.

The communal ownership presents a number of advantages, allowing a number of heirs to have access to land providing security to all co-owners while retaining flexibility in land use, and providing a buffer as well as a

number of non-monetary welfare benefits that would otherwise not be available to the weakest and poorest among the heirs.

However, it creates constraints and problems, particularly in cases of disputes, or when land is needed as collateral for access to credit. In this sense, it is an obstacle to social mobility and economic empowerment in rural areas. Communal ownership may also be an obstacle to land conservation, investment in land as a productive asset and to the use of good agricultural practices.

Whereas it is much easier to control development, conserve and protect the environment and ensure posterity of public land, it continues to experience notable challenges in Kenya. Cases of land grabbing, encroachment, inaccessibility of land to citizens and willing investors negatively influence this form of land ownership.

The incidence of land speculation, among private ownership of land impacts negatively on production while contributing to increase in land prices above what their production capacity justifies. Also, the continued fragmentation of small parcels at the expense of agricultural production and the need to diversify production is another factor.

Over the past ten years, there has been notable increase in freehold ownership of dwellings and of the land on which these dwellings are placed. There however remains a significant gap between private ownership of house and private ownership of land, with significant number of houses located on land that is not owned by the owner of the house. The demand for housing exacerbates this situation, and has encouraged some people to build houses on lands that are unsafe and prone to disasters, especially floods and landslides.

There have been a number of initiatives aimed at promoting land reform and making land accessible to the poor in Kenya over the past four decades, but these experiences have not been entirely successful. In many instances, people have not respected the terms of their lease-purchase agreements, and only a small number of intended beneficiaries have actually become owners.

2.5.10 Sectoral Land Use Conflicts

The Government shall;

- i. Identify, map and gazette critical wildlife migration and dispersal areas and corridors in consultation with the local communities and individual land owners;
- ii. Encourage the development of wildlife sanctuaries and conservancies and involve local communities and individuals living contiguous to the parks and protected areas in the co-management of such areas;
- iii. Provide mechanisms for resolving grievances arising from human/wildlife conflicts;
- iv. Review the gazettement of forests and protected areas to foster the realization of their multiple values and ensure that they are protected for their ecosystem values and not merely to physically exclude human activities;
- v. Create an effective institutional framework and capacity to implement International Conventions especially those touching on access to land based natural resources; and
- vi. Facilitate partnership with neighbouring countries to foster Trans-Boundary Natural Resource Management (TBNRM) in the interest of national, regional and international conservation and development goals.

3.1 Land Tenure

All Kenyans have a right to access and use land, either through lease or freehold title, as individuals, corporations or collective trusts. However, the availability of land, particularly arable/cultivable land, is in increasingly short supply, and consequently some prudence is required in the issuing of public land. This situation is exacerbated by the widely accepted practice of a lessee acquiring public Land with a view to selling it in order to generate revenue; a further lease then being applied for and often obtained. With a growing population and a finite land source, this practice is leading to a shortage of productive Public Land for the Kenyan farmer and other users is an unsustainable form of land distribution.

To address the issue of unsustainable form of land distribution:

- i. Allocation of lands and issuance of titles should be done on the basis of approved physical development plans and approved survey plans, approved local area zoning regulations and policy guidelines.
- ii. The principle that every individual, group of individuals or company is eligible for a lease, an extension of a lease (through a fiat or certificate) or a grant of public land shall be maintained and the granting of a further or second lease should be contingent upon:
 - a. The satisfactory utilization of the first lease.
 - b. Not infringe on the rights of others to acquire a first lease.
 - c. In cases of a transfer of a lease, the conditions of the original lease being sustained (unless revised in the light of an approved Local Land Use Plan).
- iii. Areas of Public Land that have been identified as having a high public value (such as watershed protection, important botanic or

wildlife habitat and/or landscape values, cultural significance, road reserves for potential future highways, etc.) will not be allocated except under leases with conditions that reflect the high value or period by which the land may be required for a reserved use.

- iv. Public Land that has been allocated for recreational use (parks, playgrounds and sports fields) should be promptly transferred, by lease or grant, to the relevant entity with the condition that its recreational use shall not be converted to any other use and held in perpetuity for the common good.
- v. Holding of land under a collective basis will be subject to conditions of lease and will require an approved and binding management plan for the leased land.
- vi. All lands should be managed according to their actual suitability and local land use plans will be required to implement proper management.
- vii. Areas protected for specific use by any law shall not be de-gazetted except in circumstances prescribed in the laws governing such areas.
- viii. Squatting, or the illegal occupation of national or public lands that often leads to unsustainable land development shall not be permitted.
- ix. The protection of land rights of illegally occupied lands shall be pursued through litigation by the owners.

3.2 Land Management and Administration

Land administration in the country faces challenges such as, outdated and missing cadastral information, lack of security of tenure, intricate, inefficient and uncoordinated land taxation process and inadequate information on land parcels.

To address the issue of land administration, registration and dissemination of information in relation to land transactions:

- i. The National Cadastre should be predicted upon National Spatial Plans and policy guidelines specific to various aspects of land use and practices.
- ii. The National Cadastre shall be linked to the national land tax and rent database to ensure that all users of land make their annual contributions for the use of the land.
- iii. The National Cadastre shall be open to the general public to guarantee the transparency of land tenure, land issuing and land transactions and the contribution of land tax.
- iv. All leases of public land will be issued with binding conditions stating clearly the intended use of the land and which shall comply with the relevant local land use plans and the National Spatial Plan.
- v. Protected areas and areas of high intrinsic value such as habitat for endangered biodiversity and genetic resources, ecologically sensitive sites, national heritage, water towers, marine waters and exclusive economic zones, wetlands forests and sites with fossils fuels and energy resources among others will not be allocated for private use or de-gazetted.
- vi. Land reserved for public utilities and infrastructure such as roads, railways, airports, seaports, housing, offices and land banks for investments among others shall not be allocated or re-designated for private development and shall remain public lands.
- vii. Management of reserved public land should be predicated on approved development plans, local area development policies or technical guidance issued by the relevant planning authorities at national and county level.

3.3 Land Taxation

The use of land, either lease or freehold, results in the obligation to pay rent or land tax. Land tax will be paid by owners of freehold land, and rent by the leaseholder.

To address issues of land valuation;

- i. Land valuation and taxation shall be based on approved development plans and relevant local area land use and development guidelines.
- ii. A technical framework shall be developed by the ministry in charge of environment and natural resources in conjunction with the ministry in charge of lands and physical planning to provide the necessary guidelines on valuation of land and land based resources within areas that present public environmental values and or interests.

3.4 Population Growth and Distribution

The 2009 Census information reveals an increase in population from 33 million in 1999 to 38 million, with the current population being estimated at 48 million in 2016. Apart from natural growth, several migratory trends have contributed to these changes, among them factors such as influx of refugees.

Urban sprawl, sectoral land use conflicts, wanton subdivision of land into uneconomical units, degeneration of standards of services and facilities in urban areas, issue of urban governance, ribbon development along highways, congestion and poor mass transport system, poor waste management system, pollution, social upheavals, proliferation of informal settlements, skewed distribution of resources, impacts on micro climatic change, insecurity and crime, poverty and unemployment.

To address the issues of population growth and distribution, national and county governments shall;

- i. Develop a National Spatial Plan to provide an integrated framework for development of the country including guidelines for sustainable rural and urban planning management;
- ii. Prepare and implement integrated physical development plans specific to all counties, urban and metropolitan areas, cities and local centers;

- iii. Prepare and enforce land use plans and policy guidelines to address development activities that take place within the peri-urban areas to control urban sprawl, sub-division of land, and conversion of land to different uses as well as control of ribbon type of urban development;
- iv. Encourage public private partnerships in the provision of affordable housing, public utilities and other social infrastructure;
- v. Encourage development of affordable housing to meet the demand;
- vi. Financial policy that encourages releasing of funds to the housing sector;
- vii. Establish land banks that will make it easy for people to access affordable serviced land for housing development;
- viii. Development of appropriate building technologies to encourage people to develop housing in a more economical way;
- ix. Come up with programmes for development of social housing in all urban areas;
- x. Encourage waste management programmes that are environmentally sustainable;
- xi. Encourage development of towns on green energy principles. (encourage smart growth concept);
- xii. Mainstream climate change mitigation mechanisms in the management systems of urban areas;
- xiii. Put in place sustainable urban and rural management programmes to address the growing needs of the population in terms of infrastructure services, housing and transportation services;
- xiv. Implement the Constitutional and Land Act's recommendations as far as determination of minimum and maximum land sizes are concerned; and
- xv. Discourage cultural practices that promote land fragmentation.

3.5 Productive and Sustainable Use of Land

The success of the National Land Policy is determined by the extent to which it will facilitate the productive and sustainable use of land. While important strides have been made in the country to ensure that the land is productively and sustainably used, there are still a number of problems which need to be addressed at policy level. These are:-

- a) Underutilization of land especially in the large farm sector.
- b) Land deterioration due to population pressure, massive soil erosion arising from bad land use practices and variability in climatic patterns. This has led to rapid depletion of land cover and creeping desertification in ASALs which has in turn affected the capacity for regeneration of the country's water catchment areas.
- c) Abandonment of agricultural activities due to poor infrastructure for agricultural produce such as rural access roads, marketing, facilities, financing and extension services.
- d) Incompatible land uses have resulted in land use conflicts including human wildlife and resource conflicts.

To promote and ensure productive and sustainable use of land, the Government shall develop a framework to facilitate:-

- i. The attainment of orderly, productive and sustainable land use through sound land use practices at sectoral level.
- ii. The conservation and enhancement of the quality of land and land-based resources.
- iii. The improvement of the condition and productivity of degraded lands in rural and urban areas.
- iv. Develop a set of planning guidelines, policies and standards which shall be observed and enforced by the county governments and other sectoral agencies within the frameworks of approved physical development plans.
- v. Community participation in environmental management.

- vi. Provision of social, economic and other incentives to promote sustainable use and management of land.
- vii. Adopt and mainstream GIS based integrated land use planning in a participatory and multi-sectoral approach.
- viii. Both national and county government to budget for implementation of approved development plans.
- ix. Carry out an assessment of land resources including basic soil surveys, farming systems, soil degradation surveys as well as production potentials of the soils in the country.
- x. Establish and periodically update a land productivity information data bank and make the data available to all users.

3.6 Rural Land Uses and Agricultural Development

Rural land use is literally inundated with laws, institutions and bureaucratic agencies all concerned with one aspect or another of agriculture or livestock development. These instruments notwithstanding a number of problems peculiar to rural land use still remain. These include uncontrolled subdivision of agricultural land, overstocking in the rangelands, mismanagement of water resources and destruction of catchment areas, imports that threaten local farmers, limited extension services and shortage of agricultural finances and inputs and poor management generally. A re-examination of the social, economic, legal and ecological contexts in which the rural land use operates is imperative.

To achieve sustainable rural land uses, the Government shall:-

- i. Develop and implement sectoral policy guidelines to facilitate sustainable and productive management of agriculture and livestock sector through appropriate research, extension services, finance and infrastructure including marketing, agro-processing, rural electrification and capacity building;
- ii. Develop a programme that seeks to promote balanced development of the country to stem migration of the population in search of opportunities;

- iii. Institute a land taxation policy that seeks to provide a package of incentives to encourage productive and sustainable use of land and disincentives for keeping of idle land;
- iv. Promote high value commercial agriculture;
- v. Enforce the constitutional requirement on minimum and maximum land holding acreages and also institute mechanisms for land adjustment programmes.

3.7 Urban Development and Management

The country is currently experiencing major problems of proliferation of urban informal settlements, insecurity and violence, environmental degradation and deteriorating public health standards as a result of rapid urbanization. The majority of residents in the urban areas are in the low income bracket and they earn their living in the informal economic sector, in small businesses ranging from hawking to service and production enterprises. Informal settlements are therefore an integral part of the urban economy. Since urbanization is an inevitable process, there is need for planned growth on a long term basis.

To ensure sustainable urbanization and promote the development of adequate and appropriate shelter for all, the Government shall:-

- i. Undertake an audit and map out the number and location of informal settlements and provide legal security of tenure;
- ii. Design a comprehensive national plan for low income and high density housing with well-defined targets and financing mechanism as a strategy for minimizing informal settlements in the long run;
- iii. Provide funding and mobilize resources for upgrading of informal settlements;
- iv. Create an enabling environment for urban development through the establishment of transparent, accountable, sustainable, comprehensive and participatory governance structures and decision making processes;

- v. Harmonize urban plans with the long term national development plans so as to ensure synchrony between the urban centres and rural areas;
- vi. Undertake the development of secondary towns, including provision of infrastructure and utilities as a means of stimulating agro-industrial development thus easing pressure on demand for urban services;
- vii. Protect agricultural land from indiscriminate extension of urban boundaries and other encroachments and the re-planning of peri-urban areas for agricultural or pastoral communities;
- viii. Manage spatial growth of areas in order to generate an economic and social environment for urban development;
- ix. Consider the re-conceptualization of zoning and sub-division control, not as exclusionary mechanisms within and across residential areas, but as tools for creation of integrated viable urban communities sharing common services;
- x. Provide efficient amenities for urban settlements;
- xi. Create and protect green and recreational areas within urban centres;
- xii. Review building and planning standards with a view to making them user friendly as opposed to being a deterrent to development;
- xiii. Enhance awareness on the availability of affordable proto-type plans for low-income housing;
- xiv. Promote research in appropriate technology in the construction industry with a view of reducing the costs of building materials;
- xv. Create an enabling environment for public-private partnerships in the housing sector;
- xvi. Establish land banks and make land available for investment, development redistribution, restitution and resettlement;
- xvii. Procure land for land banks through purchase and donations as well as formulate and implement the government buy back mechanism;
- xviii. Project the actual land requirement for urban development, delineate and fix urban boundaries after every 10 year period.

3.8 Land Management and Development

Sustainable use and management of land is the responsibility of the proprietors, occupiers and the State. In addition to efforts by the proprietors' own efforts, the use of regulatory power of the State is necessary if land use problems are to be resolved. Although there are mechanisms for tracking, monitoring and enforcement of existing laws, they are not successful on account of inadequate enforcement, weak institutional structures, poor governance and lack of political will.

To address the challenges of land management and development, the Government shall:-

- i. Facilitate a planning process that will:-
 - a) Ensure an orderly management of both urban and rural land.
 - b) Empower land users and occupiers to make better and more productive use of their land.
 - c) Promote efficient and environmentally sound land use practices.
 - d) Promote participatory involvement by all stakeholders in land use planning.
 - e) Ensure security and equity in access to land resources.
 - f) Provide for inter-sectoral coordination at all levels of land use development.
 - g) Make use of political and administrative resources available at national, regional, county and local levels.
- ii. Provide a clear legal framework within the physical planning law for effective coordination and enforcement of development control;
- iii. Establish and operationalize a national GIS based land use information system;
- iv. Facilitate design and implement an innovative framework for land tracking mechanism in rural and urban areas;
- v. Develop clear environmental standards to guide agricultural, livestock, urban, mineral and tourist development.

3.9 Land Use

The uncontrolled use of land has resulted into challenges on land among them incompatibility of land uses, environmental degradation, insecurity reduced productivity, wastage of resources among others.

To address issues related to land uses the Government shall;

- i. Identify, map and document all land uses in the country to be put in an inventory that is updated every 5 years for urban and 10 years for rural;
- ii. Establish a national spatial data infrastructure;
- iii. Facilitate inter-county land use planning and ensure regular updating of land use planning maps;
- iv. Develop a National land use/ land cover mapping system;
- v. Design and fund new strategies for collecting and managing data necessary for the National land use mapping system;
- vi. Modernize land use information management systems to allow for easier collection, collation, storage and dissemination of the same;
- vii. Invest in decentralized land use data centres which are easily accessible.

3.10 Land Cover

There has been consistent loss of vegetation cover to other competing land uses such as real estate development, agriculture, infrastructure development, industrial and commercial developments and energy requirements.

Land cover challenges are also noticeable through declining yields in crops and livestock per unit of land and longer distances covered by rural people to get fuel-wood, water and grazing.

To address the low vegetation cover with other competing land uses the Government shall:

- i. Carry out an inventory of all land cover classifications;
- ii. Establish mechanisms to ensure protection and improvement of vegetation cover over time;
- iii. Incorporate multi stakeholder participation in a forestation programmes and initiatives as well as promotion of a forestation programmes up to individual level;
- iv. Develop a framework for incentives to encourage achievement of a minimum 10% forest cover at county level, placing forest land use where it will provide the greatest public benefit and compensate those owners who are disproportionately affected by the extinguishment of rights to till or to graze;
- v. Promote the use of alternative sources of energy and building materials to reduce demand on forest products.

3.11 Rangelands Degradation

To address the problem of rangelands degradation and secure pastoralists livelihoods and tenure to land, the Government shall;

- i. Plan and develop rangelands according to their various potential in livestock production, tourism, mining and energy production;
- ii. Study and update the carrying capacity of rangelands;
- iii. Establish mechanisms for enforcing adherence to the optimum stocking rates for each area;
- iv. Establish a framework for livestock management in rangelands including provision of water, pasture and fodder development;
- v. Discourage open access to grazing land among the pastoralists by promoting development of communal grazing management plans;
- vi. Establish suitable methods for defining and registering land rights in pastoral areas while allowing pastoralists to maintain their unique land systems and livelihoods;
- vii. Establish a legislative framework to regulate transactions in land in pastoral areas;

- viii. Ensure that the rights of women in pastoral areas are recognized and protected;
- ix. Provide for flexible and negotiated cross boundary access to protected areas, water, pastures and salt licks among different stakeholders for mutual benefit;
- x. Ensure that all land uses and practices under pastoral tenure conform to the principles of sustainable resource management;
- xi. Mainstream climate change adaptation and mitigation in rangeland management;
- xii. Set policies that optimize the long term productivity, efficiency, equity and sustainability of rangeland use.

3.12 Cultivation on Marginal Lands and Fragile Ecosystems

To address the problem of cultivation on marginal lands and fragile ecosystems, the Government shall;

- i. Map and document all environmentally fragile and marginal land and outlaw encroachment, tilling and keeping of livestock on marginal lands;
- ii. Enforce implementation of the Environmental Management and Coordination Act (EMCA) and other related environmental policies and legislations to discourage cultivation and other land uses on marginal lands and fragile ecosystems;
- iii. Increase public awareness on the dangers of farming in marginal lands like wetlands and steep slopes as a routine activity by extension service providers;
- iv. Encourage the use of modern farming practices that sustain crop yields and soil fertility;
- v. Make provision for the possibility of exclusion of cropping and overstocking on lands currently under management where public disbenefit is arising and compensate producers affected by exclusion orders that extinguish or reduce existing rights to produce on that land.

3.13 Environmental Degradation

Environmental and natural resources conservation is key for the realization of any socio-economic development in a country. Environmental degradation entails pollution of water, air and the land resource. It also includes the destruction of natural resources like the forest through encroachment and deforestation, destruction of wetlands, water catchment areas, cultural areas and additional damaging activities like over mining, quarrying and other excavation activities.

To protect natural resources and prevent environmental degradation to foster sustainable development, the Government shall:

- i. Identify, map and document the land area encompassing key natural resources;
- ii. Develop and implement a national wetland conservation strategy through a participatory approach;
- iii. Ensure reclamation of degraded natural resources and environment;
- iv. Prohibit settlement and other activities within sensitive ecological zones;
- v. Enhance the capacity of regulatory and enforcement agencies; National Environmental Management Authority (NEMA), Kenya Forest Service (KFS), Kenya Wildlife Service (KWS), Water Management Resource Management Authority (WRMA) and Kenya Water Tower Agencies (KwTA).
- vi. Restructure and empower the National Department of Physical Planning with adequate resources and institutional capacity to carry out oversight development control at national level;
- vii. Ensure enforcement and compliance to guidelines on rehabilitation of mines and quarries, waste disposal sites and wastelands;
- viii. Levy fees on benefits from ecosystems and ecological services for management and conservation of water catchment areas;
- ix. Identify, map and gazette critical water catchment areas;
- x. Formulate and regularly update and fully implement water towers master plans.

3.14 Bio-diversity Conservation

Kenya is endowed with a rich biodiversity, however its natural resource and environment is threatened with various challenges like destruction of habitat, loss of species, desertification and uncontrolled introduction of invasive species.

To conserve and sustain Kenya's bio-diversity, the Government shall:

- (i) Identify, map and gazette wildlife corridors, forests, mountains and marine dispersal areas;
- (ii) Identify and map each major habitat type and ensure that where more than 80% of the original extent of a particular habitat has been lost nationally that no further loss is permitted and that restoration is undertaken to reach a minimum 20% target.
- (iii) Systematically plan for and set out the extent of original and remaining biodiversity habitats and conserve all areas of those habitats where less than 20% of original cover remains, with similar process for ecosystem service provision;
- (iv) Secure wildlife dispersal and migratory corridors through provision of easements and fiscal incentives programmes to the affected communities and individuals.
- (v) Enforce application of land use guidelines on Biodiversity and Invasive Species;
- (vi) Provide incentives for community participation in conservation of natural resource and environment;
- (vii) Conduct research on natural resource and environment conservation technologies;
- (viii) Establish and maintain model primary natural habitat sites;
- (ix) Promote integrated ecosystem management approaches in land use management;
- (x) Research and develop a framework for valuing (through monetization or otherwise) services derived from natural resource and environmental conservation, and promote the use of

instruments such as payment for environmental services systems or similar that perpetuate the continued delivery of environmental services.

3.15 Climate Change

Global climate changes have triggered erratic weather patterns across the country. The unpredictable weather patterns have led to floods, droughts, famines, low water levels and melting of snow from mountain tops. The situation is further aggravated by the lack of adequate, systematized information for long term predictions and planning to deal with the challenge of climate change catastrophes.

To address the challenges of climate change the Government shall:

- (i) Identify and map disaster prone areas;
- (ii) Promote the use of NEMA Guidelines on Hazardous and Disaster Management;
- (iii) Strengthen capacity of institutions involved in climate change trends analysis and mitigation;
- (iv) Build and strengthen research capacity on climate change and related environmental issues;
- (v) Promote land use practices that increase climate resiliency and reduce effects on climate change;
- (vi) Prioritize land use for climate change mitigation activities;
- (vii) Mainstreaming climate change curriculum in national education and values;
- (viii) Integrate initiatives that will address issues of climate change and disaster management;
- (ix) Develop disaster awareness programs that sensitize the communities on best land use practices that incorporate disaster mitigation, incorporate climate change, adaptation and preparedness.

3.16 Urban Environment Management

As the country intensifies its industrialization and deepens the use of new technology coupled with increased population it faces increased challenges in form of pollution, informal settlement, strain on infrastructure, waste management, public health and safety among others.

To mitigate on the problems of urban environment the Government shall:

- (i) Zone riparian areas, wetlands, escarpments, forests, open spaces and parks in the urban areas for the protection of key natural resource and environmental features and amenities including, establishing green areas and recreational facilities in residential areas;
- (ii) Restore and reclaim riparian areas, wetlands, escarpments, forests, open spaces and parks that may have been allocated, back to public ownership to ensure that they revert back to the original state;
- (iii) Promote appropriate waste management technologies (reduce, recycle, reuse) including toxic, hazardous, e-waste and adopt measures to provide incentives and disincentives on recycling and reclamation of reusable packaging materials;
- (iv) Ensure appropriate formulation and implementation of Urban Development Plans that should take into account the need for waste management sites and burial sites;
- (v) Develop mechanisms to minimize air, water and land pollution;
- (vi) Establish measures to regulate urban and peri-urban mining, quarrying and other extractive activities and provide for rehabilitation and restoration of such sites;
- (vii) Develop strategy and framework for improving urban solid and waste water management systems;
- (viii) Promote upstream activities to reduce the likelihood of the incidence of flooding in downstream urban areas through water retention etc.

3.17 Coastal and Maritime (Blue Economy) Environmental Management and Conservation

The country's coastal region is affected by erosion, encroachment of high water marks, destruction of marine breeding sites, destruction of coral reefs and mangrove forests, extinction of species, competition from infrastructure and other development projects, restricted fish landing sites and obstruction of access to the beach among others.

A sustainable blue economy is marine-based and provides social and economic benefits for current and future generations. It restores, protects and maintains the diversity, productivity, resilience, core functions, and intrinsic value of marine ecosystems (the natural capital upon which its prosperity depends).

To ensure sustainable coastal environmental management and blue economy, the Government shall:

- (i) Identify, map and gazette critical river deltas, mangroves, coral reefs, and other important coastal habitats;
- (ii) Ensure the formulation and implementation of an integrated coastal land use plan;
- (iii) Harmonize and coordinate the roles of regulatory and enforcement agencies including the county governments, NEMA, Kenya Maritime Authority, State Department of Fisheries, Water Resources Management Authority as well as Ministry of Lands and Physical Planning;
- (iv) Promote and protect sustainable utilization of marine resources;
- (v) Establish and implement a framework for beach management that ensures public access as well as protection and conservation of the beaches;
- (vi) Ensure enforcement of environmental protection within Exclusive Economic Zones, including multilateral environmental agreements on pollution, sea-mining and fishing;

- (vii) Protect, maintain and restore marine species, habitats and ecosystems of national and international importance, including islands within coastal and marine protected areas;
- (viii) Establish convenient public utility plots along the coast line to serve as fish landing sites and for public recreation;
- (ix) Provide a framework and capacity for the management of spills and waste emanating from the marine industry;
- (x) Plan, manage and effectively govern the use of marine space and resources, applying inclusive methods and the ecosystem approach;
- (xi) Formulate and implement laws and agreements that support a sustainable blue economy;
- (xii) Develop and apply standards, guidelines and best practices that support a sustainable blue economy. National and County governments, shall develop and apply the global sustainability standards, guidelines and best practices;
- (xiii) Set out statutory responsibilities for sound spatial planning of the marine resource and ensure that these are fully integrated with the terrestrial planning system.

3.18 Surface and Underground Water Bodies

Challenges facing surface and underground water bodies include; increased population settlement on riparian reserves, increased cultivation within catchment areas causing sedimentation, use of chemical fertilizers by farmers causing imbalance in chemical composition, creation of land parcels that include parts of riparian areas, increased pollution and over abstraction of the water sources.

To address the above challenges the Government shall;

- i. Map, restore and reclaim riparian areas along lakes, rivers, swamps and other wetlands;
- ii. Map and ascertain the state and extent of aquifers and groundwater resources and plan for their sustainable exploitation;

- iii. Plan for trans-boundary water catchments and aquifers at the national level;
- iv. Re-afforest hill tops to restore aquifers and springs in the arid and semi-arid lands;
- v. Set up a special fund for management and reclamation of wetlands under Ministry of Lands and Physical Planning;
- vi. Harmonize and coordinate the roles of regulatory and enforcement agencies including the county governments, NEMA, State Department of Fisheries, Water Resources Management Authority as well as Ministry of Lands and Physical Planning;
- vii. Promote and protect sustainable utilization of inland water bodies' resources;
- viii. Establish and implement a framework for beach management that ensures public access as well as protection and conservation of the beaches;
- ix. Protect, maintain and restore marine species, habitats and ecosystems of national and international importance, including lakes, rivers, swamps and other wetlands;
- x. Establish convenient public utility plots along the inland water bodies to serve as fish landing sites and for public recreation;
- xi. Plan, manage and effectively govern the use of inland water bodies and resources, applying inclusive methods and the ecosystem approach;
- xii. Formulate and implement laws and agreements that support a sustainable inland water bodies' economy;
- xiii. Set out statutory responsibilities for sound spatial planning of the inland water bodies' resources and ensure that these are fully integrated with the terrestrial planning system.

3.19 Agriculture Environment Management

Challenges associated with agricultural activities include cultivation on the slopes, encroachment into wetlands, salinization in the ASALs, soil erosion, landslides, eutrophication of water bodies, over grazing, deforestation and use of inappropriate technologies.

To protect the agricultural environment, the Government shall:

- (i) Identify map and delineate areas suitable for irrigated agriculture in ASALs;
- (ii) Policy proposals contained in the National Spatial Plan for promotion of agricultural land uses should be adopted;
- (iii) Zone and protect lands appropriate for agricultural uses;
- (iv) Re-establish and/or provide livestock holding grounds (sufficient to restore livestock to a valuable state after movement and before slaughter) and livestock movement routes;
- (v) Formulate and implement an integrated land use framework for ASAL areas;
- (vi) Develop and implement a regulatory framework for reclamation, rehabilitation, restoration and use of reclaimed land;
- (vii) Promote the use of NEMA Land Use Guidelines on irrigation.

3.20 Trans-Boundary Issues

The conservation and management of trans-boundary natural resources is vital for the natural resource and environmental sustainability. Some resources like lakes and rivers are ecologically dependent on elements beyond the national boundaries. The trans-boundary natural resources and environment are affected by conflicting policies and approaches by various stakeholders.

Kenya is a signatory to a number of international treaties and conventions and regional agreements that are of direct relevance to land use. It is for this reason that the Kenya Constitution Article 2 (5) and (6) recognizes

that international law, treaties or convention ratified by Kenya form part of the supreme law of the land.

To ensure sustainability and harmonious sharing of transnational resources, the Government shall:

- (i) Identify map and plan for all trans-boundary natural resources;
- (ii) Develop trans-boundary conflict prevention resolution mechanisms;
- (iii) Harmonize policies and legal framework for environmental and natural resource management in line with regional and international conventions;
- (iv) Enforce and/or implement existing Multilateral Environmental Agreements (MEA) related to trans-boundary resource use;
- (v) Promote the use of bi-lateral agreements and other instruments to facilitate sustainable trans-boundary resource use.

To address the issues of low level implementation of provisions of both regional and international treaties and conventions, the Government shall:

- (vi) Implement all ratified regional and international treaties and conventions relating to land use e.g. Treaty for the Establishment of the East African Community, Chapter 15 (Articles 89, 90, 91, 92 and 93) on Cooperation and Infrastructure Services, and Chapter 19 on Cooperation on Environment and Natural Resources Management specifically Article 111 on Environmental issues and Natural Resources;
- (vii) Domesticating international conventions and other protocols to ease compliance and implementation;
- (viii) Disseminate information and sensitize the people of Kenya and East Africa in general on the regional and international treaties and conventions relating to land use.

To address issues related to lack of a coordinated approach in the management of trans-boundary resources, the Government shall:

- ix. In partnership with neighboring countries, provide for a legal framework to effectively streamline the management of trans-boundary eco-systems with a view to enhancing the quality of the environment and also ensure sustainable utilization of shared natural resources in the EAC. E.g. waters of Lake Victoria, Lake Natron, Mara River, Mt. Kilimanjaro Ecosystem, and Mt. Elgon Ecosystem.

To address issues related to lack of harmonized regional legislations/policies that relate to conflicting land use practices e.g. Serengeti-Mara game reserve between Kenya and Tanzania, the government shall:

- x. In partnership with the member states, develop a common environmental management policy for sustainable utilization of land among partner states;
- xi. Implement the provisions of the Treaty for the Establishment of the East African Community, Chapter 19 (Article 112) on Management of the Environment.

To address the issues of lack of national safeguards in light of regional and international obligations, the Government shall;

- xii. Scrutinize regional and international treaties and conventions to ensure that they are beneficial to the country and in consistent with the national values.

3.21 Information and Knowledge Gap on Natural Resources

There is inadequate information and knowledge on the location, extent, quality and quantity of natural resources. Natural resource mapping is primarily done by Directorate of Resource Survey and Remote Sensing (DRSRS) while geological and soil mapping are done by different organizations. There is, therefore, a need for unified mechanisms for collection, storage and dissemination of environment and natural resources information.

To address the information and knowledge challenges, the Government shall:

- (i) Map resources on a GIS based system;
- (ii) Develop a common system for purposes of classification and identification of natural resources;
- (iii) Promote research and studies on Kenya's natural resources;
- (iv) Establish a multi-sectoral databank and develop mechanism for dissemination of information on Kenya's natural resource;
- (v) Keep this resource open to public access unless clear public interest justification is made to the contrary.

3.22 Government Priorities on Issues of National Heritage

There has been low prioritization of issues related to the sustainable development and protection of national heritage sites such as forests, rivers, lakes, seas, shrines, cultural and historical. This has continued to hamper optimum utilization of land in the natural resource and environment sector. Inadequate budgeting allocations to these sectors have demonstrated that the government has failed to prioritize the national heritage sites as matters of importance.

To promote the highest and best utilization interests of the national heritage, the Government shall:

- (i) Establish, disseminate and maintain appropriate heritage and cultural sites data bases;
- (ii) Revise and implement the legal framework that governs heritage, conservation and cultural issues;
- (iii) Mobilize financial resources towards improvement and sustainability of cultural heritage and conservation;
- (iv) Protect and maintain strategic heritage and cultural sites;
- (v) Enhance research on cultural conservation issues;
- (vi) Identify, map and gazette the historical sites as part of the national heritage.
- (vii) Allocate the necessary resources to allow for the interpretation of these sites to the public and to educators so as to raise and maintain awareness of the value of the national heritage.

3.23 Physical Development Planning

Inadequate planning both in rural and urban areas, has resulted into haphazard development, underutilization and inappropriate settlement systems. Inadequate urbanization policies and planning guidelines have resulted to urban sprawl and the gradual transformation of prime agricultural land into urban areas. There is also the challenge of inadequate institutional structure to plan and implement Physical Development plans both for the urban and the rural areas. This situation is exacerbated by the seeming duplicity and conflicts in the assignment of the mandate for control and administration of the physical planning function at the national level.

This state of affairs has resulted in skewed allocation of financial resources to facilitate effective performance of this function by the National Directorate of Physical Planning.

To ensure that a comprehensive and effective system for physical planning at both national and county level is established and implemented, the Government shall:

- (i) Implement the Physical Planning legislation and regulations to facilitate urban and rural planning;
- (ii) Establish and empower appropriate physical planning structures at county level with adequate resources and capacity to ensure their effective and efficient performance;
- (iii) Establish dispute resolution mechanisms to handle sectoral land use disputes as well as conflicting decisions on matters of land use;
- (iv) Harmonize physical planning regulations and structures with the other sectoral regulatory agencies within the land and environment sectors;
- (v) Develop, implement and periodically review a National Urban Development Policy to respond to urbanization challenges;

- (vi) Facilitate county and urban planning units to formulate integrated land use plans;
- (vii) Facilitate the integration of local, county and regional plans into a national plan;
- (viii) Develop sustainable settlement systems, which suit the various urban and rural areas to create a healthy living environment;
- (ix) Ensure all land use planning institutions in the country are supported to improve and consolidate their capacity;
- (x) Promote the role of community governance institutions in the planning process;
- (xi) Promote use of compact sustainable urban forms (density);
- (xii) Promote and provide incentives for urban renewal and re-development for urban areas;
- (xiii) Promote informal settlements improvement programs;
- (xiv) Designate and gazette urban growth boundaries to prevent urban sprawl;
- (xv) Implement the Urban Areas and Cities Act, 2011 to facilitate urban settlement and management;
- (xvi) Review planning legislation and guidelines to meet the challenges of urban planning and development;
- (xvii) Develop urban renewal strategies and enforce development control;
- (xviii) Provide for designated, well planned and serviced wholesale and retail sites in major and satellite towns;
- (xix) Undertake planning and land banking for industrial, commercial, agriculture and infrastructure development.

3.24 Provision of Infrastructure and Services in Human Settlements

Most urban areas are not adequately provided with infrastructure such as safe water, sanitation, drainage, solid waste disposal services, and transportation infrastructure. This phenomenon negatively affects the quality of environment required in the human settlements. There is therefore a need for development that takes into cognizance the provision of basic infrastructure and services.

Similarly rural settlements also lack basic infrastructure and services. This is caused by high costs due to horizontal nature of developments, dispersed nature of rural settlements, high utilization of biomass energy (firewood and charcoal) for cooking that depletes tree cover, haphazard development of urban areas and fringes, and lack of integration in the provision of infrastructure.

To ensure adequate provision of infrastructure and services in human settlements, the Government shall:

- (i) Promote an integrated approach that brings together infrastructure and service providers at the planning stage of development;
- (ii) Empower national and county planning institutions to ensure proactive sustainable planning implementation and enforcement within their respective areas of jurisdiction;
- (iii) Open up rural transportation infrastructure to provide for improved rural-urban integration;
- (iv) Promote energy saving technology and encourage the use of alternative/renewable energy sources;
- (v) Develop strategies for urban and rural transportation systems;
- (vi) Provide initial basic services and infrastructure in pre-developed and developed areas;
- (vii) Adopt appropriate standards for infrastructure and services in human settlement planning.

4.1 Institutional Framework

The implementation of this Policy will require a well-coordinated institutional and legal framework. The success of a good land use policy depends largely on the willingness and ability of government and other institutions to implement prescribed recommendations.

4.1.1 National Council for Land Use Policy

There shall be established a National Council for Land Use Policy to be chaired by the Head of Public Service to take full responsibility for coordination, sectoral integration and mobilization of resources for implementation of this Policy.

Functions

The principal functions of the Council shall be;

- i. Steering organ for the implementation of the Policy;
- ii. Mobilization of resources for effective performance of land use and management function;
- iii. Coordination and integration of sectoral programmes for effective implementation of this Policy.

Membership of the Council shall include;

- i. Head of Public Service - Chairman
- ii. The Cabinet Secretaries in charge of ministries responsible for; Lands and Physical Planning, National Treasury, Transport, Infrastructure, Environment and Natural Resources, Water, Agriculture, Livestock and Fisheries, Devolution and Planning, Interior, Defense, Tourism, Mining and Energy

- iii. Representatives of County Governments through the Council of Governors
- iv. Chairman, National Land Commission
- v. Director General NEMA
- vi. Director General KWS
- vii. Director KFS
- viii. National Director of Physical Planning- Secretary

The Council shall hold meetings on quarterly basis.

4.1.2 National Technical Implementation Committee

The secretariat to be provided by National Director of Physical Planning Technical heads of departments and state agencies drawn from the respective sectors including;

- i. National Director of Physical Planning - Chairman
- ii. Director of Surveys
- iii. Director Land Use Planning - National Land Commission
- iv. Director General NEMA
- v. Director General AFA
- vi. Director General Kenya Maritime Authority
- vii. Director KENHA
- viii. Director KURA
- ix. Director General LAPPSET
- x. Director General KWS
- xi. Director KFS
- xii. Regional Development Authorities
- xiii. County Executive Committee members in charge of Lands and Physical Planning
- xiv. Representatives from non-state actors through co-option

Functions of the National Technical Implementation Committee

The principal functions of the Committee shall be;

- i. Implementation of decisions made by the National Council
- ii. Preparing reports from various sectors on the status of implementation for presentation to the National Council
- iii. Coordination of implementation in the various sectors
- iv. Monitoring and tracking of the performance of the various sectors in the implementation of the Policy
- v. Technical support and capacity building for counties and other agencies within the sectors
- vi. Any other function assigned by the National Council

The National Technical Implementation Committee shall hold meetings on a quarterly basis.

4.1.3 County Technical Implementation Committees

Within each county there shall be a county specific implementation committee chaired by the Governor and deputized by the Deputy Governor. The functions will be similar to the national technical implementation committee but strictly within the jurisdiction of the county and membership to be drawn along similar lines.

Membership of the County Technical Implementation Committee

- i. Governor - Chairman
- ii. Deputy Governor - Deputy Chairman
- iii. Chief Executive Committee Member in charge of; Lands and Physical Planning, Transport, Infrastructure, Environment and Natural Resources, Water, Agriculture, Livestock and Fisheries, Finance, Tourism, Mining and Energy
- iv. Chief Officers in charge of; Lands and Physical Planning, Transport, Infrastructure, Environment and Natural Resources, Water, Agriculture, Livestock and Fisheries, Finance, Tourism, Mining and Energy

- v. The secretary will be the County Director in charge of Physical Planning
- vi. Representatives from non-state actors through co-option
- vii. Community land administration boards

4.1.4 Ministry of Lands and Physical Planning

Within the Ministry of Lands and Physical Planning the National Department of Physical planning will be restructured and given fresh impetus for effective performance of its enhanced function.

Specifically;

- i. Government shall rationalize and bring together all the sections existing in other national government ministries that are currently performing physical planning related functions. In this respect, the current department of Urban and Metropolitan Development within the Ministry of Transport, Infrastructure, Housing and Urban Development will be transferred and will be domiciled in the National Department of Physical Planning to avoid duplication and allow for coordinated approach in handling the function of Land Use Planning and Urban Development Management;
- ii. The National Director of Physical Planning shall be the lead national authority and advisor on matters of physical planning as well as urban development and management;
- iii. Government shall increase budgetary allocation to the National Department of Physical Planning to facilitate effective performance of the enhanced functions assigned to that office;
- iv. Restructure and revise the organizational structure of the National Department of Physical Planning to give it adequate institutional capacity in terms of human resource establishment and administrative leeway to give it the necessary latitude to perform its enhanced function.

4.1.5 The National Land Commission

The Constitution and the National Commission Act assigns the NLC a number of functions related to land and land Use.

In respect to this, the National Land Commission shall;

- i. Develop a framework for monitoring, oversight and reporting on performance of various public, private, communities, non-state actors and individual land holders in performing their obligations as outlined in this document;
- ii. Conduct research on matters related to land and the use of natural resources and make recommendations to the relevant authorities;
- iii. Prepare reports to bring out challenges in the implementation of National Land Use Policy by the different sectors;
- iv. Carry out periodic reviews on sectoral performance in the implementation of this Policy to be submitted to all levels, specific agencies, county governments, Parliament and President;
- v. Carry out resource mobilization for the sectors in the implementation of the Policy as the lead advocacy agent.

4.1.6 Ensuring Sound Implementation of the National Land Use Policy

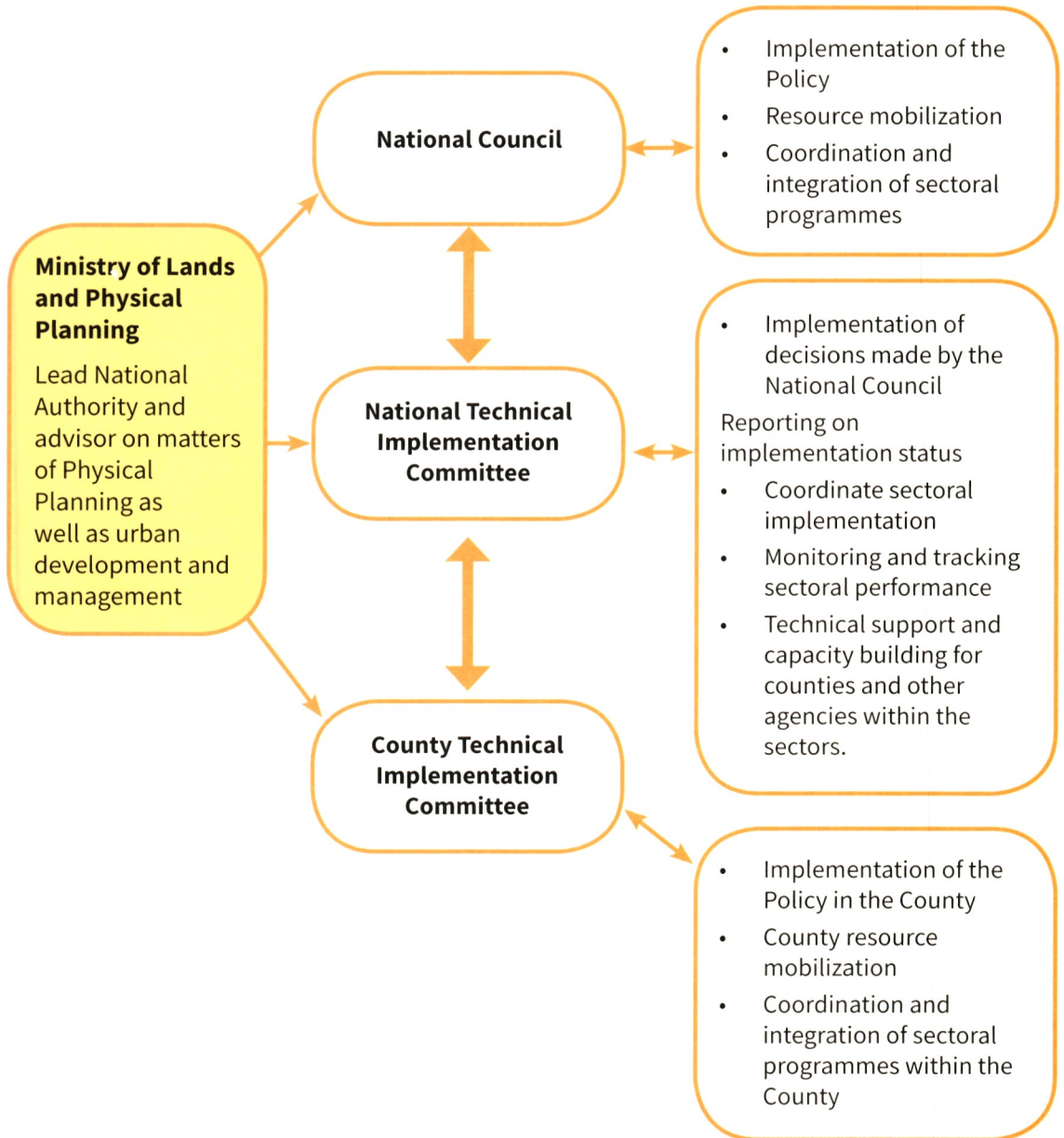
Responsibility for ensuring the sound implementation of planning policy rests principally with the National Land Commission as set out in section 4.1.5 above. Initial responsibility to implement this Policy lies with National and County Technical Committees.

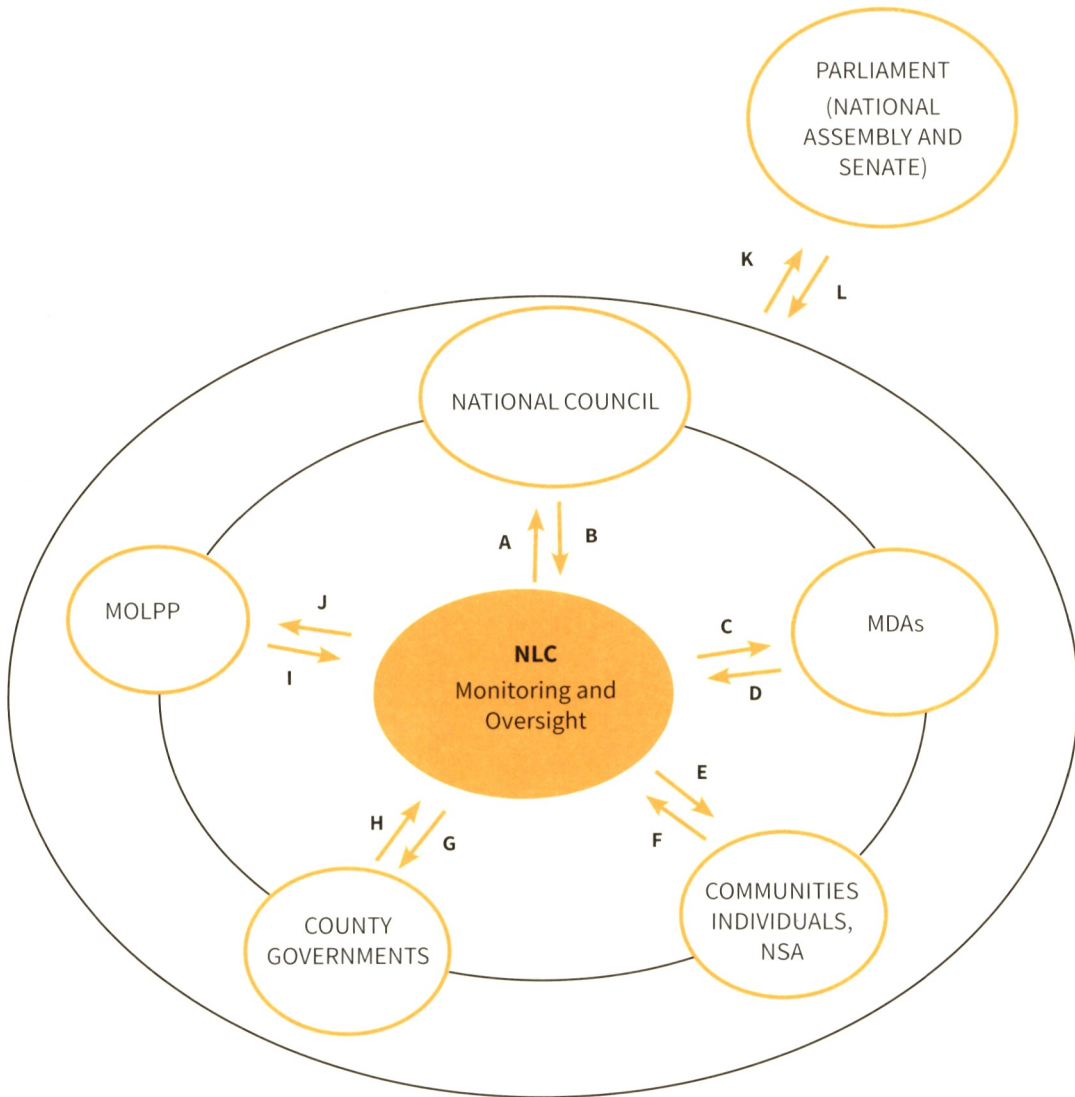
In respect to this;

- i. All national, county and local institutions, led by the National Council for Land Use Policy, shall adhere to the provisions of this Policy in as far as sound and legal implementation of this Policy is concerned;

- ii. The National and County Technical Committees shall ensure that planning is executed and implemented in accordance with the provisions of the Constitution, other relevant national legislation and any other relevant county laws or by-laws;
- iii. The National Land Commission shall set up a system for monitoring and evaluation of all physical/spatial development plans prepared at the national and county levels to bring them in conformity with the Constitution and national laws.
- iv. The corrective guidance of the National Land Commission shall be upheld through a series of sanctions required to bring any errant national or county implementing agency into line with what the Constitution and other laws requires.

INSTITUTIONS AND FUNCTIONS FOR THE IMPLEMENTATION OF NATIONAL LAND USE POLICY





MOLPP-Ministry of Lands and Physical Planning

NLC-National Land Commission

MDAs-Ministries, Departments and Agencies

NSA-Non State Actors

A	<ul style="list-style-type: none"> i. Report on the overall status of sectoral performance to ensure compliance to Policy direction ii. Implementation of recommendations made by the National Council iii. Generate periodic reports to the National Assembly
B	<ul style="list-style-type: none"> i. Coordination of sectoral activities in the implementation of this Policy ii. Issue recommendations on issues arising from implementation of the Policy
C	<ul style="list-style-type: none"> i. Tracking performance of the implementation of the National Land Use Policy and Law in adherence to the principles and guidelines laid out ii. Generating reports on the status of the Implementation of the National Land Use Policy and the Law by the implementing agencies iii. Offering advice on matters of land use iv. Issuing cautionary notices on underperformance by the various sectors
D	<ul style="list-style-type: none"> i. Seek advice on land use matters ii. Dispute resolutions over land related matters iii. Provide implementation status reports
E	<ul style="list-style-type: none"> i. Seek advice on land use matters i. Provide implementation status reports on land use matters
F	<ul style="list-style-type: none"> i. Ensure participation on land use matters with a view of getting comments on the implementation of NLUP ii. Dispute resolutions over land related matters

G	<ul style="list-style-type: none"> i. Monitoring and evaluation of all physical/spatial development plans ii. Tracking performance and generating reports on the implementation status iii. Issuing cautionary notices on wanting performances and relevant sanctions iv. Offering advice and remedial measures
H	<ul style="list-style-type: none"> i. Preparation and submission of implementation status reports on the Land Use Policy ii. Seek advice on land use matters
I	<ul style="list-style-type: none"> i. Consultation and cooperation on land use matters ii. Preparation and submission of implementation status reports on the Land Use Policy iii. Seek advice on land use matters
J	<ul style="list-style-type: none"> i. Sharing of information on areas that the departments intervention ii. Require the NDPP to provide technical support to counties iii. Oversight the Ministry to determine whether it is executing its mandate as far as supporting counties in implementation of this Policy
K	<ul style="list-style-type: none"> i. Preparation and submission of status reports on implementation of this Policy
L	<ul style="list-style-type: none"> ii. Exercise oversight role in relation to implementation of this Policy iii. Consider proposed legislation on implementations of this Policy for approval

4.2 Review of Existing Legislation

All sectoral laws and policy frameworks will be revised to bring them into accord with the recommendation of this Policy. These include; Agriculture Food and Fisheries Act, 2013, Survey Act, Cap 299, Environmental Management and Coordination (Amendments) Act 2015, Water Act, Wildlife Conservation and Management Act, 2013, Kenya Maritime Authority Act Cap 370, 2012, Roads Act, Climate Change Act, 2016, Physical Planning Act Cap 286, Land Act 2012, National Land Commission Act 2012, County Governments Act, 2012, Land Registration Act 2012, Urban Areas and Cities Act, 2012, Forestry Act, 2005, Protected Areas Act

4.3 Review of Existing Policy Frameworks

All sectoral policy frameworks will be revised to bring them into accord with the recommendation of this Policy. These policies include;

- i. National Land Policy
- ii. National Urban Development Policy
- iii. National Transportation Policy
- iv. Agriculture, Food and Fisheries
- v. Maritime Policies
- vi. Wildlife Policies
- vii. Environmental Conservation Policies
- viii. Forestry Conservation Policies
- ix. Kenya Vision 2030

4.4 Preparation of Planning Guidelines and Manuals

For effective implementation and mainstreaming of policy guidelines principles and strategies the National Director of Physical Planning will prepare and disseminate appropriate physical planning guidelines, manuals and standards. These guidelines shall be prepared in a multi-sectoral and participative manner to ensure ownership and easy implementation of the Policy principles.

4.5 Dissemination of the Land Use Policy Guidelines and Principles

To improve dissemination of land use information at all levels in the country, the Ministry of Lands and Physical Planning through the National Director of Physical Planning shall:

- (i) Develop and implement a communication strategy specific to this Policy to ensure effective and pervasive dissemination of all the principles and guidelines to all sectors of the economy, county governments, communities, land owners, private sector, civil society organizations and international agencies operating within the country;
- (ii) Develop programmes for direct field engagements with stakeholders from the counties;
- (iii) Increase the use of existing and potential avenues for disseminating land use information, including Print and Electronic media, Institutional Libraries and Resource Centers, Civil Society and Religious Organizations;
- (iv) Package and disseminate land use information for use by a variety of stakeholders including county governments, landowners, land managers, land administrators, researchers, students, investors and others;
- (v) Develop the capacity of private extension and other service providers to provide expert advice on land use through the participation of all land actors;
- (vi) In collaboration with the National Land Commission, produce a status report on "The State of Land use in Kenya" once every 5 years for urban areas and 10 years for rural areas;
- (vii) Fully decentralize land administration and information management systems in line with the Kenya Constitution.

4.6 Estimated Budgetary Requirements

Implementation of this Policy has financial requirements to facilitate capacity building for the National Department of Physical Planning,

implementation of communication strategy for effective dissemination, review of existing sectoral policies and legislations, strengthening of the capacity of county physical planning units and implementation of the action plan for execution of this Policy across all the relevant sectors. Below are the intended activities that have financial implications;

4.6.1 Capacity Building for National Department of Physical Planning

- i. Adequate staff comprising Physical Planners, GIS Analysts, cartographers and administrative staff
- ii. Training for skill enhancement and sensitization
- iii. Benchmarking with best practices and exchange programmes.
- iv. Automate physical planning processes and development of a Land Use Management System for connectivity and real time sharing within the various sector, validate and digitize all records held by the National Director of Physical Planning
- v. Proper GIS Laboratories at head office and regional levels of; Mombasa, Embu, Nyeri, Isiolo, Eldoret, Kakamega, Garissa, Kisii, Machakos, Nakuru, Kisumu and Kitale.
- vi. At least one four-wheel drive vehicle in each regional office
- vii. Adequate office space with adequate internet connectivity and furniture.

4.6.2 Communication Strategy

- i. Dissemination materials
- ii. Workshops
- iii. Publications
- iv. Production of ICE (Information, Communication and Education materials)
- v. Annual Exhibitions
- vi. Public Relations and Media

4.6.3 Review of Policies and Existing Legislations

- i. Hiring of consultants to study the existing legislations and policies
- ii. Actual drafting of the bills and policies
- iii. Stakeholder engagement in the review processes

4.6.4 Development of Policy Guidelines, Standards, Strategies and Manuals

- i. Revision of the Physical Planning Handbook
- ii. Development of Regulations for operationalization of the Physical Planning Act.
- iii. County planning guidelines
- iv. Building standards
- v. Urban transportation guidelines
- vi. Disaster management and early warning systems
- vii. Peri-urban development guidelines
- viii. Standards for the utilization of natural resources for construction
- ix. Blue Economy development standards

4.6.5 Enhancement of Capacity of Counties to Perform Physical Planning Functions

- i. Adequate staff comprising Physical Planners, GIS Analysts, cartographers and administrative staff
- ii. Training for skill enhancement and sensitization
- iii. Benchmarking with best practices and exchange programmes
- iv. Automate physical planning processes and development of a Land Use Management System for connectivity and real time sharing within the various sectors, validate and digitize all records held by the County Director of Physical Planning
- v. At least one four wheel drive vehicle for each sub-county
- vi. Adequate office space with adequate internet connectivity and furniture

4.6.6 Mapping and Documentation

- i. Natural resources
- ii. Land capability
- iii. Trans-boundary resources
- iv. Land use and land cover
- v. Fragile ecosystems and marginal lands
- vi. Wildlife dispersal corridors
- vii. Marine dispersal areas
- viii. Disaster prone areas
- ix. Riparian areas, wetlands, open spaces, parks and river deltas
- x. Irrigated and areas with potential for irrigation in the ASALs
- xi. National protected areas
- xii. Historical sites and national heritage areas
- xiii. Informal settlements

4.6.7 Preparation of Land Use Reports

- i. State of Land Use in Kenya
- ii. Rangelands carrying capacity study report

4.6.8 Establishment of a Land Reclamation and Restoration Fund

- i. Land reclamation and restoration fund

4.6.9 Development of an Action Plan for Implementation of the Policy

For purposes of having a rationalized and coordinated programme, the Ministry of Lands and Physical Planning shall develop and disseminate an action plan that will guide all sector players in implementation of this Policy.

Policy Implementation Cost

	Year	Actions	Cost in Millions
Year one	2016/2017	Develop action plans and roll out the implementation process	100M
		Setting up GIS Labs in and Head office and regional offices	300M
		Capacity Building and additional staff for the head and each regional office (Each Regional office to have at least 3 physical planners, 2 GIS analysts and 1 cartographer)	400M
		Initiate preparation of Policy guidelines, standards, regulations and planning manuals Initiate planning and mapping of natural resources and fragile ecosystems	1.2 billion
Year Two	2017/2018		3 billion
Year Three	2018/2019		4 billion
Year Four	2019/2020		4 billion
Year Five	2020/2021		4 billion

Note: Initial Programme over 5 years will cost Ksh. 17 Billion.