

**FINAL DRAFT**

# **VIHIGA COUNTY GOVERNMENT**



**DEPARTMENT OF ENVIRONMENT, WATER, ENERGY AND NATURAL  
RESOURCES**

## **THE VIHIGA COUNTY ENVIRONMENT POLICY 2019**

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## FOREWORD

This Vihiga County Environment Policy 2019 gives a framework for addressing environmental issues in the County. It gives introduction to the natural and built up environments, and the state of the environment in the context of dealing with:

- (a) Loss of biodiversity
- (b) Implementation of land policy
- (c) Valuation of environmental and natural resource
- (d) Reclamation, rehabilitation, and restoration of degraded landscapes
- (e) Urbanization and waste management
- (f) Pollution
- (g) Climate change and disaster management
- (h) Concessions and incentives
- (i) Valuation of environmental and natural resources
- (j) Green Energy
- (k) Climate change and disaster management
- (l) Conservation of shared natural resources
- (m) Invasive and alien species
- (n) Civic engagement
- (o) Data and information
- (p) Poverty
- (q) Weak enforcement of laws and regulations
- (r) Integrated approach to development.

The National government has revised the environment policy leading to the need for review of the EMCA law. This policy aligns the environment sector to the Constitution of Kenya 2010, the National Environment Policy and existing legal framework. Further it is aligned to the Sustainable Development Goals (SDGs), and the need to address environment impacting emerging issues such as climate change, green energy development, blue economy, poverty reduction, prioritization of agriculture, mining practices, and eco-tourism. Fortunately these issues are anticipated in the Vihiga County Development Plan (CIDP) for the period 2017-2022.

The natural environment is a valuable asset whose health must be guaranteed if it has to effectively support biodiversity and livelihoods. By focusing on bio-prospecting the potential for life transforming benefits sharing is real. In deriving benefits and opportunities from environmental resources, the county government of Vihiga must ensure that biological diversity, soil and water conservation are not compromised thereby ensuring improved livelihoods while maintaining the potential for provision of environmental goods and services such as wetlands functions, watershed protection and carbon sequestration. To this end an integrated approach to environmental management is paramount.

The County government of Vihiga has put in place a number of policies, and Acts, and regulations which in tandem contribute to effective and efficient protection and conservation of environmental health. Among the policies referred to include: The Forestry Management Policy, The Climate Change Policy, The Agroforestry Policy, The Solid Waste Management Policy, and The Water Policy. It is envisaged that the promotion of bamboo growing in the County shall draw direction

from the National Bamboo Policy while ensuring legislation and regulations for the management of Eucalyptus tree species with regard to banning its growing from riparian and fragile ecosystems.

In order to meet the vision and mission of the Department of Environment, Water, Energy and Natural Resources, and in realizing and appreciating the value of ensuring the health of the natural and built up environments, the citizens of Vihiga County must join all forms of initiatives for robust environmental management. For instance mass action in averting the disaster that is facing the degraded Maragoli Hills is paramount. By this approach it may be possible to reduce deforestation and degradation, and contribute to the elimination of emission of greenhouse gases. This policy does point to such actions and more. Its full implementation shall necessitate concerted efforts jointly and severally among all stakeholders.

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**THE COUNTY GOVERNMENT OF VIHIGA**

## **ACRONYMS AND ABBREVIATIONS**

CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species
COPDS	Chronic Obstructive Pulmonary Disease
EAC	East African Community
EHIA	Environmental Health Impact Analysis
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
GDP	Gross Domestic Product
GIS	Geographical Information Systems
GoK	Government of Kenya
MEA	Multilateral Environmental Agreement
NEMA	National Environment Management Authority
NGOs	Non-Governmental Organizations
PES	Payment for Environmental Services
SDGs	Sustainable Development Goals
SEA	Strategic Environmental Assessment
WEHAB	Water, Energy, Health, Agriculture and Biodiversity
WSSD	World Summit on Sustainable Development

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## CHAPTER 1

### 1.0 INTRODUCTION

- 1.1 The natural and built environment includes the physical factors of the surroundings of human beings such as, water, the atmosphere, sound, odour, taste; the biological factors of animals and plants; and the social factors of aesthetics.
- 1.2 Vihiga County has a wide variety of ecosystems ranging from hills, forests, rivers and wetlands. The functions of these ecosystems include: the regulatory services of forests and hills which serve to regulate water flow and sustain biodiversity; cultural services of forests, hills and rivers such as aesthetic, recreational or spiritual values and uses; the provisional services such as forests providing timber and fuelwood, and the supporting services such as soil formation, nutrient cycling and primary production that help sustain livelihoods.
- 1.3 That is why the Environment is an essential feature of the national development policy. Thus the environmental imperatives are captured in the National Environment Policy, 2016.
- 1.4 The national policy process culminated into the Draft Sessional Paper No. 6 of 1999 entitled “Environment and Development.” The legislative process gave forth the Environment Management and Coordination Act (EMCA) (Act No. 8 of 1999) as Kenya’s first framework environmental law. The latest national environment policy shall therefore inform future revisions of the EMCA law and attendant regulations.
- 1.5 Further the processes alluded to in 1.4 above, shall be anchored into the context of the Kenya Constitution, 2010. The latter embodies elaborate provisions with considerable implications for sustainable development beginning within every citizen being entitled to live in a clean environment. Hence the Kenyan constitution is hailed as a green Constitution having a Bill of Rights with attributes ranging from environmental principles and implications of multilateral environmental agreements (MEAs) to the right to clean and healthy environment. Subsequent rights include the right to water, food and shelter – among others.
- 1.6 This County Environment Policy provides for a focused framework to guide the management of Vihiga’s natural and built environment, thereby help address the challenges associated with the nexus of environment, poverty and economic development.at all levels.



## CHAPTER 2

### 2.0 THE STATE OF THE ENVIRONMENT

- 1.7 Vihiga County is experiencing a myriad of social, economic, political and technological changes that influence the nature of the living environment. The emerging environmental change defines the human activities which further contribute to environmental degradation such as what has happened in Maragoli Hills. Consequently many agricultural activities aimed at sustaining a decent livelihoods are becoming non-viable. Hence the need to address correction of environmental damages that have led to unsustainable agricultural land use, poor soil and water management practices, deforestation, pollution, waste management challenges.
- 1.8 The cost rapidly increasing cost of living may be linked to environmental degradation. This is translated into rising costs of water treatment, food imports and medical treatment (such as associated with water borne disease due to water sources contamination, skin conditions due to pollution, among others). On the other hand the expansion of agriculture into wetlands, forests and sharp slopes propels land degradation throughout the county. The resulting loss of biological resources translates into loss of economic potential and options for commercial development in the future.
- 1.9 Hence the need for this policy to deal with:
  - (a) Loss of biodiversity
  - (b) Implementation of land policy
  - (c) Valuation of environmental and natural resource
  - (d) Reclamation, rehabilitation, and restoration of degraded landscapes
  - (e) Urbanization and waste management
  - (f) Pollution
  - (g) Climate change and disaster management
  - (h) Concessions and incentives
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  - (n) Civic engagement
  - (o) Data and information
  - (p) Poverty
  - (q) Weak enforcement of laws and regulations
  - (r) Integrated approach to development.



## CHAPTER 3

### 3.0 GOALS, OBJECTIVES AND GUIDING PRINCIPLES

#### 3.1 GOAL

The policy adopts the national goal for the environment policy. It states: “A better quality of life for current generation without compromising the quality of life of future generations through sustainable management of the environment and natural resources”.

#### 3.2 OBJECTIVES

The objectives of this policy are:

- (a) Provide a framework for an integrated approach to planning and sustainable development for Vihiga County ensuring conservation of natural environment and resources.
- (b) Strengthen the County legal and institutional framework for effective coordination and management of the environment and natural resources.
- (c) Promote and support the use of innovative environmental management tools – such as incentives, disincentives, total economic valuation, and indicators of sustainable development, SEA, EIA, Environmental Audit, and payment of environmental services – in environmental management.
- (d) Promote partnerships and civic engagement in the protection, conservation and better management of the environmental resources.
- (e) Integrate poverty reduction, gender, disability and HIV/AIDS into County sectoral planning processes.

#### 3.3 GUIDING PRINCIPLES

The Vihiga County Environment Policy adopts the guiding principles outlined in the National Environment Policy being:

- (i) A Right to a Clean and Healthy Environment
- (ii) A Right to Development
- (iii) Ecosystem Approach
- (iv) Total Economic Value
- (v) The Principle of Sustainable Use
- (vi) Inter- and Intra-generational Equity
- (vii) Public Participation and Inclusivity Principle
- (viii) The Principle of Subsidiarity
- (ix) The Precautionary Principle
- (x) The Polluter Pays Principle
- (xi) International Cooperation
- (xii) Good Governance.

## CHAPTER 4

### 4.0 SUSTAINABLE UTILIZATION OF NATURAL ECOSYSTEMS AND RESOURCES

Natural ecosystems of concern in Vihiga County include forests, wetlands, and hills. Within these ecosystems are key natural resources which provide natural capital for economic development. The natural resources of significance include fisheries, land, soils, biodiversity, wildlife, minerals, and livestock.

#### 4.1 FOREST ECOSYSTEMS

The forest ecosystems in the County include the Kibiri Forest, the community forests scattered throughout the county and forests on private lands. The specific policy statements for the protection, conservation and management of forest ecosystems are outlined in *The Vihiga County Forestry Management Policy, 2019*.

#### 4.2 WETLANDS ECOSYSTEMS

Wetlands play a major role in the provision of environmental goods and services including the storage and retention of water for domestic, agricultural and industrial use. Their regulating services include modifying water flows (hydrological flows), recharging and discharging groundwater resources and diluting or removing pollutants. Their supporting services with regard to the hydrological cycle are important for soil formation and soil retention and nutrient cycling. The ecosystems also provide habitats for a great number of species, promoting biodiversity which underlies the resilience and productivity of ecosystems. They are also important for recreation (e.g., Yala River, Edzava River, Jordan River and associated streams) as well as their spiritual and inspirational roles among the peoples of Vihiga County. Several wetland zones have potential for the development of recreational centres such the Kikuyu Wetlands along the Edzava River, the silted old Kaimosi Dam along the Galagoli River bordering Shamakhokho and Muhudu Wards, and the Emahondo Wetlands along the Mulwanda River in North East Bunyore.

#### *Policy Statements*

*The County government will:*

- 1. Develop **The Vihiga County Wetland Policy** and regulations.*
- 2. Develop and implement integrated wetland and water resources management strategies and action plans.*
- 3. Map wetland areas countywide*
- 4. Ensure restoration of degraded wetlands, and riverbanks by promoting growing on bamboos in place of Eucalyptus tree species.*
- 5. Promote and support establishment of constructed wetlands.*

#### 4.3 HILLS ECOSYSTEM

Hills ecosystems in the County are numerous as the county is mostly hilly. Where human encroachment is minimal such hills host important biodiversity in the form of plants and animals,

including high levels of endemic species. These hills are also an important source of water resources. For example, Maragoli Hills, Ebusiekwe Hills, Ebuhando Hills, Esalwa Hills, Mudzazi Hills, among others serve as water towers. Hills ecosystems are fragile and highly susceptible to erosion and landslides, as evidenced in Maragoli Hills which have been extensively degraded due to illegal deforestation, illegal logging, poaching of wild plants and animals, destruction of habitats by fire and murram mining, uncontrolled grazing, encroachment by human settlements and agriculture, and the effects of climate change.

#### ***Policy Statements***

*The County government will:*

- 1. Implement the policies set out in **The Vihiga Forestry Management Policy 2019**, specific to Hill Forests.*
- 2. Generate and strengthen knowledge about the ecology and sustainable management of Hills ecosystems.*
- 3. Promote integrated watershed management and alternative livelihood opportunities to enhance community participation in the conservation and management of Hills ecosystems.*
- 4. Develop management plans for Hills ecosystems and resources therein.*

#### **4.4 FISHERIES RESOURCES**

The County government of Vihiga has already embarked on an extensive programme for fisheries development. It has established a fisheries hatchery at Mwitoko in Wemilabi Ward in Luanda Sub-County. A significant population of people depend on fisheries both directly and indirectly for livelihood through fishing and linkages to fish processing and trade. Fisheries has a great potential for enhancing and transforming rural incomes in the county. This policy shall adopt the policy statements outlined in the National Environment Policy.

#### **4.5 Land**

The County is associated with finite, fragile and non-renewable land resources. The increasing population has led to predominance of uneconomical sub divisions of land. This has led to pressure on land resources. The situation is worse in urban areas with serious impacts on the environment. The resulting activities are significantly contributing to land degradation include unsuitable agricultural land use, poor soil and water management practices, deforestation and overgrazing. Natural disasters, including droughts, floods and landslides, as has been witnessed in Tambua Ward contribute to land degradation and destruction of slopes.

### ***Policy Statements***

*The County Government of Vihiga will:*

- 1. Ensure implementation of the Constitution and the National Land Policy so as to take into account sustainable conservation and management of the environment and land resources.*
- 2. Undertake preparation of Land Valuation Roll.*
- 3. Promote and enhance best practices for sustainable land use.*
- 4. Promote and support the establishment of environmentally significant areas for purposes of enhancing the protection and conservation of the environmental resources.*
- 5. Promote conservation and smart agriculture.*

#### **4.6 Soils**

Degradation of soils in the county has led to impacts on the hydrological cycle as well as effects of soil erosion, compaction and soil fertility depletion. Cases of loss of natural habitats are abound thereby leading to reduction of vegetation cover that expose soils to extensive wind and soil erosion in many parts of the county. This has affected the soil functions, such as the soil's ability to act as a buffer and filter for pollutants, its role in the hydrological and nitrogen cycle, and its ability to provide habitat and support biodiversity. Already most rivers and dams in the county are suffering from the effects of siltation along with increased risk of flooding. This explains why farmers are now forced to apply excessive fertilizers and other chemicals which further contributes to soil degradation and water pollution. The registered low yields are a manifestation of inaccessibility of most farmers to agricultural inputs.

### ***Policy Statements***

*The County government will:*

- 1. Generate a detailed soil map for Vihiga County.*
- 2. Draw on the National Soil Conservation Action Plan.*
- 3. Promote and support eco and organic farming so as to restore soil fertility.*
- 4. Ensure the protection of wetlands, riverbanks, hilltops and slopes from unsustainable practices to prevent soil erosion and environmental degradation.*

#### **4.7 Biodiversity**

Vihiga County is endowed with rich biodiversity that contributes to a variety of environmental services, such as regulation of the gaseous composition of the atmosphere, sustenance of wetlands, regulation of the hydrological cycle and climate, generation and conservation of fertile soils, dispersal and breakdown of wastes, crop pollination, and pollutants absorption. Livelihoods are anchored onto the biodiversity base through the provision of genetic resources for food and agriculture, and food security.

### ***Policy Statements***

*The County government will:*

- 1. Adopt and implement the National Biodiversity Strategy and Action Plan (NBSAP).*
- 2. Regulate and encourage sustainable utilization and bio-prospecting of biological resources in accordance with national and international law.*
- 3. Develop mechanisms to ensure benefits sharing of access to genetic resources, including intellectual property rights, traditional and indigenous knowledge and technologies among communities living in within areas where the genetic material originated (e.g. utilization of forest-sourced products of *Mondia whytei*)*
- 4. Develop and implement a strategy to contain, control and mitigate alien and invasive species within the context of the national framework.*

#### **4.8 Wildlife Resources**

Vihiga County lacks in a diverse wildlife base. Significant wildlife resources may be associated with the tropical rain forests of Kibiri. Previously the forested Maragoli Hills was known to harbour wildlife species which have since been annihilated following dissemination of the forest cover. Existing hills and rivers may host small population of wildlife. Therefore currently there is insignificance occurrence of human-wildlife conflicts. In the event that the Kakamega-Kibiri Forest ecosystems is fully fenced, then, even with stocking of these ecosystems with wildlife, the stated conflicts may successfully be contained.

### ***Policy Statements***

*The County government will:*

- 1. Implement the National Wildlife Policy and the reviewed Wildlife (Conservation and Management) Act.*
- 2. Protect, conserve and improve wildlife habitats*
- 3. Provide incentives for investment in sustainable eco-tourism and wildlife conservation initiatives.*
- 4. Promote the establishment of trans-boundary and/or trans-frontier wildlife conservation areas as may be the case between Kakamega, Nandi and Vihiga Counties.*
- 5. Encourage and support the establishment of community-based conservation areas in order to expand protected area network and win more space for wildlife.*
- 6. Maintain and expand all gazetted protected areas and reclaim, rehabilitate and restore encroached areas e.g. gazetted forests*
- 7. Strengthen and support wildlife research and information sharing for decision making.*

#### 4.9 Mineral Resources

Vihiga County is believed to have a rich mineral resource waiting to be discovered. This is indicated from the preponderance of numerous artisanal mining activities especially focusing on gold prospecting and mining. In this regard the need for extensive geological surveys is overriding. Increased mining activity, including quarrying and harvesting of sand, may result in environmental degradation. Hence the need for measures are taken to guide and control operations in the mining sub-sector.

##### ***Policy Statements***

*The County government will:*

- 1. Implement the national government Mineral Resources Development and Exploitation Policy and The Mining Act 2005.*
- 2. Develop The Vihiga County Sand Conservation and Management Bill that takes into consideration the environmental considerations.*
- 3. Ensure reclamation, rehabilitation and restoration of all mining sites such as quarries, gold pits, among others.*

#### 4.10 Livestock Resources

The County is promoting dairy livestock production so as to limit indigenous herds grazing that cause land degradation. The zero grazing system is promoted. However the main issue in livestock production is waste management and disposal resulting in water pollution. In urban areas, disposal of effluents from abattoirs, butcheries and tanneries is a major problem.

##### ***Policy Statements***

*The County government will:*

- 1. Implement County Livestock Policies and Acts*
- 2. Develop and implement regulations and guidelines for livestock waste disposal especially from the abattoirs, butcheries, tanneries, and large zero-grazing units.*

## CHAPTER 5

### 5.0 ENVIRONMENTLA HEALTH

Life forms depend on the health of the environment. Therefore it is important to ensure quality management of environmental resources. This entails proper handling of matters pertaining to air pollution, waste management, and noise control.

#### *Policy Statements*

*The County government will:*

- 1. Ensure that the Environmental Health Impact Analysis (EHIA) is mandatorily enforced as a component of the Environmental Impact Assessment (EIA) for all development projects.*
- 2. Promote occupational health and safety services.*
- 3. Promote capacity building in the field of health impact analysis.*

### 5.1 Reducing Effects of Air Pollution

Issues of respiratory diseases are on the increase in the County and they include lung cancer, pulmonary heart disease, and bronchitis, and chronic obstructive pulmonary disease (COPD). These diseases may be associated with effects of air pollution such as cooking with charcoal and firewood, dust storms, among others.

#### *Policy Statements*

*The County government will:*

- 1. Adopt and implement the national air quality standards and enforcement regimes.*
- 2. Promote efficient non-motorized and mass transport system.*
- 3. Encourage use of green energy, energy saving devices, and construction of well ventilated houses through enforcement of building standards.*

### 5.2 Waste Management

The management of Solid and liquid wastes in Vihiga County is in its formative stages. Key challenges is the inadequate availability of dump sites and landfills and sewerage systems. The County government is the process of streamlining these attributes. With regard to the management of solid waste, the county has acquired land for the establishment of a recycling facility including production of organic fertilizers.

Further it is imperative to improve the handling of toxic and hazardous wastes. Most of such wastes originate from the medical facilities, institutions and factories within the County. Exposure to these substances is likely to produce chronic rather than acute effects. The county like the rest of the county is vulnerable to illegal dumping of obsolete and banned toxic and hazardous substances.

### ***Policy Statements***

*The County government will:*

- 1. Implement **The Vihiga County Solid Waste Management Policy** and associated Acts.*
- 2. Develop an integrated county waste management strategy that draws on the national strategy*
- 3. Promote the use of economic instruments to manage solid and liquid wastes.*
- 4. Promote establishment of facilities and incentives for cleaner production, waste recovery, recycling and re-us.*
- 5. Establish appropriate toxic and hazardous substances disposal facilities.*
- 6. Develop a national strategy on toxic and hazardous substances.*
- 7. In collaboration with the national government, establish appropriate toxic and hazardous substances disposal facilities.*
- 8. Collaborate with the national government and the international community in curbing illegal dumping of obsolete or banned toxic and hazardous substances and enforce the relevant MEAs.*
- 9. Develop a county strategy on toxic and hazardous substances.*

### **5.3 Noise Pollution**

The county is increasingly experiencing noise pollution emanating from outdoor church activities, discos, funerals (at night in the form of “disco matanga”). Exposure to high levels of noise can result in significant adverse health impacts such as the loss of hearing, hearing damage as well as interfere with communication at household levels, at on-going meetings, and recreational centres.

### ***Policy Statements***

*The County government will:*

- 1. Develop a county strategy on noise pollution.*
- 2. Strengthen capacity and infrastructure to monitor noise pollution.*
- 3. Enforce laws and regulations on noise pollution.*
- 4. Undertake mapping of noise pollution in the county so as to inform decision making.*



## CHAPTER 6

### 6.0 ENVIRONMENTAL GOVERNANCE

The county government of Vihiga is putting in place functioning governance structures, legal and policy instruments. In addition it is undertaking institutional and human resource capacity building to enable implementation and enforcement of laws and regulations. This is poised to enhance conditions for effective environmental governance.

#### *Policy Statements*

*The County government will:*

##### On Legal Reforms:

- 1. Promote the constitutional order on environment and the Bill of Rights.*
- 2. Work in collaboration with NEMA to enforce EMCA.*
- 3. Ensure harmonization of sectoral laws with EMCA and their implementation.*
- 4. Implement **The Vihiga County Climate Change Policy and The Vihiga County Climate Change Fund Act 2019.***

##### On Institutional Framework:

- 1. Streamline, strengthen, and support the gazetted County Environment Committee so as to make it more effective and participatory.*
- 2. Strengthen the Directorate of Environment at the Department of Environment, Water, Energy and Natural Resources.*
- 3. Develop and Implement a Strategy on Partnerships and Stakeholder Involvement to enhance environmental management.*

##### On Human Capacity Building:

- 1. Support and promote the development of expertise in County Departments and Agencies, the private sector and civil society organizations in the various areas of environmental management through targeted short and long term courses.*
- 2. Develop a wide range of training opportunities and modules in the field of environment for different levels taking into account gender equity, emerging environmental issues up-to the Ward level.*
- 3. Enhance and promote networking between centres of excellence in environmental management at the County, National, Regional and International Levels.*

### 6.1 Environmental Funding Mechanisms

The county government realises the challenges faced with budgetary deficiencies for environmental activities. Efforts to change this situation means reaching out for more collaboration in environmental management and programming.

### ***Policy Statements***

*The County government will:*

- 1. Provide resources for environmental protection and management through the annual Government budgetary allocation.*
- 2. Promote participation of the individuals, civil society organizations and the private sector in environmental protection through fiscal incentives and voluntary agreements pegged on environmental performance indicators.*
- 3. Broaden the revenue base to support financial sustainability of environmental management.*
- 4. Encourage proposal writing for mobilizing resources from national agencies, development partners and international funding institutions (e.g. from MEAs financing mechanisms, such as the Global Environment Facility (GEF)), to support sound environmental management and sustainable development.*
- 5. Implement **The Vihiga County Climate Change Fund Act** and related support systems.*

## CHAPTER 7

### 7.0 MONITORING AND EVALUATION

Monitoring and evaluation of environmental programmes, projects and activities involves the collection and analysis of information, especially on compliance status of the different stakeholders. In collaboration with NEMA the county should be in a position to contribute to the national status and health of the environmental. This includes the preparation of the “*Vihiga County Status of the Environment Report*” by the County Environment Committee (CEC) as per provisions in the EMCA Act 1999.

In particular monitoring is essential to detect and correct environmental violations, provide evidence to support enforcement actions and evaluate implementation progress by establishing compliance status. Weak enforcement of legal instruments is attributed to inadequate technical capacities, monitoring infrastructure and trained enforcement staff at the County level.

#### *Policy Statements*

*The County Government will:*

- 1. Design and implement a County Environmental Inspection Programme.*
- 2. Develop a County Environmental Management Strategy.*
- 3. Develop guidelines for public-private-partnership in environmental management especially on investments in the Wastes Management sub-sector.*
- 4. Promote negotiated agreements, self-monitoring, self-record keeping and self-reporting by various stakeholders.*
- 5. Implement the National Strategy on Access to Environmental Justice (NSAEJ) when ready.*

## ANNEXI I: GLOSSARY OF TERMS

**Atmosphere** – means the gaseous envelope surrounding the earth. The dry atmosphere consists almost entirely of nitrogen and oxygen, together with trace gases including carbon dioxide and ozone.

**Biodiversity** - means the variability among living organisms from all sources including ecosystems and the ecological complexes of which they are a part. It encompasses the ecosystem, species and genetic diversity. Also viewed as the total diversity of all organisms and ecosystems at various spatial scales (from genes to entire biomes).

**Bio-prospecting** - refers to the exploration of biodiversity for commercially valuable genetic and biochemical resources and research;

**Climate Change** – means the change in the climate system which is caused by significant changes in the concentration of greenhouse gases because of human activities and which is in addition to natural climate change that has been observed during a considerable period.

**Climate Finance** – Means money available for or mobilized by government or non-government entities to finance climate change mitigation and adaptation actions and interventions.

**Community** - refers to a clearly defined group of users, which may, but need not be, a clan or ethnic community. These groups of users hold a set of clearly defined rights and obligations;

**Conservation** - means the protection, maintenance, rehabilitation, restoration and enhancement of the environment;

**County Government** – means the government of Vihiga being one of the forty seven county governments in the Republic of Kenya

**Disaster**- means the tragedy of a natural or human made hazard (a hazard is a situation which poses a level of threat to life, health, property, or environment). It is a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.

**Ecosystem** - means an interactive system formed from all living organisms and their abiotic (physical and chemical) environment within a given area. Ecosystems cover a hierarchy of spatial scales and can comprise the entire globe. It is a dynamic complex of plant, animal, micro-organism communities and their non-living environment interacting as a functional unit;

**Environmental impact assessment** - means a systematic examination conducted to determine whether or not a programme, activity or project will have any adverse impacts on the environment;

**Erosion** – means a process of removal and transport of soil and rock by weathering, mass wasting, and the action of streams, glaciers, winds, and underground water.

**Ex-situ conservation** - means conservation outside the natural ecosystem and habitat of the biological organism;

**Flood** – means an overflow of water that submerges land which is usually dry.

**Genetic resources** - means genetic material of actual or potential value;

**Green Energy** – means energy resource that is replaced rapidly by a natural process such as power generated from the sun or from the wind.

**Land use** - means activities carried out on a given piece of land;

**In-situ conservation** - means conservation within the natural ecosystem and habitat of the biological organism;

**Invasive and alien species** - means a species that is not an indigenous species or an indigenous species trans-located to a place outside its natural distribution range in nature;

**Multilateral environmental agreement (MEAs)** - means international legal instruments for the regulation of activities affecting the environment particularly wildlife resources to which Kenya is a Party;

**Payment for environmental services (PES)** - means market-based approach to conservation based on the twin principles that those who benefit from environmental services (such as users of clean water) should pay for them, and those who generate these services should be compensated for providing them. In a PES mechanism, service providers receive payments conditional on their providing the desired environmental services (or adopting a practice thought to generate those services). Participation is voluntary

**Protected area** - means an area declared to be a protected area under the applicable law.

**Species** - means a population of individual organisms capable of mating with one another and producing fertile offspring in a natural setting and that share common and specialized characteristics from others;

**Stakeholder** - refers to an individual or group having a vested interest in environment and natural resources;

**Strategic environmental assessment** - refers to a range of analytical and participatory approaches that aim to integrate environmental considerations into policies, plans and programmes and evaluate the inter linkages with economic and social considerations;

**Sustainable use** - means present use of natural resources, which does not compromise the ability to use the same by future generations or degrade the carrying capacity of ecosystems and habitats;

**Trans-frontier conservation area** - means the area or component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas, as well as multiple resource use areas;

**Vulnerability**- means the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. It is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity.

**Wetlands** - means areas of marsh, fen, peat land, or water, whether natural or artificial, permanent or temporary, static or flowing, fresh, brackish, salt, including areas of marine water the depth of which at low tide does not exceed 6 meters. It also incorporates riparian and costal zones adjacent to the wetlands; and

**Wise use** - means sustainable utilization of resources, including wetlands for the benefit of humankind in a way compatible with the maintenance of the species and the integrity of the ecosystem.