



# NATIONAL SPATIAL PLAN GUIDELINES FOR EMBU COUNTY

Optimal productivity, sustainability, efficiency and equity in  
use of our land and territorial space



©JUNE 2022

MINISTRY OF LANDS AND PHYSICAL PLANNING  
STATE DEPARTMENT FOR PHYSICAL PLANNING

## **Foreword**

The Constitution of Kenya apportions responsibility of planning to both National and County Governments. Under the Fourth Schedule on distribution of functions, Part 1 (21) and (32) mandates the National Government with the responsibility of formulating general principles of land planning, co-ordination of planning by the Counties, capacity building and technical assistance to the Counties. On the other hand, Part 2(8) allocates the function of County planning and development to County Governments. It is under these provisions that the County specific guidelines have been prepared.

The Department of Physical Planning prepared the National Spatial Plan (NSP) in response to the Kenya Vision 2030 to guide the spatial development of the country over a period of 30 years beginning in 2015.

It aims at achieving an organized, integrated, sustainable and balanced development of the country by providing a framework for better national organization and linkages between different activities within the national space.

To implement the Plan, the Counties are expected to play a key role by mainstreaming strategies, policies, and measures identified in the NSP into the County spatial planning systems.

The guidelines have identified planning policies, strategies, and measures that Plans at the County level are expected to mainstream and propagate. The policies address among others, the protection of rich agricultural land, development imbalances, conservation of environmentally sensitive areas, urban containment, and promotion of industrial development.

The guidelines provide direction on the existing potentials, the opportunities, the constraints/challenges inhibiting harnessing of the potentials, the strategies to apply, respective policies required, and the necessary measures to achieve optimal productivity, sustainability, efficiency and equity in the use of county land resources.

The guidelines are an opportunity on how best to refocus, vary and complement areas that require different approaches responding to country-specific needs and promote

the livelihoods of their people, while contributing to the national aspirations of vision 2030, regional objectives of the Africa Agenda 2063, and international targets of sustainable development. The refocusing will also be handy in reviewing and making decisions on NSP which is due for review in 2025.

These guidelines are therefore a tool for enhancing this critical path and provide a direction for development planning by the Counties as they discharge their responsibility of preparing county and local physical and land use development plans. The guidelines will also ensure that the County Integrated Development Plans conform to the proposed County specific policy guidelines and measures.

DRAFT

## **Preface**

The National Spatial Plan(NSP) recognizes that Kenya is greatly endowed with massive and diverse resources distributed over the national space that require an integrated and coordinated approach for optimal productivity and sustainability.

The County Specific Guidelines have been derived from the National Spatial Plan and provide a planning framework for the integration of the NSP into the county spatial planning system. They are clear statements linking the National Spatial Plan to Inter-County, County and lower-level Physical and Land Use Development Plans and provide clarification on the anticipated sustainable development outcomes of implementing the Plan.

The County Government will adopt, develop and implement their plans based on the policies, strategies, and measures articulated in the guidelines. The realized county plans are expected to guide, harmonize and facilitate development within the county, hence contributing to the overall implementation of the NSP.

The guidelines also form an efficient compass and monitoring tool for National and County Governments to jointly pursue sustainable planning and appropriate implementation mechanisms.

For the county to be nationally competitive, there is need to balance development and promote optimal utilization of land and land-based resources as well as cultivate an integrated approach in addressing the intertwined challenges of regional imbalances/inequalities, rural development, underutilization of the available resources, uncontrolled urbanization, environmental degradation and inefficient transportation. It is imperative therefore, to prioritize the implementation of this strategic document so as to promote balanced development and competitiveness across the county.

## **Executive Summary**

The County Specific Guidelines seek to facilitate the implementation of the National Spatial Plan by outlining policies, strategies and measures to guide County spatial planning and development and promote optimal productivity, sustainability, efficiency and equity in the use of land. They provide a framework for preparation of lower level Plans including Inter-County, County and Local Physical and Land Use Development Plans.

The disconnect between National and County Spatial Planning and development has resulted in uncoordinated and unbalanced development, therefore creating a need for a clear structure that links National, Regional and Local planning and development. This is achievable through integration of the policies, strategies and measures proposed by the guidelines into County Spatial Plans, Programs and Projects, to tackle challenges of unbalanced regional development, urbanization, national competitiveness and unsustainable use of land and natural resources.

The County Specific Guidelines are organized into five chapters detailing various facets. Chapter one provides an overview, purpose and justification of preparation of the guidelines. It also outlines the objectives that the guidelines intend to achieve and details the preparation process as well as intended users. This chapter highlights the key principles that form the basis for preparation of lower level plans including public participation, livability, sustainable development, urban containment, smart urban growth among others.

Chapter two details the legal and policy provisions that the guidelines are anchored upon. They include, among others, The Constitution of Kenya, 2010, The Physical and Land Use Planning Act No.13 of 2019, County Government Act, 2012, Environmental Management and Coordination (Amendment) Act, 2015, Sessional Paper No. 01 of 2017 on National Land Use Policy and Sessional Paper No. 10 of 2012 on Kenya Vision 2030.

The third chapter analyses the county profile, detailing its location, size, bio-physical characteristics, socioeconomic status and the County's comparative advantage in relation to others. The locational context provides information on the geographical position and bordering Counties while the biophysical context discusses the

topography, hydrology and climate. The socioeconomic status indicates key economic drivers of the County and its population and demographic structure.

Chapter four presents the County specific issues and proposes development strategies to promote national competitiveness, optimal use of land and resources, rural development, balanced intra-county development and urbanization. Additionally, it provides policy guidelines and measures for County advancement.

The final chapter five focuses on implementation and adoption of the guidelines. The implementation framework identifies institutions, County development programs and projects, and further ties them with responsible actors, resources and timeframes for effective execution. It proposes a framework for ensuring that the outlined policies, strategies and measures are adequately implemented.

DRAFT

## Table of Contents

1.1	Background .....	<b>Error! Bookmark not defined.</b>
1.2	Purpose .....	<b>Error! Bookmark not defined.</b>
1.3	Objectives .....	<b>Error! Bookmark not defined.</b>
1.4	Scope .....	<b>Error! Bookmark not defined.</b>
1.5	Justification .....	<b>Error! Bookmark not defined.</b>
	Application .....	<b>Error! Bookmark not defined.</b>
1.6	Process of preparing the Guidelines .....	<b>Error! Bookmark not defined.</b>
1.7	Targeted users .....	<b>Error! Bookmark not defined.</b>
1.8	Key Principles .....	<b>Error! Bookmark not defined.</b>
2	THE POLICY, LEGAL AND PLANNING FRAMEWORK FOR THE GUIDELINES .....	<b>Error! Bookmark not defined.</b>
2.1	Constitutional context.....	<b>Error! Bookmark not defined.</b>
2.2	Policy Context.....	<b>Error! Bookmark not defined.</b>
2.2.1	Sessional Paper No. 10 of 2012 on Kenya Vision 2030 ...	<b>Error! Bookmark not defined.</b>
2.2.2	Sessional Paper No. 01 Of 2017 on National Land Use Policy .....	<b>Error! Bookmark not defined.</b>
2.2.3	Sessional Paper No. 03 of 2009 on National Land Policy .....	<b>Error! Bookmark not defined.</b>
2.3	Legal Context .....	<b>Error! Bookmark not defined.</b>
2.3.1	The Physical and Land Use Planning Act, 2019	<b>Error! Bookmark not defined.</b>
2.3.2	County Governments Act, 2012 .....	<b>Error! Bookmark not defined.</b>
2.3.3	The Urban Areas and Cities (Amendment) Act, 2019 .....	<b>Error! Bookmark not defined.</b>
2.3.4	Environmental Management and Coordination (Amendment) Act, 2015...	<b>Error! Bookmark not defined.</b>
2.3.5	National Land Commission Act, 2012.....	<b>Error! Bookmark not defined.</b>
2.4	Planning Context.....	<b>Error! Bookmark not defined.</b>
2.4.1	National Spatial Plan (NSP) .....	<b>Error! Bookmark not defined.</b>
2.4.2	NSP linkage to other plans .....	<b>Error! Bookmark not defined.</b>
3	COUNTY PROFILE.....	8
3.1	Location Context .....	13
3.2	Bio-physical context .....	14
3.3	Socio-economic status .....	15
3.3.1	Demography.....	15

3.3.2 Agriculture.....	15
3.3.3 Physical Infrastructure.....	16
3.3.4 Transportation.....	16
3.3.5 Public Utilities.....	16
3.4 County’s comparative advantage.....	16
<b>4 County Specific Issues and Development Strategies.....</b>	<b>Error! Bookmark not defined.</b>
4.1 County Specific Issues and Development Strategies.....	18
4.2 Spatial Policy Guidelines for Embu County.....	26
<b>5.0 IMPLEMENTATION AND ADOPTION OF THE GUIDELINES.....</b>	<b>Error! Bookmark not defined.</b>
5.1 Introduction.....	<b>Error! Bookmark not defined.</b>
5.2 Implementation Channels.....	<b>Error! Bookmark not defined.</b>
5.3 Institutional Framework for Implementation.....	<b>Error! Bookmark not defined.</b>
5.3.1 National Physical Planning Council.....	<b>Error! Bookmark not defined.</b>
5.3.2 National Technical Committee.....	<b>Error! Bookmark not defined.</b>
5.3.3 County Physical Planning Committee.....	<b>Error! Bookmark not defined.</b>
5.4 Conclusion.....	<b>Error! Bookmark not defined.</b>

**List of tables**

Table 1: Targeted Users of the Guidelines.....	<b>Error! Bookmark not defined.</b>
Table 2: Population Projections.....	15
Table 3: County Specific Issues and Development Strategies.....	24
Table 4: NSP Policy Guidelines for Embu County.....	26
Table 5: NSP Implementation Approaches.....	<b>Error! Bookmark not defined.</b>

**List of maps**

Map 1: Locational Context of Embu County.....	13
Map 2: Existing Situation in Embu County.....	17

**List of figures**

Figure 1: Scope of the Guidelines.....	<b>Error! Bookmark not defined.</b>
Figure 2: Policy Focus of the NSP.....	<b>Error! Bookmark not defined.</b>
Figure 3: NSP linkage to other plans.....	<b>Error! Bookmark not defined.</b>
Figure 4: NSP Implementation Organizational Structure.....	<b>Error! Bookmark not defined.</b>

## **1 Introduction**

### **1.1 Background**

The County Guidelines set out policies, strategies and measures that will guide the long-term spatial development of the county for a period of 30 years. They cover the entire county and defines the general trend and direction of its spatial development.

The guidelines have been developed in line with the four thematic areas as outlined in the NSP. They provide a guide to the Planning Authority at the county on how to incorporate the NSP policies, strategies and measures during the preparation of County Spatial Plans and other lower level plans like the Local Physical and Land Use Development Plans consequently implementing the NSP.

The NSP County Specific implementation guidelines summarize the County's existing potentials and opportunities, the constraints (challenges) inhibiting harnessing of the potentials, the applicable strategies and respective policies required, and the necessary measures to achieve optimal productivity, sustainability, efficiency and equity in the use of the county land resources. They act as a reference point

### **1.2 Purpose**

The purpose of the County Specific Guidelines is to provide a planning framework for mainstreaming of the National Spatial Plan to the County spatial planning system.

The guidelines are intended to assist the County enhance the implementation of the NSP by linking the proposed county specific policies, strategies and measures into the County plans, programs and projects while putting measures in place for achieving them. The guidelines inform preparation of various County Physical Plans such as the County Physical and Land Use Development Plans.

For optimal implementation of these plans, a County Integrated Development Plan (CIDP) is essential since it is a sectoral and budgetary based plan that draws its implementation programs and projects from the County Physical Plans.

### **1.3 Objectives**

The guidelines provide policies, strategies and measures to deal with challenges of regional imbalances/inequalities, rural development, underutilization of the available resources, urbanization, environmental degradation and inefficient transportation.

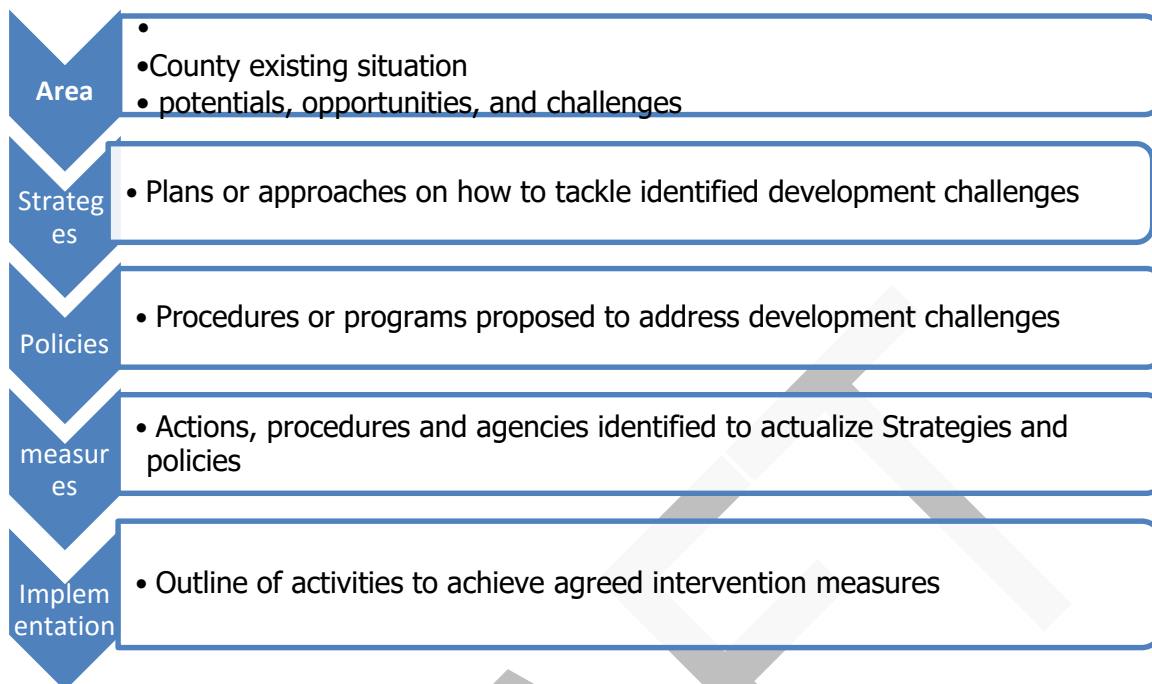
Specifically, the objectives are;

1. To sensitize the County on the provisions of the NSP
2. To promote synergy between National and County planning
3. To guide the County, implement the NSP
4. To identify the roles of the different actors in the implementation of the NSP.

### **1.4 Scope**

The guidelines comprise policies, strategies and measures specific to Embu County covering approximately 2037 km<sup>2</sup>. The guidelines highlight the County's existing potentials and opportunities, the constraints (challenges) inhibiting harnessing of the potentials, the applicable strategies and respective policies required, and the necessary measures, actions, approaches, plans and procedures prescribed to achieve optimal productivity, sustainability, efficiency and equity in the use of the county's land resources and an outline of activities to execute agreed interventions as captured in the National Spatial Plan, as indicated in Figure 1 below. These guidelines are effective up to the year 2045.

**Figure 1: The Scope of the Guidelines**



**Source: State Department for Physical Planning, 2022**

## **1.5 Justification**

Since the approval and launch of the NSP, its implementation has been undertaken in an uncoordinated manner hence the guidelines will provide a standardized approach for all Counties. The guidelines are also an important tool for tracking and evaluating implementation of the NSP both at National and County levels.

The preparation of County Spatial Plans and other lower-level plans which is a mandate of Counties has been slow and, in some Counties, has not begun at all. These guidelines are therefore a quick reference in preparation of county plans and for some Counties to help optimize land in the absence of these plans.

## **1.6 Application of the Guidelines**

The guidelines will be used or applied in the following ways to achieve a more sustained and coordinated development of the County;

- To effectively coordinate planning between the National and the County Government;

- To improve the County Government's capacity to formulate, coordinate and implement integrated development policies, strategies, measures, programs and projects to address spatially unbalanced development;
- To inform strategic infrastructure policy and public investment decisions which support the achievement of balanced development in the County;
- To strengthen County inter-sectoral coordination within a spatial framework and provide the private sector with a clear context in which they can make investment decisions;
- To optimize the use of land and natural resources by providing a framework for making sustainable locational choices for sustainable development and conservation of land productivity in the County.

### **1.7 Process of preparing the Guidelines**

The process involved reviewing the National Spatial Plan and identifying key issues, spatial policies, development strategies and measures specific to Embu County. These key issues, spatial policies, development strategies and measures will be realized through preparation of County and other lower-level plans.

Research was undertaken on various thematic areas to enrich the County specific issues and development strategies as well as policy guidelines and measures/interventions. Further, preparation of the guidelines considered the constitutional, policy and legal provisions on physical and land use planning. Expert opinion was sought on the identified issues, policies, measures and strategies for implementation viability.

The preparation of the guidelines was identified as one of the implementation tools of the NSP, in which key NSP issues, policies, strategies and measures were translated into specific action plans, programs and projects at the County level.

### **1.8 Targeted users of the Guidelines**

These Guidelines have diverse consumers and application depending on prevailing circumstances and actors as demonstrated in Table 1 below:

**Table 1: Targeted Users of the Guidelines**

<b>User</b>	<b>Application</b>
County Executive Committee Member in charge of Physical and Land Use Planning	<ul style="list-style-type: none"> <li>● Preparation of county and lower-level plans</li> <li>● Linkage of planning structures</li> <li>● Quality control of the various county plans</li> <li>● Formulate county planning policies and strategies</li> <li>● Establish county specific planning institutions</li> <li>● Coordinate and implement county plans and policies</li> </ul>
The County Director of Physical and Land Use planning	<ul style="list-style-type: none"> <li>● Advising the county government on the impact of the county specific guidelines to the county</li> <li>● Preparation of County physical and land use development plans and other lower level plans</li> <li>● Formulating County physical and land use planning policies, guidelines, strategies, and standards;</li> <li>● Issuance of development permission and other development control instruments under The Physical and Land Use Planning Act, 2013.</li> </ul>
Licensed physical and land use planners both in public and private sectors	<ul style="list-style-type: none"> <li>● Prepare, coordinate and implement spatial plans</li> <li>● Quality control of plans and consultancy services</li> <li>● Formulate policies, strategies and development guidelines</li> <li>● Dispute resolution</li> </ul>
County assembly	<ul style="list-style-type: none"> <li>● Approval of strategic sectoral budgets such as planning</li> <li>● Vetting of various County specific plans</li> <li>● Formulation and passing of County planning legislation</li> <li>● Enhance capacity to oversee the executive on spatial planning</li> </ul>

Ministries, Departments and Agencies	<ul style="list-style-type: none"> <li>● Mainstreaming relevant NSP policies, programs and projects</li> <li>● Allocation of resources to priority areas,</li> <li>● Strengthening linkages with spatial planning in resource management</li> </ul>
The National Land Commission (NLC)	<ul style="list-style-type: none"> <li>● Oversight role in land use planning to ensure efficient implementation of the NSP</li> <li>● Ensure relevant planning authorities carry out their functions as required by the law</li> </ul>
Practitioners in the built environment	<ul style="list-style-type: none"> <li>● Advance NSP relevant policies, programs and projects hence optimization of land resource</li> <li>● Appreciate sectoral Linkages to spatial planning</li> <li>● Facilitate incorporation of the policies, strategies and measures into, County specific plans</li> </ul>
Community, developers and investors	<ul style="list-style-type: none"> <li>● Comprehend the County priority sectors and County Plans and policies</li> <li>● Complement County spatial planning and implementation measures</li> <li>● Making informed investment decisions</li> </ul>
Development partners	<ul style="list-style-type: none"> <li>● Reference frame for selecting and funding spatial planning activities</li> <li>● Understand planning linkages and implementation</li> <li>● Informed development decisions</li> </ul>
Training institutions	<ul style="list-style-type: none"> <li>● Compliment the curriculum for training of spatial planners</li> <li>● Understand the planning procedures and processes</li> </ul>

### 1.9 Key Principles

The principles, as applied in the NSP, should guide and form the basis upon which the lower-level physical and land use plans are prepared. Further the principles

should ensure sustainable, coordinated, and realistic development. They include the following:

**1. Effective Public participation/engagement:** All plans shall be prepared in a participatory and consultative manner with relevant stakeholders and sectoral actors.

**2. Urban containment/Compact cities:** Local plans shall strive to limit and control urban growth within the set urban boundaries to protect rich agricultural land, mitigate urban sprawl and reduce cost of infrastructural provision.

**3. Livability:** The planning of urban areas shall enhance the livability index in the area of housing, environment, transportation, health, and social engagement. The urban areas must be economically viable, socially inclusive and ecologically sustainable.

**4. Smart and green urban growth:** Plans shall promote sustainable use of energy, creation of green spaces, reduce the need for car travel, and promote use of local materials, support businesses, protection of heritage and creation of unique character.

**5. Sustainable development:** Balancing social, economic and environmental dimensions of development and catering for current and future generations.

**6. Promotion of ecological integrity:** Plans shall promote the protection and conservation of environmentally sensitive areas.

**7. Promote public transportation:** Favor public transportation over private transport to ensure efficiency and functionality of urban places.

**8. Balanced development:** Plans to ensure there/ is balanced development in the County to cure inequalities.

## **2 The Policy, Legal and Planning Framework For The Guidelines**

### **2.1 Constitutional context**

The formulation of these guidelines took into account the Constitution of Kenya 2010 aspirations and Principles. Article 66 of the Constitution of Kenya 2010 gives the State powers to regulate use of any land and property in the interest of land use planning among others. The guidelines are therefore within and in response to the aspirations, values and principles as provided for in the constitution.

### **2.2 Policy Context**

#### **2.2.1 Sessional Paper No. 10 of 2012 on Kenya Vision 2030**

Kenya Vision 2030 is the overarching national development framework which all plans should be aligned to. The preparation of all spatial plans should take cognizance of the aspirations, foundations and development concepts of the vision. The preparation of the first National Spatial Plan is identified in Kenya Vision 2030 as a flagship project and is regarded as one of the foundations for socio-economic transformation. Hence the need for linkage between national planning and county planning which will be achieved through mainstreaming NSP requirements into CSPs and other lower-level plans by preparing NSP county specific guidelines to implement the NSP at lower levels.

#### **2.2.2 Sessional Paper No. 01 of 2017 on National Land Use Policy**

The policy was formulated to address the various challenges related to land use and ensure efficient, productive and sustainable use of land. The main goal of the 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 recommends the preparation of a National Spatial Plan to provide an integrated framework for the development of the country including guidelines for sustainable rural and urban planning management. The policy also provides for the preparation of planning guidelines, policies and standards to be observed by County Governments and other sectoral agencies within the frameworks of approved physical and land use development plans. These guidelines have been prepared on this basis

and they are to be observed by counties in the implementation of the National Spatial Plan.

### **2.3 Legal context**

Various Acts of Parliament are in place to provide the legal framework for the implementation of the mandate provided for in Article 66 of the Constitution. The Physical and Land Use Planning Act, 2019, The Urban Areas and Cities (Amendment) Act, 2019, County Governments Act No. 17 of 2012, The Land Act No. 6 of 2012, National Land Commission Act No. 5 of 2012 among others. The NSP County specific guidelines are prepared in this context and meet this criterion.

#### **2.3.1 The Physical and Land Use Planning Act No. 13 of 2019**

This is the overarching statute that provides for formulation of both National and County physical and land use planning policies, guidelines and standards. The Act further provides for administration, types, content, process and approval of the various types of Physical and Land Use Development Plans.

#### **2.3.2 County Governments Act, 2012**

This statute mandates County Governments to carry out the planning function at the county level. The guidelines support preparation of the various county level plans that meet the recommended quality and standards.

#### **2.3.3 Urban Areas and Cities (Amendment) Act, 2019**

The statute provides for classification of urban areas and cities, their governance and management, and for integrated development planning. The guidelines are a basis for preparation of these lower-level plans.

#### **2.3.4 Environmental Management and Coordination (Amendment) Act, 2015**

The Act provides for the establishment of an appropriate legal and institutional framework for the management of the environment as well as guidelines relating to environmental management and prevention or abatement of environmental degradation. The guidelines take cognizance of this Act and will be implemented within the framework

### 2.3.5 National Land Commission Act, 2012

The Act mandates the National Land Commission with the management and administration of public land on behalf of the National and County Governments and to monitor and oversight physical and lands use planning in the country. The guidelines fall within the ambit of this statute and will facilitate their oversight responsibilities.

## 2.4 Planning Context

### 2.4.1 National Spatial Plan (NSP)

The National Spatial Plan (NSP) covers the whole country encompassing the exclusive economic zone. The NSP outlines policies and strategies geared towards influencing desired future distribution and organization of human activity outlined in Vision 2030 and sectoral policies and plans. It aims at achieving economic efficiency and balanced development. The various County Spatial Plans should be aligned to the policies outlined in the NSP as demonstrated in Figure 2 below.

**Figure 2: Policy Focus of the NSP**



**Source: National Spatial Plan, 2015-2045**

To actualize the NSP, a comprehensive implementation strategy has been proposed that embraces a multiplicity of actors including National Government Ministries, Departments and Agencies, County Governments and the National Land Commission. The strategy proposes the establishment of the following institutions as key in the

implementation of the Plan; The National Physical Planning Council, the National Technical Committee and the County Physical Planning Committee.

#### **2.4.2 NSP linkage to other plans**

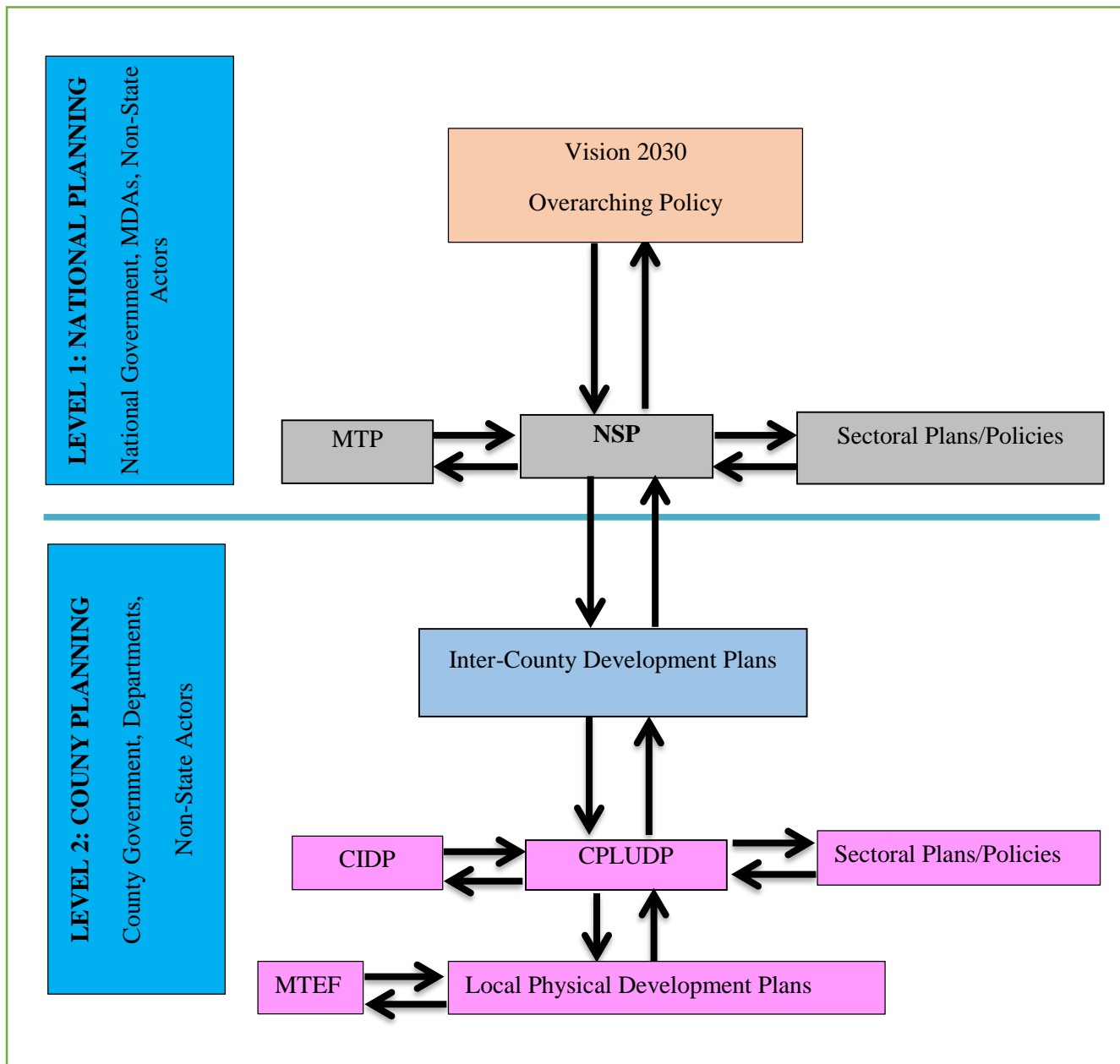
The linkage of the National Spatial Plan (NSP) to county and other lower-level plans is key to realization of its aspirations and the successful actualization of these plans. The NSP provides a spatial framework to ground the Vision 2030 flagships projects and form a basis for coordination of County policies, strategies, measures and plans.

Inter County and County plans take into considerations the policies, measures and strategies of the NSP and implements them actualizing its aspirations.

County Physical and Land Use Development Plans provide a framework where the CIDP draws its programs and projects. The implementation of the CIDP in turn leads to realization of the objectives of the County Physical and Land Use Development Plan.

DRAFT

**Figure 3: NSP Linkage to other Plans**



**Source: The National Spatial Plan, 2015-2045**

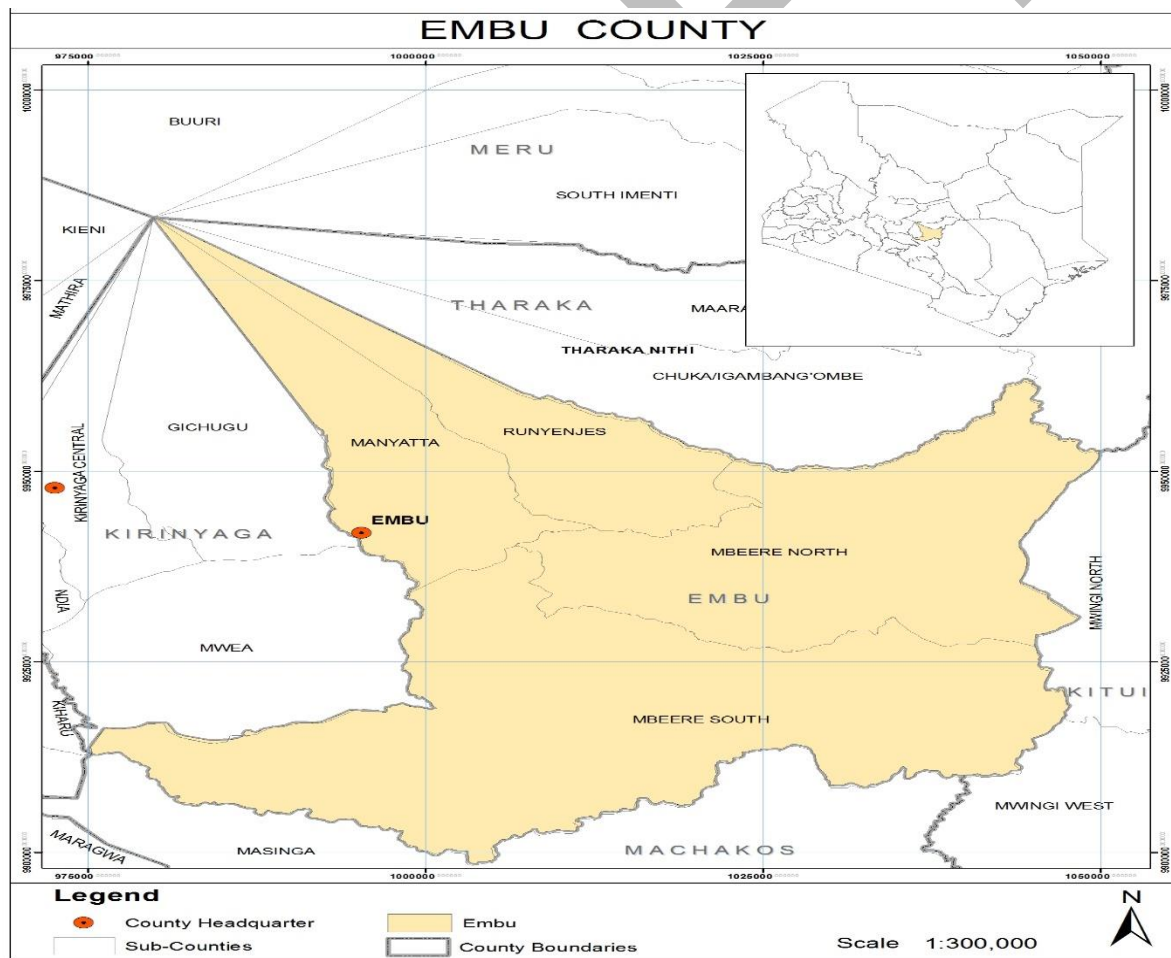
### 3. County Profile

This chapter describes Embu County including its location, bio-physical context, land and land use patterns, socio-economic background, Infrastructure and utilities and its comparative advantage.

#### 3.1 Location Context

Embu County is located approximately between latitude 0° 8' and 0° 50' South and longitude 37° 3' and 37° 9' East. It borders Kirinyaga County to the West, Kitui County to the East, Machakos County to the South, Murang'a County to the South West, Tharaka-Nithi County to the North and Meru to the North West. The county is divided into four constituencies, namely; Runyenjes, Manyatta, Mbeere South and Mbeere North covering a total area of 2,818 sq. km.

Map 1: Locational Context of Embu County



Source; State Department for Physical Planning, 2022

### **3.2 Bio-physical context**

**Topography-** Embu County slopes from North-West towards East and South-East with a few isolated hills such as Kiambere, Kianjiru and Kiang'ombe which rise above the general height and slope. The County is characterised by highlands and lowlands.

**Water resources-** The County is endowed with six major rivers; four of them, Thũci, Tana, Kĩĩ and Rũvingasĩ which form part of the Embu County's boundaries. The county also borders 3 dams of the 7 folks dam, they are Masinga, Masinga dam, Kamburu dam, Gitaru dam, Kindaruma dam and Kiambere dam which it shares with Machakos county along river Tana.

**Rainfall-** The average annual rainfall reflects this contrast: from more than 2200 mm at an altitude of 2500 m to less than 600 mm near the Tana River at an altitude of 700 m. The variation is mainly due to the mountain but also to the "water recycling" effect of the forest by evapo-transpiration. Above 2500 m, rainfall decreases due to the lower moisture content of the colder air and the stronger influence of the trade wind system

**Temperatures** range from a minimum of 12oC in July to a maximum of 30oC in March with a mean average of 21oC. The extensive altitudinal range of the county influences temperatures and amount of rainfall.

#### **Land and land Use Patterns**

The County is characterized by a predominantly rural settlement pattern. There is a concentration of people along the major permanent water sources such as rivers and dams where irrigation, farming and fishing are carried out. The settlement pattern is also influenced by social economic activities, rain and soil fertility. Mbeere North and Mbeere South receive less rainfall and have a more scattered settlement pattern compared to Manyatta and Runyenjes sub-counties which receive more rainfall.

The county has three major urban centres, namely Embu, Siakago and Runyenjes towns. There are also major market centres like Ishiara, Karaba, Kiritiri, Gachoka, and Kianjokoma.

The County has experienced changes in land use patterns as a result of;

- i. Increasing population

- ii. Rising demand for food and other cash crops
- iii. Increasing urbanization
- iv. Rising standards of living

### 3.3 Socio-Economic Background

#### 3.3.1 Demography

The population of Embu County from KNBS 2019 data was estimated at 608,599 (50.1% women and 49.9% men) It has an average household size of 3.3 and population density of 216 persons per square kilometer.

Table 1: Population Projections

YEAR	2019		2020		2025		2030		2035		2040		2045	
<b>Popul ation size</b>	608,575		617,096		661,520		709,142		760,192		814,917		873,581	
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
	304,208	304,367	308,548	308,707	330,760	330,919	354,571	354,730	380,096	380,255	407,459	407,618	436,791	436,950
<b>hous ehold s</b>	184,417		186,999		200,379		214,892		230,362		246,945		264,721	
<b>Area</b>	2,820.7		2,820.7		2,820.7		2,820.7		2,820.7		2,820.7		2,820.7	
<b>Densi ty</b>	216		219		235		252		270		289		310	

Source; KNBS Census Report, 2019

#### 3.3.2 Agriculture

Agriculture contributes a substantial amount of export earnings to the economy providing the much-needed foreign exchange. The potential components of agriculture vary within the rural areas such as crops, livestock, fishing and forestry which have been either under-utilized or not utilized. However, some of these agriculturally potential areas are experiencing increased pressure by urban sprawl. There has also been increased subdivision of the rich agricultural land into small uneconomic units and slow or nill adoption of modern technology and farming methods. All these among others have contributed to the reduced agricultural production.

### **3.3.3 Physical Infrastructure**

Infrastructure is key to the achievement of the National Spatial Plan objectives of global competitiveness, regional balance and optimal utilization of land and other resources. Embu has fairly developed infrastructure including transport, physical and social infrastructure. Which have a high potential of economically empowering it's People and attracting private investors if well maintained. The sector faces problems regarding poor connection, low coverage, unreliability, high costs, skewed distribution and low/surpassed design. To rectify this situation clear indicative policy, strategies and measures have to be developed and implemented to achieve overall efficiency

### **3.3.4 Transportation**

The County has an expansive road network with coverage of 914.3 km earth surface, 402 km of ground surface and 120 km of tarmac which connect Embu County to neighbouring counties. The Embu-Kibugu road connects Embu to Kirinyaga, the Nairobi-Meru highway connects Embu to Tharaka Nithi and Meru Counties while the Embu-Kitui highway connects Embu to Machakos and Kitui Counties. Most of the earth surface roads in Embu County are impassable during rain seasons and need to be either graveled or tarmacked.

Embu County is also host to one Airstrip located at Don Bosco in Embu town and is currently being refurbished.

### **3.3.5 Public Utilities**

The county has several public utilities with majority located in the urban centres, they include Moi stadium, health centres from level I-IV, vocational training centres, schools and universities and GTI like Embu.

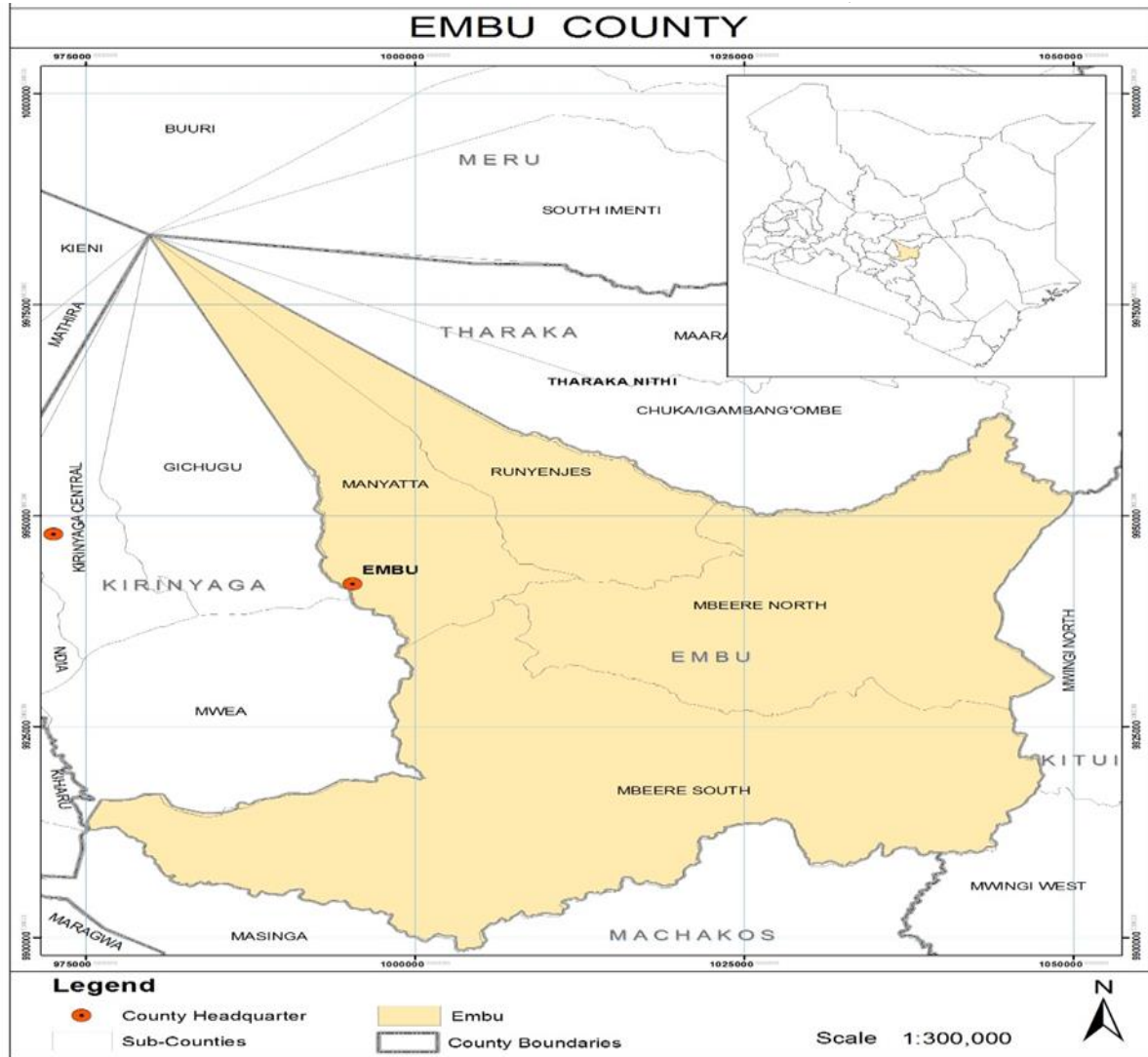
To achieve a spatial and balanced regional development and meet demands of a growing population, there is need to develop and enhance economic infrastructure such as water services, waste management, energy and ICT to provide the foundation for economic development.

## **3.4 County's Comparative Advantage**

- a) The Embu-Mwea-Makutano road A2 and Embu-Chuka-runyenjes road B6 a major transportation corridor traverses the county.

- b) Availability of arable land that is suitable for farming.
- c) Presence of 7 folks dam to provide water for irrigation and tourist attraction
- d) The County has high potential for tourism due to tourist attractions like The Mt. Kenya and Mwea national reserve

Map 2: Existing Situation in Embu County



Source: State Department for Physical Planning, 2022

## **4 County Specific Issues, Development Strategies and Policy Guidelines**

### **4.1 Embu County Specific Issues and Development Strategies**

The National Spatial Plan provides strategies for spatial growth and development across the country. The strategies are aimed at providing a spatial expression to Kenya Vision 2030 and other sector policies.

This section seeks to provide strategies for spatial growth and development of the county by addressing the factors that prevent the county from achieving the intended goals and objectives. Specifically, the development strategies have been proposed to address the following aspects of the county's development agenda;

- Managing the national competitiveness
- Optimal use of land and other resources
- Balanced county development
- Rural development in the county
- Urbanization

The following are detailed NSP sector-specific issues and strategies that apply to Samburu County.

## Strategy 1: Optimizing Land and Natural Resources

Sector	Opportunities	Constraints	Strategies
Land Capability	<ul style="list-style-type: none"> <li>Abundant land resource for development</li> <li>Change in land use patterns</li> </ul>	<ul style="list-style-type: none"> <li>Skewed development patterns</li> <li>Unsustainable land use practices</li> </ul>	<ul style="list-style-type: none"> <li>Formulate policies to tap the capability and potentials of the county</li> </ul>
Agricultural	<ul style="list-style-type: none"> <li>Vast land to support large scale livestock production</li> <li>Irrigation potential along rivers Mbeere North and Mbeere South.</li> <li>High potential for Apiculture</li> <li>Aquaculture and river-line fishing potential along rivers and dams</li> </ul>	<ul style="list-style-type: none"> <li>Unreliable and poorly distributed rainfall pattern</li> <li>Food and nutrition insecurity</li> <li>Soil erosion</li> <li>Negative effects of climate change</li> </ul>	<ul style="list-style-type: none"> <li>Harness the irrigation potentials along rivers (Thuci, Tana, Kii, Ruingazi, Thiba and Ena) and dams (Kiambere, Masinga, Kamburu and Kindaruma)</li> <li>Exploit underground water potential, rain water harvesting and harness the existing surface water</li> <li>Encourage dry land farming methods and plant drought resistant crops in Mbeere North and Mbeere South</li> <li>Improve transportation infrastructure in agricultural areas</li> <li>Mainstream climate change adaptation and mitigation measures</li> </ul>
Environmental Conservation	<ul style="list-style-type: none"> <li>High potential for ground water harvesting in some areas</li> <li>Diverse biodiversity</li> <li>Huge potential for sand harvesting</li> <li>Member of Tana and Athi Development Authority (TARDA)</li> </ul>	<ul style="list-style-type: none"> <li>Haphazard quarrying and sand harvesting and brick making in major wetlands</li> <li>Encroachment on river banks and flooding</li> <li>Overstocking thus overgrazing</li> <li>Loss of wetland ecosystems</li> <li>Environmental pollution –air, land, water</li> </ul>	<ul style="list-style-type: none"> <li>Regulate quarrying, sand harvesting and brick making activities</li> <li>Promote soil erosion control measures</li> <li>Commercialization of livestock keeping</li> <li>Provide requisite livestock infrastructure e.g. abattoirs, markets</li> <li>Encourage and adopt modern ranching methods</li> <li>Sensitize the public in matters of carrying capacity</li> </ul>

		<ul style="list-style-type: none"> <li>• Charcoal Production</li> <li>• Deforestation of hill tops and dry lands</li> <li>• Effects of climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Promote the use of renewable energy such as solar and wind</li> <li>• Mainstream climate change adaptation and mitigation measures in County policies laws and plans</li> <li>•</li> </ul>
Natural Resources	<ul style="list-style-type: none"> <li>• Endowed with --Mineral resources e.g iron ore (Kianjiru Hill)and coal (, copper ore (Ngiiri), graphite (Thabo Hill Ishiara)</li> <li>Sand (All rivers In Mbeere North and Mbeere South)</li> <li>Building Stones (Nganduri, Munyori and Siakago)among others</li> <li>• Favorable wind speeds and solar heat to support green energy</li> <li>• 9.3 % of the county is under forest cover - indigenous closed canopy and industrial plantation (Irangi and Maranga forests)</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate technology and exploitation infrastructure</li> <li>• High costs of exploiting available natural resources</li> <li>• Inadequate geological information on the existence of the minerals and their commercial viability</li> <li>• Deforestation</li> </ul>	<ul style="list-style-type: none"> <li>• Optimal utilization of the available resource potential</li> <li>• Invest in appropriate technology and infrastructure</li> <li>• Formulate a policy pertaining to the use and protection of the parks and conservancies</li> <li>• Undertake geological surveys to establish viability of mineral deposits</li> <li>• Create favourable environment for investment in green energy</li> <li>• Promote afforestation, re-afforestation and agroforestry programmes</li> <li>•</li> </ul>
Industrial	<ul style="list-style-type: none"> <li>• Availability of minerals</li> <li>• Huge potential for livestock product based industries e.g. abattoir in Ishiara</li> <li>• Great potential for agro-based industries for tea and coffee, milk processing, saw mills,</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of information on potential mining opportunities</li> <li>• Low adoption of technology</li> <li>• Inadequate transport infrastructure</li> <li>• Lack of manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Carry out geological surveys to establish true quantity of mineral deposits and viability</li> <li>• Formulate a policy that creates an enabling environment to attract investments in mineral exploration</li> <li>• Provide appropriate technology to enhance value addition</li> </ul>

	<p>grain milling, fruit processing factories</p> <ul style="list-style-type: none"> <li>• Honey market at Muminji</li> <li>• Fishing and fish based products industries</li> </ul>	<p>industries for livestock products</p> <ul style="list-style-type: none"> <li>• Poor linkage to the markets</li> <li>• Lack of value addition support infrastructure and services</li> <li>• Weak cooperatives that deal with processing of camel milk</li> <li>• Skewed distribution of industries</li> </ul>	<ul style="list-style-type: none"> <li>• Provide adequate, supportive transport and infrastructure facilities</li> <li>• Diversify energy production sources to reduce costs of production and enhance its reliability</li> <li>• Promote the formation of cooperatives and Saccos to advance marketing</li> </ul>
Tourism(Central Highlands and Great Rift Valley Circuit)	<ul style="list-style-type: none"> <li>• Diverse range of natural, social, human and physical resources which include forests, wildlife for safari tourism, scenic and adventure tourism and cultural tourism e.g. Mwea and Mt Kenya National Parks</li> </ul>	<ul style="list-style-type: none"> <li>• Human-human and human-wildlife conflicts</li> <li>• Untapped tourism potential</li> <li>• Poor/inadequate transport and infrastructural facilities</li> <li>• Poor legal and policy frameworks</li> </ul>	<ul style="list-style-type: none"> <li>• Mapping out of wildlife migratory corridors</li> <li>• Exploit tourism potential</li> <li>• Provide appropriate infrastructure to link the county to other circuits</li> <li>• Invest in ICT infrastructure and capitalize on online marketing</li> <li>• Formulate and enact county based Tourism polices and regulations</li> </ul>
Transport	<ul style="list-style-type: none"> <li>• Rapid urbanization</li> <li>• Increased trade and investments</li> <li>• Opening up of the undeveloped areas</li> <li>• Existence of airstrips Don Bosco in Embu town and the second in Kiambeere</li> </ul>	<ul style="list-style-type: none"> <li>• Poor condition of roads</li> <li>• Lack of Non-Motorized and Intermediate Means of Transport (NMIMT)</li> <li>• Missing transportation links</li> </ul>	<ul style="list-style-type: none"> <li>• Formulate regulations and guidelines to control development along transport corridors</li> <li>• Upgrade and maintain surface roads which include Embu-Kibugu to bitumen standards.</li> </ul>

		<ul style="list-style-type: none"> <li>• Road construction and maintenance is capital</li> </ul>	<ul style="list-style-type: none"> <li>• Open feeder roads at ward levels and improve them to motorable conditions</li> <li>• Improve and expand the existing airstrips</li> </ul>
Water and Sanitation	<ul style="list-style-type: none"> <li>• Financial and technical support from the National government and non-governmental organizations in provision of water and sanitation facilities</li> <li>• Demand for water for agricultural and industrial development</li> <li>• Waste collection points and dumpsites in urban areas</li> </ul>	<ul style="list-style-type: none"> <li>• Encroachment of human activities into catchment areas</li> <li>• Lack of reliable/permanent surface water sources e.g rivers</li> <li>• Inadequate accessibility to portable water points</li> <li>• Prevalence of water-borne diseases</li> <li>• Inadequate sanitation facilities in urban and rural areas</li> </ul>	<ul style="list-style-type: none"> <li>• Protection of catchment areas</li> <li>• Investments in water harvesting technologies and storage facilities</li> <li>• Exploit underground water to augment the other sources</li> <li>• Expansion of existing water supplies in the county</li> <li>• Develop appropriate sanitation infrastructure including collection, disposal and treatment system in all urban centres</li> <li>• Promote the reduce, reuse and recycling principles of waste management</li> </ul>
Energy	<ul style="list-style-type: none"> <li>• The provision of electricity from Seven Folks Hydro Electric Power Stations along River Tana</li> <li>• Served by the national grid</li> <li>• Strong winds to support green energy</li> <li>• Availability of resource for green energy</li> </ul>	<ul style="list-style-type: none"> <li>• Low coverage of electricity. Most of the parts of the County have no power connection.</li> <li>• Untapped exploitation of green energy (wind and solar) potential</li> </ul>	<ul style="list-style-type: none"> <li>• Exploit the green energy potentials</li> <li>• Promote afforestation, reforestation and agroforestry programmes</li> <li>• Increase connections to the national grid</li> <li>• Diversify energy sources to include green energy</li> <li>• Promote research and planning in green energy exploitation</li> </ul>

ICT	<ul style="list-style-type: none"> <li>• Disparity in access to internet services</li> </ul>	<ul style="list-style-type: none"> <li>• Increased demand in technological services</li> <li>• Low coverage of fibre optic network by National Optic Fibre Backbone Infrastructure (NOFBI). There is a connection in Embu and Runyenjes towards Meru and also through Kirirtiri to Masinga</li> </ul>	<ul style="list-style-type: none"> <li>• Mainstream ICT at all sectors to promote service, increase efficiency and productivity and improve on existing platforms such as Huduma centre, Business Process Outsourcing (BPO) services and E-government</li> <li>• Expand the fibre optic network to all urban areas to increase the coverage and data connectivity and increase access for rural population</li> </ul>
Sports, Culture and Arts	<ul style="list-style-type: none"> <li>• Existence of sports grounds a stadium in Embu town and community play grounds</li> <li>• Immense, untapped sporting talent in the county</li> <li>• Existence of local youth tournaments that need to be hosted in good quality stadia; sports tourism</li> <li>• Availability of land for infrastructure development</li> <li>• The county has four youth empowerment centers and Embu Talent Academy</li> </ul>	<ul style="list-style-type: none"> <li>• Poor management of existent infrastructure</li> <li>• Skewed distribution</li> <li>• Lack of proper repair and maintenance structures</li> <li>• Little modernization and upgrade of sporting infrastructure</li> <li>• Underutilization stemming from little promotion of sports as a potential income earner</li> </ul>	<ul style="list-style-type: none"> <li>• Address imbalances in distribution of sporting infrastructure by establishing modern stadia in areas away from major urban areas</li> <li>• Develop sound stadia repair, upgrade and maintenance policies</li> <li>• Encourage private entities to take part in the development and management of sporting infrastructure</li> <li>• Set up talent academies to harness sporting talent throughout the country and increase utilization of the infrastructure</li> </ul>

Table 2: County Specific Issues and Development Strategies

<b>Strategy 2: Balanced Regional Development</b>		
<b>Opportunities</b>	<b>Constraints</b>	<b>Strategies</b>
<ul style="list-style-type: none"> <li>• Devolution of power and resources</li> <li>• Equalization funds to improve on water services, healthcare, roads and electricity</li> <li>• Falls under medium potential region due to its high potential for agriculture through irrigation and livestock keeping.</li> <li>• Potentials which include mining, tourism, green energy generation, livestock and agro-based industries</li> <li>• High potential for large scale livestock keeping</li> </ul>	<ul style="list-style-type: none"> <li>• Under-exploitation of the natural resource potential</li> <li>• Inadequate provision and access to infrastructural facilities</li> <li>• Insecurity due to differences over control of resources.</li> <li>• Food and nutrition insecurity</li> <li>• Regional disparities within the County</li> <li>• Inadequate utilization of knowledge and innovation</li> <li>• Inadequate geological information on the existence of minerals and their commercial viability</li> </ul>	<ul style="list-style-type: none"> <li>• Establish economic zones in the region according to the potential of every region to promote processing and value addition of the various products</li> <li>• Encourage equitable exploitation and sound management of mineral resources</li> <li>• Promote investment in sustainable tourism including eco-tourism</li> <li>• Promote industrialization and value addition through the provision of support infrastructure in the less developed regions as well as strengthening the better developed regions</li> <li>• Promote Irrigation activities for improved productivity in quantity and quality of yield within the potential regions</li> </ul>

<b>Strategy 3: Promoting Rural Development</b>		
<b>Opportunities</b>	<b>Constraints</b>	<b>Strategies</b>
<ul style="list-style-type: none"> <li>• County Endowed with resources such as crop and livestock production, tourist attraction sites,</li> <li>• Enabling policy framework to support rural development e.g. Vision 2030, NSP, NLUP etc.</li> <li>• High poverty levels Mbeere North and Mbeere South sub-counties</li> </ul>	<ul style="list-style-type: none"> <li>• Weak rural-urban linkages</li> <li>• Under exploitation of resources</li> <li>• Insufficient and dilapidated infrastructure facilities and services</li> <li>• Slow adoption of technology</li> <li>• Low productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Develop appropriate transport and infrastructural facilities and services to support the exploitation of the natural resources in the area as well as the opportunities they present to spur economic development</li> <li>• Promote rural industrialization which includes, rural tourism, mining and agro-based industries</li> <li>• Provide a spatial framework for harnessing natural wealth e.g. renewable energy, from both solar and wind</li> </ul>

		<ul style="list-style-type: none"> <li>Promote sustainable land uses that are capable of meeting the rangeland needs and guaranteeing secure livelihoods, economic and social growth</li> </ul>
<ul style="list-style-type: none"> <li><b>Strategy 4: Urbanization</b></li> </ul>		
<b>Opportunities</b>	<b>Constraints</b>	<b>Strategies</b>
<ul style="list-style-type: none"> <li>Existing main roads</li> <li>Existing Urban areas(Embu, Kiritir, Manyatta, Siakago and Kigumo)</li> <li>Devolution</li> <li>Available human resource (skilled and unskilled)</li> </ul>	<ul style="list-style-type: none"> <li>Dispersal of urban centres hindering the area not to positively benefit from urbanization</li> <li>Ribbon development</li> <li>Unbalanced distribution of urban centres</li> <li>Poor implementation of development plans and planning policies</li> <li>Land and governance issues</li> </ul>	<ul style="list-style-type: none"> <li>Promote the development of centers as per their economic potential</li> <li>Create an enabling environment for commercial and industrial developers to activate potential development within the urban areas</li> <li>Provide alternative areas for development of urban centers by provision of services and infrastructure closer to the rural areas</li> <li>Strengthen urban-rural linkages through provision of integrated transportation and communication system to reduce the rate of urbanization and improve the rural economy</li> </ul>

Source; National Spatial Plan 2015-2045

## 4.2 Spatial Policy Guidelines for Embu County

The National Spatial Plan has stipulated policies to provide a foundation upon which to anchor the strategies enumerated therein. The primary aim is to inculcate discipline in the use of land and natural resources of the country thus stemming duplication and wastage of the resources.

This section seeks to provide the spatial policy guidelines and measures aimed at promoting the achievements of the objectives of the National Spatial Plan using its guidelines. These policies are supported by a wide range of measures which spell out the specific actions to be undertaken to actualize the policy intentions. The policies shall be implemented by the County Government's agencies responsible for land use planning and development control as well as the authorities responsible for land administration.

The following are the policies and measures specific to Embu County

Table 3: NSP Policy Guidelines for Embu County

No	Thematic Area	Policy Guidelines	Measures
1.	<b>Resource Potential Growth regions</b>	<ul style="list-style-type: none"><li>Enhanced agricultural and food production</li><li>Robust physical and social infrastructure</li><li>Environmental protection and conservation</li></ul>	<ul style="list-style-type: none"><li>Provision infrastructure to support value addition initiatives and human settlement</li><li>Develop Small and medium urban centres</li><li>Rural development through provision of infrastructure, agricultural sector development and related economic activities</li><li>Develop and rehabilitate key infrastructure in underserved locations</li></ul>
2.	<b>County Spatial Structure</b>	The National Spatial Plan shall be the basis for the preparation of lower tier development plans to achieve integrated and sustainable land use planning and to promote harmony and mutual cooperation in planning in Kenya	<ul style="list-style-type: none"><li>All Regional, County and Local physical/spatial plans shall be guided by the objectives and policies of the NSP</li><li>Existing physical/spatial plans shall be reviewed to conform to the objectives and policies of NSP</li><li>All sectoral policies shall take cognizance of the objectives and policies of NSP</li></ul>

			<ul style="list-style-type: none"> <li>Support Planning authorities at the county levels with adequate human, financial and technical resources to promote sustainable physical/spatial planning and development</li> </ul>
<b>3.</b>	<b>Enhancing National Competitiveness</b>	The selective concentration concept shall be adopted for the planning and location of urban based economic activities in all counties to leverage on national competitiveness	<ul style="list-style-type: none"> <li>Concentrate urban based economic activities in selected urban areas to spur economic development and to exploit the natural resource endowments</li> <li>Prioritization in the preparation of Spatial Development Plans to guide development in the selected county growth areas</li> </ul>
		The major urban areas shall be planned and provided with appropriate infrastructure to enhance efficiency and quality of life	<ul style="list-style-type: none"> <li>Enhance the Livability Index for urban areas by providing quality and affordable housing, efficient public transportation, improving neighborhood characteristics, conserve and improve the quality of the environment, quality healthcare, create job opportunities, and promote civic and social engagement</li> <li>Improve the road infrastructure by providing for modal split, linkages and interchanges</li> <li>Provide appropriate trunk infrastructure in the form of reliable energy, water, sanitation and ICT</li> </ul>
		Land and natural resources of the less developed areas shall be utilized optimally and sustainably	<ul style="list-style-type: none"> <li>Encourage modern farming practices</li> <li>Identify and develop the tourism potential within the northern circuit</li> <li>Explore and exploit the energy and water potentials</li> <li>Provide transportation networks and other infrastructure necessary to support exploitation of land and other natural resources</li> <li>Support development of urban areas in the less developed areas to catalyze development</li> </ul>
			<ul style="list-style-type: none"> <li>Renew and modernize the existing northern corridor to spur economic development in the southern region</li> </ul>

			<p>and improve the linkages to East and Central African region</p> <ul style="list-style-type: none"> <li>• Spatial development plans shall be prepared for the main transportation corridors to guide the planning and development of the corridors for sustainable economic development and transportation</li> </ul>
<b>4.</b>	<b>Modernizing Agriculture</b>	<ul style="list-style-type: none"> <li>• Embu to be developed based on both <ul style="list-style-type: none"> <li>○ rain fed agricultural potential</li> <li>○ irrigation agriculture and livestock production potential</li> </ul> </li> <li>• Spatial Development plans shall be prepared to guide implementation of the flagship projects in the agricultural sector</li> <li>• Agro climatic zones III (in the very high grounds) to VII (in the plains or lowlands) shall be developed and used optimally for large scale commercial production of livestock to support downstream processing of livestock products and promote balanced regional development</li> </ul>	<ul style="list-style-type: none"> <li>• Expand the irrigation scheme in Mbeere North and Mbeere South sub-counties</li> <li>• County spatial plans prepared by county to guide and promote the development of large scale crop and livestock productions</li> <li>• Prioritize provision of requisite infrastructure (water pans, dams, cold storage facilities and laboratories) to support ranching</li> <li>• Modernize livestock keeping through appropriate animal husbandry (high-yielding breeds, extension services and research and disease control), product processing and timely marketing</li> <li>• Appropriate rangelands management practices shall be adopted including observance of carrying capacity, conservation of the natural vegetation and adaptation and mitigation against climate change and its impacts</li> <li>• Early warning systems, prompt response and recovery systems shall be taken to cushion the county and make it more resilient to the perennial drought cycles</li> </ul>
<b>5.</b>	<b>Diversifying Tourism (Central tourism circuit)</b>	Promote diversification of tourism by offering diverse products	<ul style="list-style-type: none"> <li>• Plan and develop the circuit to offer; safari and wildlife, cultural and heritage, archeological and historical, filming ecotourism and adventure tourism products</li> </ul>

		<p>Appropriate Tourism support infrastructure and facilities shall be provided</p>	<ul style="list-style-type: none"> <li>• Carry out an inventory of tourism infrastructure and facilities in all the tourism circuits</li> <li>• Formulate planning regulations and standards to guide tourist specific infrastructure and facilities</li> <li>• Develop the requisite tourism support infrastructure and facilities</li> <li>• Upgrade the existing tourism facilities and infrastructure</li> <li>• Provide and upgrade the ICT infrastructure to support tourism</li> </ul>
		<p>Tourist attraction areas and sites shall be conserved and protected</p>	<ul style="list-style-type: none"> <li>• Prepare subject plans for the wildlife migratory and dispersal corridors and wildlife habitat as a unit</li> <li>• Strictly regulate developments within and around the tourist attraction sites</li> <li>• Protect wildlife watering points</li> </ul>
		<p>Appropriate transport infrastructure shall be provided to link the different tourist circuits, attraction areas and sites</p>	<ul style="list-style-type: none"> <li>• Prepare and implement an integrated Tourism Transportation Master Plan</li> <li>• Upgrade the existing transportation facilities and support infrastructure</li> <li>• Upgrade the air transportation facilities at Embu Airstrip</li> </ul>
<p><b>6.</b></p>		<p>Governance of the tourism sector shall be enhanced</p>	<ul style="list-style-type: none"> <li>• Enhance tourism dedicated security to the tourism sector</li> <li>• Identify and map potential eco-tourism development sites</li> <li>• Undertake awareness campaigns on the value of eco-tourism to the industry players both locally and globally</li> <li>• Develop standards for eco-tourism establishments</li> <li>• Facilitate access to eco-tourism development incentives</li> </ul>

		Spatial Development plans shall be prepared to guide implementation of the projects the tourism sector	<ul style="list-style-type: none"> <li>• Prepare Ecosystem area plans for all parks and reserves in conjunction with the national government to address problems of unplanned development of lodges and poor access roads</li> <li>• Prepare plans for the cultural heritage sites</li> </ul>
<b>7.</b>	<b>Managing Human Settlements</b>	The expected increase in population in urban areas shall be anticipated and accommodated particularly for the main growth areas	<ul style="list-style-type: none"> <li>• Increase the housing stock by planning and redeveloping existing housing areas</li> <li>• Plan and designate land for new housing schemes</li> <li>• Upgrade the existing and provide additional infrastructure and facilities to support housing development in the urban areas</li> <li>• Locate industrial and service development activities with the global reach in the main urban areas</li> <li>• Provide efficient transportation and quality infrastructure in human settlements to support industrial and service sectors.</li> <li>• Promote adoption of modern technology in housing development</li> </ul>
		Alternative urban areas shall be developed and supported to promote balanced regional development and spur growth	<ul style="list-style-type: none"> <li>• Develop principal towns of Embu in accordance with their regional potentials and be promoted as alternatives to the three main growth areas</li> <li>• Develop urban centers as intermediate centers between the rural and the principal towns</li> <li>• Provide principal towns and urban centers with the requisite infrastructure to support their growth and development</li> <li>• Prepare local physical and land use development plans to define the urban growth limits for the principal urban centers</li> <li>• Intensify the supply of urban infrastructure within the area contained to make it attractive for investment</li> </ul>
		Human settlements shall be developed in line with environmental and natural	<ul style="list-style-type: none"> <li>• Map out and prohibit development in environmental sensitive areas</li> </ul>

		<p>resources conservation to improve living conditions</p>	<ul style="list-style-type: none"> <li>• Plan and provide an integrated waste management system</li> <li>• Prepare and implement zoning guidelines to ensure compatibility of land uses in human settlement areas</li> <li>• Promote social organization and environmental awareness through the participation of local communities in the identification of public service needs</li> <li>• Strengthen the capacity of the local governing bodies to effectively deal with environmental challenges associated with rapid and sound urban growth</li> <li>• Empower community groups, nongovernmental organizations and individuals to assume responsibility and authority for managing and enhancing their environment</li> <li>• Deliberately provide adequate and functional open spaces in urban places</li> <li>• Prescribe planning standards for open/green space on private development</li> </ul>
		<p>NSP advocates for the provision of an efficient, reliable and effective transport system for human settlements</p>	<ul style="list-style-type: none"> <li>• Integrate land use and transportation planning to encourage development patterns which reduce transport demands</li> <li>• Establish an effective transport management system that enhances the reliability and efficiency of the transport system</li> <li>• Improve the road conditions and expand the linkages to human settlements</li> <li>• Integrate NMT with existing transport infrastructure</li> </ul>
<p><b>8.</b></p>		<p>The management and governance of Human Settlements particularly the urban areas shall be improved</p>	<ul style="list-style-type: none"> <li>• Build institutional capacities of the urban areas management boards</li> <li>• Integrate technology in management of human settlements to strengthen urban data systems</li> </ul>

			<ul style="list-style-type: none"> <li>• Coordinate and strengthen development control mechanisms</li> <li>• Conduct research into migration trends to inform effective planning and provision of human settlements</li> </ul>
		NSP shall advocate for upgrading of the existing settlements and forestalling of new informal settlements	<ul style="list-style-type: none"> <li>• Encourage redistribution of urban income through integrated development planning encompassing social, economic and physical factors</li> <li>• Prepare Local Physical and land use Development Plans for purpose of renewal and/or redevelopment of the informal settlements</li> <li>• Ease the process of issuance of ownership documents to the legal owners in order to encourage formal developments</li> <li>• Enforce development control regulations and adherence to building code and standards</li> <li>• Enhance coordination of donor agencies activities within informal settlements by relevant authorities for optimal returns</li> </ul>
		Peri-urban development shall be managed and controlled to contain urban growth within its limits and protect rural land uses	<ul style="list-style-type: none"> <li>• Formulate measures for urban containment and densification</li> <li>• Formulate and implement planning legislation on peri-urban planning and management</li> <li>• Institute sanctions on idle land to encourage productive and sustainable land utilization</li> <li>• Create green belt buffer zones to define the urban and peri-urban areas</li> </ul>
<b>9.</b>	<b>Conserving the Natural Environment</b>	All environmentally sensitive areas shall be protected and utilized in a sustainable manner <b>(Wetland Ecosystems)</b>	<ul style="list-style-type: none"> <li>• Prepare integrated wetland resource management plans to promote sustainable use of freshwater and wetland resources</li> </ul>
		All environmentally fragile areas shall be conserved and utilized in a sustainable manner	<ul style="list-style-type: none"> <li>• Develop and implement an Integrated Land Use (Development) Plan</li> </ul>

		<p><b>(ASALs)</b></p>	<ul style="list-style-type: none"> <li>• Ensure application of Integrated Water Resources Management (IWRM)</li> <li>• Promote efficient adaptation measures for productive and sustainable resource management</li> <li>• Involve and empower communities in the management of ASAL ecosystems and promote environmental education and awareness</li> <li>• Gazette and manage emergency drought reserve areas and encourage the development of buffer areas of crop and forage production as part of contingency planning</li> <li>• Mainstream climate change and climate adaptation into planning at all levels by strengthening the climate resilience of communities and promoting sustainable livelihoods</li> </ul>
		<p>All environmentally sensitive areas shall be protected and utilized in a sustainable manner <b>(Forest Ecosystems)</b></p>	<ul style="list-style-type: none"> <li>• Prepare integrated forest resource management plans to promote sustainable use of forest resources</li> <li>• Develop and implement a county strategy for rehabilitation and restoration of degraded natural and indigenous forests and protect water catchment areas with active community involvement/participation</li> <li>• Support effective implementation of the forest and other related policies and laws.</li> <li>• Develop and implement national standards, principles and criteria of sustainable forest management</li> <li>• Involve and empower communities in the management of forest ecosystems through controlled logging, agro-forestry, re-forestation and natural regeneration</li> <li>• Determine potential areas for farm/agro and dry land forestry</li> </ul>

			<ul style="list-style-type: none"> <li>• County Government of Embu to promote afforestation and agro-forestry through County Spatial Plans</li> <li>• Gazette, protect and rehabilitate degraded forests through re-afforestation by replanting trees on land that were previously forests</li> <li>• Enforce legal and regulatory provisions for forest management and protection</li> </ul>
		All environmentally sensitive areas shall be protected and utilized in a sustainable manner ( <b>Mountain Ecosystem</b> )	<ul style="list-style-type: none"> <li>• Generate and strengthen knowledge about the ecology and sustainable management of mountain ecosystems</li> <li>• Develop and implement strategies and action plans for sustainable management of mountain ecosystems</li> <li>• Adopt appropriate land use planning and watershed management practices for sustainable development of mountain ecosystems</li> <li>• Ensure all water catchment areas are zoned and managed as protected areas and free from excision</li> <li>• Involve and empower communities in the management of mountain ecosystems</li> </ul>
		All government agencies shall integrate environmental concerns in policy formulation, resource planning and development processes	<ul style="list-style-type: none"> <li>• Ensure waste Management and Pollution Control</li> <li>• Develop and maintain an inventory of all vital habitats within the county, and create a biodiversity information data base of all plant and animal species, indicating their potential use</li> <li>• Encourage the participation of local communities in conservation and management of the environment by giving incentives for effective conservation of the environment by local communities</li> <li>• Jointly develop and implement harmonized regional plans for sustainable management of trans-boundary resources</li> <li>• Implement the National Climate Change Strategy and the National Climate Change Action plan</li> </ul>

			<ul style="list-style-type: none"> <li>Strengthen Environmental Governance and harmonize sectoral policies, legislation and regulations</li> </ul>
		Community participation shall be mainstreamed in the protection and conservation of natural resources	<ul style="list-style-type: none"> <li>Sensitize communities living around the natural resources on the need for conservation of the resources</li> <li>Develop mechanisms for sharing benefits accruing from the natural resources by the conservation agencies in consultation with the local communities</li> <li>Identify and map all disaster prone areas for sustainable management</li> </ul>
		County Physical Planning departments shall mainstream climate change into their planning processes	<ul style="list-style-type: none"> <li>Build and strengthen research capacity on climate change and related environmental issues</li> <li>Promote water conservation including reversal of degradation of the main water towers and rehabilitation and restoration of all water catchments through planning</li> </ul>
<b>10.</b>	<b>Integrating the National Transportation Network</b>	An integrated and functional transport system for the national and urban areas shall be developed	<ul style="list-style-type: none"> <li>Upgrade the existing airstrip to support the agricultural, industrial and tourism activities in the county</li> <li>Integrate the national transportation corridors consisting of road to provide links between Makutano –Meru road, Embu – Kibugu road to the county transportation corridors</li> <li>Provide access and linkage, between county headquarters; county headquarters and sub-county headquarters and for local access and link them to national transportation corridors</li> <li>Expand all roads connecting county headquarters to sub-county headquarters to at least 30m and developed to bitumen standard</li> </ul>

		<p>An efficient and affordable Mass Public Transport for all urban areas in the country shall be developed</p>	<ul style="list-style-type: none"> <li>• Integrate land use with urban transport planning</li> <li>• Configure urban based activities to support mass transit systems and reduce the need for travel</li> <li>• Establish a comprehensive transport management information system for all transport modes</li> </ul>
		<p>An urban transport policy that facilitates an integrated, balanced and environmentally sound urban transport system in which all modes efficiently play their roles shall be developed</p>	<ul style="list-style-type: none"> <li>• Develop a public transport policy to regulate planning and management of public transport</li> <li>• The county government to develop measures to limit use of private transport and maximize on public transport</li> <li>• provide a framework for development and management of public service termini by the private sector through public private participation</li> <li>• Plan, construct and manage designated terminal facilities in the periphery of the urban areas to accommodate parking spaces for the private vehicles and interchange to the public transport system</li> <li>• Plan and develop satellite towns to complement and decongest major urban areas</li> <li>• County governments to identify, plan and control developments in the satellite towns</li> </ul>

<b>11. Providing Appropriate Infrastructure</b>	Safe, adequate, reliable and affordable electricity for both urban and rural settlements shall be provided	<ul style="list-style-type: none"> <li>• Tap into solar for large scale production in the county and sale to the national grid</li> <li>• Provide safe connections for all informal settlements in urban areas for safety</li> <li>• Mainstream and enforce green energy options in the design of buildings</li> <li>• Support the flagship projects that are geared towards increasing electricity supply from both renewable and non-renewable sources</li> </ul>
	Expansion and improvement of water reticulation systems to facilitate the access to clean, safe, adequate, reliable and affordable water in human settlements shall be promoted	<ul style="list-style-type: none"> <li>• Construct and rehabilitate water supply systems in the county</li> <li>• Incorporate water provision in all physical development plans</li> <li>• Expand and rehabilitate existing water supply from the rivers</li> <li>• Build water kiosks and yard taps, develop water supply pipeline systems and sewers, and a comprehensive mapping of all water supplies systems in the informal settlements</li> </ul>
	A globally competitive, accessible and affordable higher education, training and research facilities shall be promoted	<ul style="list-style-type: none"> <li>• All universities and other tertiary institutions to invest in research, technology and innovation</li> <li>• Expand access and equity, improve quality and relevance and invest in human resource by enhancing institutionalization of excellence and increasing the level of research funding</li> <li>• Restructure higher education institutions to offer courses based on regional endowment to promote competitiveness and regional balance</li> <li>• Mainstream ICT in higher education and training to provide online content to increase access</li> <li>• Develop and upgrade physical infrastructure in all higher education institutions to increase their capacity</li> </ul>

			<ul style="list-style-type: none"> <li>• Promote the delivery of University education and training system that is internationally competitive</li> </ul>
		A network of functional, efficient, safe, accessible and sustainable national health referral infrastructure shall be established	<ul style="list-style-type: none"> <li>• Increase the utilization of services at lower levels of the health services and reduce self-referral to the higher levels of healthcare</li> </ul>
		Appropriate, quality, efficient and cost effective ICT infrastructure in both rural and urban areas shall be promoted	<ul style="list-style-type: none"> <li>• Integrate e-youth ICT platforms. The sub-sector will establish a youth portal to enhance information access by the youth</li> <li>• Develop and upgrade ICT Infrastructure in all counties</li> <li>• Extend ICT infrastructure to cover all the rural and local growth centres</li> <li>• Mainstream use of ICT in all levels of government and the private sector (e-government)</li> </ul>
		The expansion of sewerage systems and waste management facilities shall be promoted	<ul style="list-style-type: none"> <li>• Service all urban settlements by a centralized sewerage treatment system and solid waste disposal facilities</li> <li>• Apply appropriate technology solutions to sewerage treatment in rural and low density housing areas</li> <li>• All spatial plans to make provision for development of sewer systems and treatment works and solid waste disposal sites</li> <li>• Adopt appropriate technology to facilitate reduction, recycle and reuse of waste (3R's)</li> <li>• Undertake rehabilitation of storm water drainage systems in all urban areas</li> <li>• Construct waste water treatment plants and solid waste management projects in well-established permanent settlements in the arid region</li> </ul>

		Sporting infrastructure shall be planned, developed, maintained and the existing rehabilitated to promote sports development	<ul style="list-style-type: none"> <li>• Establish County Sports Talent Centers to act as feeds to the international center to scout, nurture and develop sports talents at the sub-national levels</li> <li>• Rehabilitate existing stadia to international standards to enable the youth to actively develop and tap the immense talent in sports will be undertaken</li> </ul>
<b>12.</b>	<b>Towards a Rapidly Industrializing County</b>	The cluster development strategy shall be promoted to focus on proximity to raw materials and markets of region specific products	<ul style="list-style-type: none"> <li>• Concentrate urban-based industries</li> <li>• Mineral-based industries to be located in-situ where the minerals are found</li> <li>• Concentrate livestock produce industries.</li> <li>• Promote value addition in processing of local Produce</li> </ul>
		Specific sites for industrial development shall be identified, planned and serviced with the appropriate infrastructure	<ul style="list-style-type: none"> <li>• Plan and set aside land for industrial development in every county</li> <li>• Develop SME and Industrial Parks in all counties</li> <li>• Integrate the industrialization process and environment conservation</li> <li>• Provide an integrated, efficient, reliable and sustainable road transport infrastructure</li> <li>• Encourage adoption and utilization of ICT in every county in order to enhance the country's transformation towards an advanced Information Society</li> </ul>
		Adequate and affordable energy supply for the industrial sector shall be provided	<ul style="list-style-type: none"> <li>• Provide reliable energy infrastructure by extending the national grid network</li> <li>• Adopt renewable energy generation programmes by provision of incentives and enforcement of building laws requiring utilization of renewable energy</li> <li>• Incentivize large industries to promote co-generation of power</li> <li>• Promote the adoption of energy efficient technologies to lower the demand for energy</li> </ul>

Source; National Spatial Plan 2015-2045

DRAFT

## **5 Implementation and Adoption Of The Guidelines**

### **5.1 Overview**

The implementation framework identifies activities and further ties them with responsible actors, resources and timeframes adequate for their execution. It constitutes a deliberately established method, means or system of ensuring that the policies, strategies and measures outlined in the guidelines are continuously and consistently executed to achieve their objectives.

To effectively implement the guidelines, the various sectors, actors and levels of planning have been identified and have to work together and the mandate of the sectors at the National and County levels of planning have to be integrated.

### **5.2 Implementation Approaches**

The County Specific Guidelines will be implemented through various approaches including:

1. Preparation of spatial plans to integrate and conform to the proposals of the County Guidelines. The plans include:
  - Inter-County Physical and Land Use Development Plans for Metropolitan regions, conservation zones, river basins, water towers, coastal ecosystems, trans-boundary resource areas and transport corridors, among others.
  - County Physical and Land Use Development Plans.
  - Local Physical and Land Use Development plans for Cities, Urban areas, special area plans, subject plans and detailed neighborhood plans, among others.
  - Sectoral plans
2. Integration of the guideline policies, strategies and measures into the County sector plans, programs and projects. Ministries, Departments and Agencies (MDAs), County and National Departments identified in the plan to administer the policies, strategies and measures are required to translate them into action plans, programmes and projects and to include them in their subsequent sector plans.
3. Formulation of policies, regulations and standards to guide development control

### **5.3 Implementation Framework**

The implementation of the various policies, strategies, measures, programmes and projects under these Guidelines will involve a wide range of actors. It will require a coordinated approach and partnership between the National and County Governments and non-state actors. It may require re-engineering of institutions and a number of actors to undertake the implementation through a harmonized approach.

The National Spatial Plan identified a multi-leveled framework for implementation of the plan that incorporates all levels of actors. In this regard, the institutions identified in the NSP to undertake implementation of the plan at County-level shall also be mandated to ensure implementation of this Guidelines.

The following are the Institutions mandated to ensure implementation of the County Specific guidelines;

#### **5.3.1 County Physical Planning Committee**

The role of the County Planning Committee shall be to ensure aspirations of the guidelines are articulated in preparation of the County Spatial Plans, County Integrated Development Plans and Local Physical and Land Use Development Plans.

The composition of this committee consists of;

- i. The Governor who will be the Chairperson,
- ii. the Deputy Governor,
- iii. the County Executive Committee Members from various sectors
- iv. Directors from various relevant County Departments including Lands and Physical Planning, Economic planning, Agriculture, Industrialization, Tourism, Environment, Transport and Infrastructure

The functions of the committee include;

- 1) To promote effective integration between physical, economic and sectoral planning within the framework of county development policies.
- 2) To provide policy guidance for the implementation of strategic spatial projects

- 3) To ensure that the guidelines policies and measures are mainstreamed in the various county plans.
- 4) To mobilize resource for implementation of the Guidelines.

### **5.3.2 County Planning Unit (CPU)**

The technical Unit shall provide technical support to the various implementing County departments on issues relating to physical planning.

The CPU shall;

- i. Monitor the Implementation of the guidelines.
- ii. To disseminate components of the guidelines to the various county departments.
- iii. Update the County Physical Planning Committee on a regular basis on the implementation of the guidelines.

The County Director of Physical Planning shall be responsible for preparation of an annual state of planning report which shall among other things appraise the status of implementation of the guidelines.

### **5.3.3 National Land Commission**

The National Land Commission shall play its oversight role in land use planning to ensure efficient implementation of the NSP and the guidelines. Other functions of the Commission in the implementation of the NSP and the guidelines include the following:

- To formulate mechanisms and parameters for monitoring and overseeing land use planning.

- i. To ensure that relevant planning authorities carry out their functions as required by law.
- ii. To make recommendations for improvements of the planning systems in the county.
- iii. To mobilize resources to support physical/land use planning.

## **5.4 Monitoring and Evaluation**

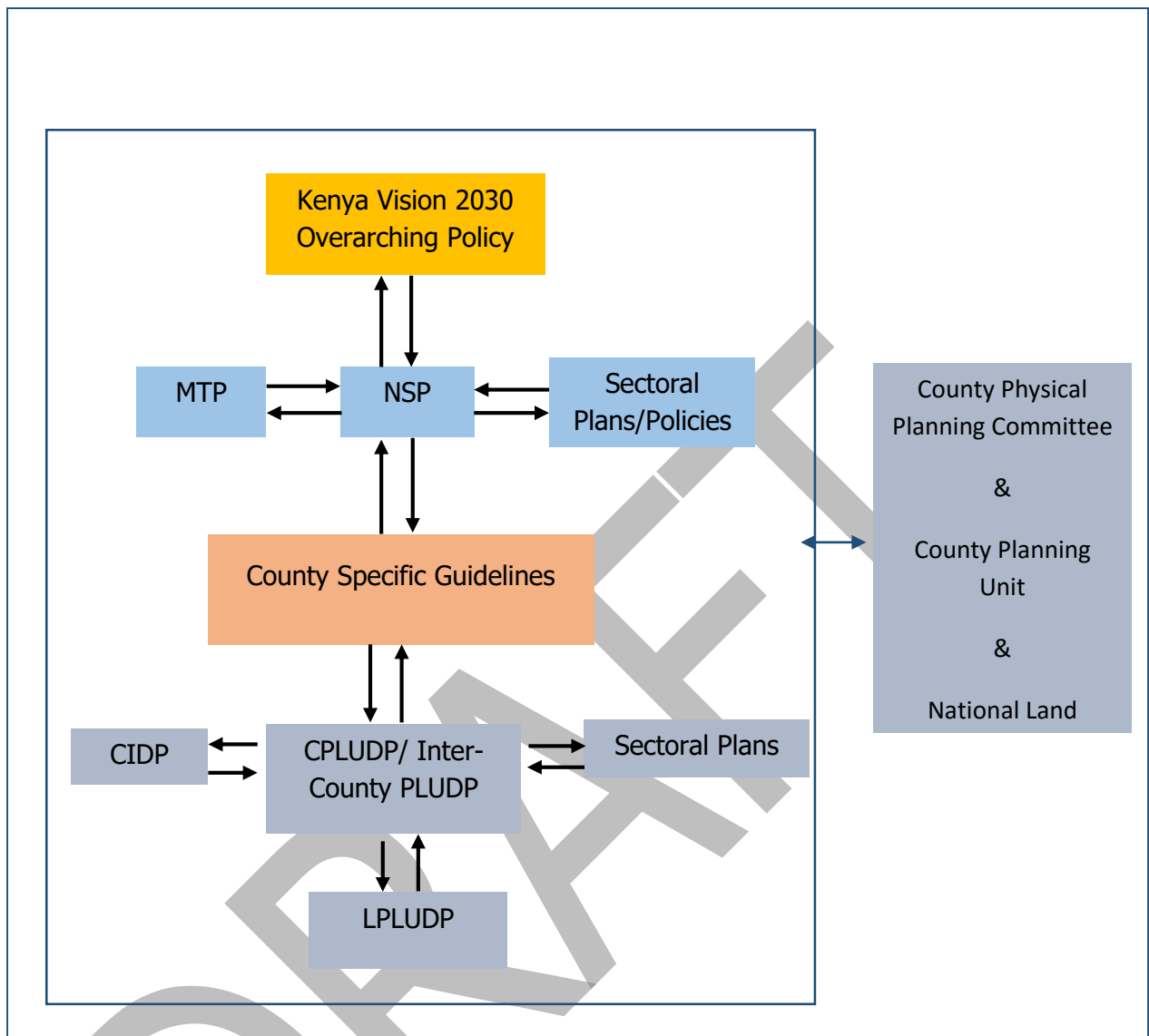
Implementation of the guidelines will be monitored and evaluated to measure both outputs and outcomes and ensure that the intended actions are implemented in a

timely manner. To facilitate attainment of the objectives of the guidelines, performance indicators will be developed by the County Physical Planning Department for efficient monitoring. Periodic reports will be prepared in relation to progress being made in their implementation.

The graphic below illustrates the implementation structure for County Specific guidelines.

DRAFT

**Figure 2: Implementation structure of the guidelines**



**Source: State Department for Physical Planning, 2022**

## 5.5 Conclusion

The application of these guidelines will be undertaken by a number of actors and hence the need for a coordinated approach. The lead agency will be Embu County Government which will be responsible for implementing various county specific initiatives proposed by the guidelines.

The National Government, County Government of Embu, the private sector and the general public will be critical in actualizing the objectives of these guidelines. The County Physical Planning Committee shall develop a communication strategy to enhance the synergies.

The National Department of Physical Planning shall undertake sensitization, training and capacity building of the County Government and National Government institutions and agencies that will be involved in the implementation of these guidelines. Special attention will be given to the County physical planning units, as they will be expected to provide technical expertise in the implementation of the County specific policies and strategies.

