



NATIONAL SPATIAL PLAN GUIDELINES FOR MACHAKOS COUNTY

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



© 2022

MINISTRY OF LANDS AND PHYSICAL PLANNING
STATE DEPARTMENT FOR PHYSICAL PLANNING

Kenya 
VISION 2030

Table of Contents

Foreword	1
Preface	3
Executive Summary	4
1 Introduction	6
1.1 Background	6
1.2 Purpose	6
1.3 Objectives	7
1.4 Scope	7
1.5 Justification	8
1.6 Application of the Guidelines	8
1.7 Process of preparing the Guidelines	9
1.8 Targeted users of the Guidelines	10
1.9 Key Principles	12
2 The Policy, Legal and Planning Framework For The Guidelines	13
2.1 Constitutional Context	13
2.2 Policy Context	13
2.2.1 Sessional Paper No. 10 of 2012 on Kenya Vision 2030	13
2.2.2 Sessional Paper No. 01 of 2017 on National Land Use Policy	13
2.3 Legal Context	14
2.3.1 The Physical and Land Use Planning Act No. 13 of 2019	14
2.3.2 County Governments Act, 2012	14
2.3.3 Urban Areas and Cities (Amendment) Act, 2019	14
2.3.4 Environmental Management and Coordination (Amendment) Act, 2015	14
2.3.5 National Land Commission Act, 2012	14
2.4 Planning Context	15
2.4.1 National Spatial Plan (NSP)	15
2.4.2 NSP linkage to other plans	16
3 County Profile	18
3.1 Locational Context	18
3.2 Bio-Physical Characteristics	19
3.3 Socio-economic Background	20

3.4	Machakos County Comparative Advantage	22
4	County Specific Issues, Development Strategies And Policy Guidelines	25
4.1	Machakos County Development Strategies	25
4.2	Spatial Policy Guidelines	45
5	Implementation and Adoption Of The Guidelines	55
5.1	Overview	55
5.2	Implementation Approaches	55
5.3	Implementation Framework	56
5.3.1	County Physical Planning Committee	56
5.3.2	County Planning Unit (CPU)	57
5.3.3	National Land Commission	57
5.4	Monitoring and Evaluation	57
5.5	Conclusion	60
6	61

DRAFT

List of maps

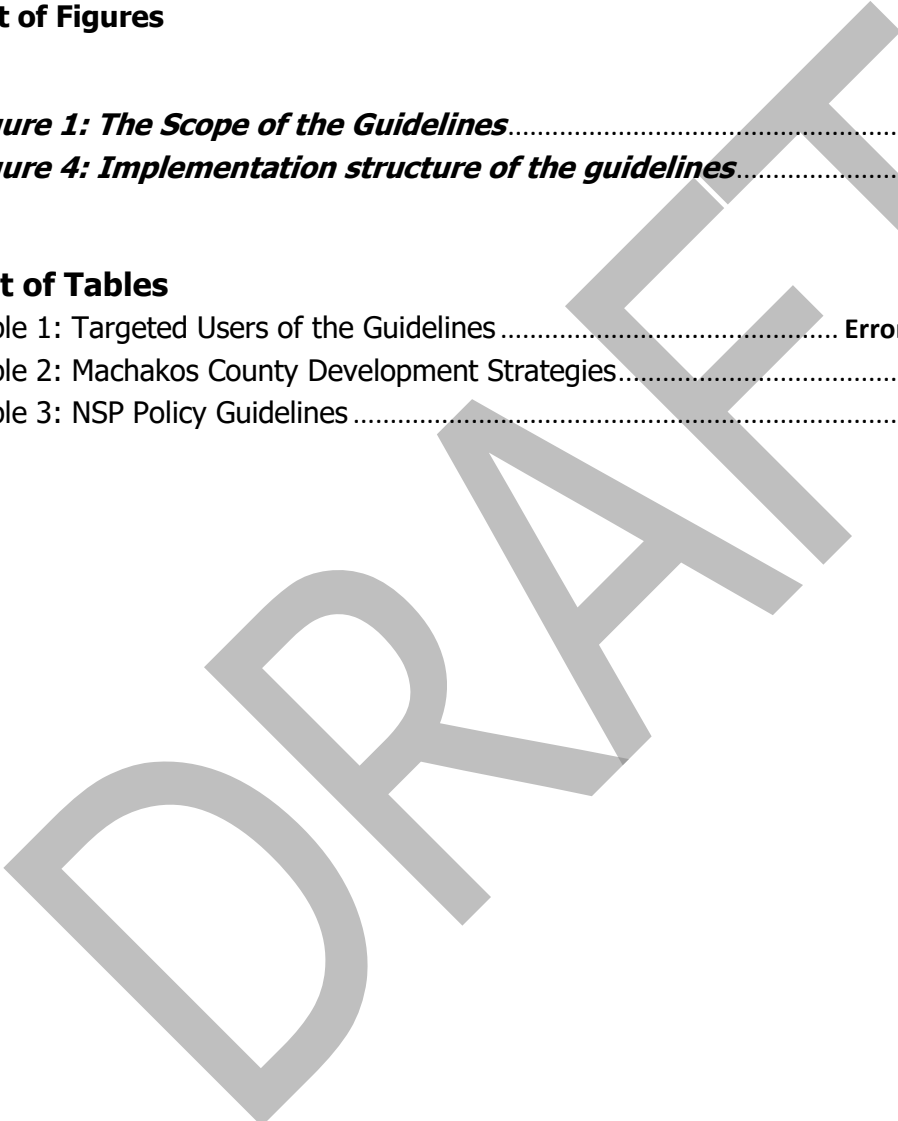
Map 1: Locational Context of Machakos County..... 19
Map 2: Machakos County Existing Situation..... 24
Map 3: NSP Proposals..... 54

List of Figures

Figure 1: The Scope of the Guidelines..... 8
Figure 4: Implementation structure of the guidelines..... 59

List of Tables

Table 1: Targeted Users of the Guidelines..... **Error! Bookmark not defined.**
Table 2: Machakos County Development Strategies..... 26
Table 3: NSP Policy Guidelines 46



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.

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.

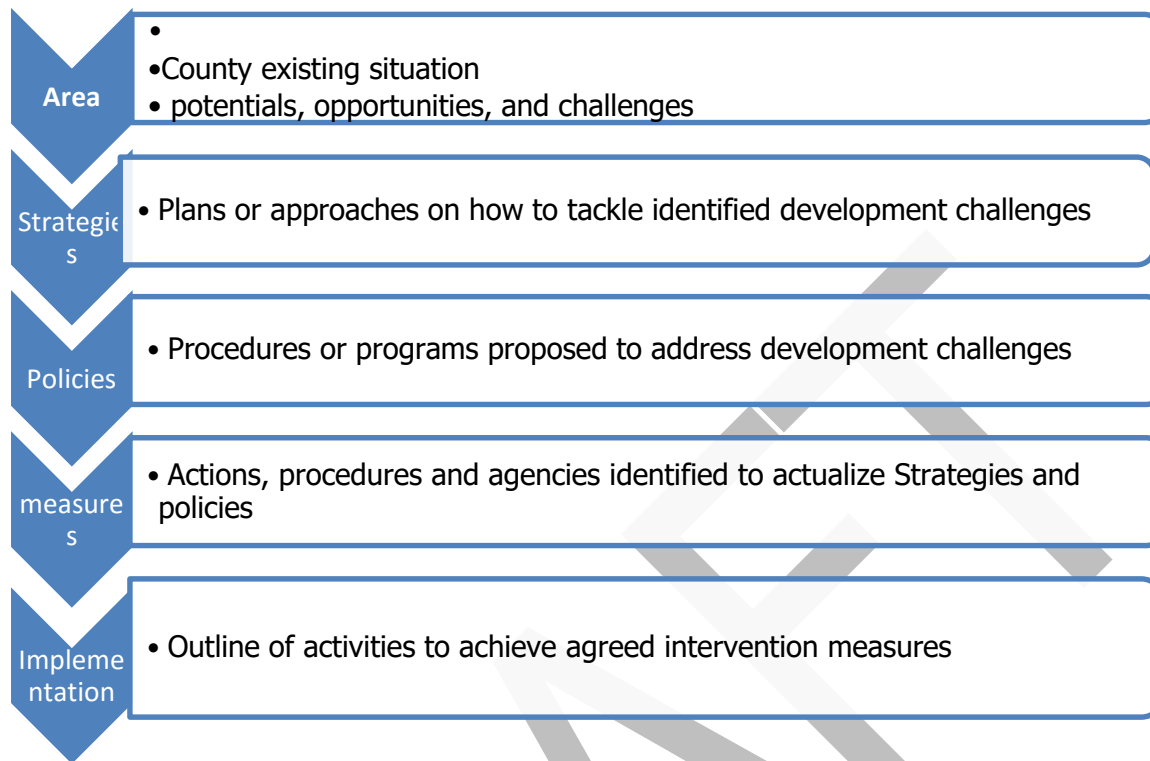
Specifically, the objectives are;

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 Machakos County covering approximately 2037 km². 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 Machakos 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

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

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

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

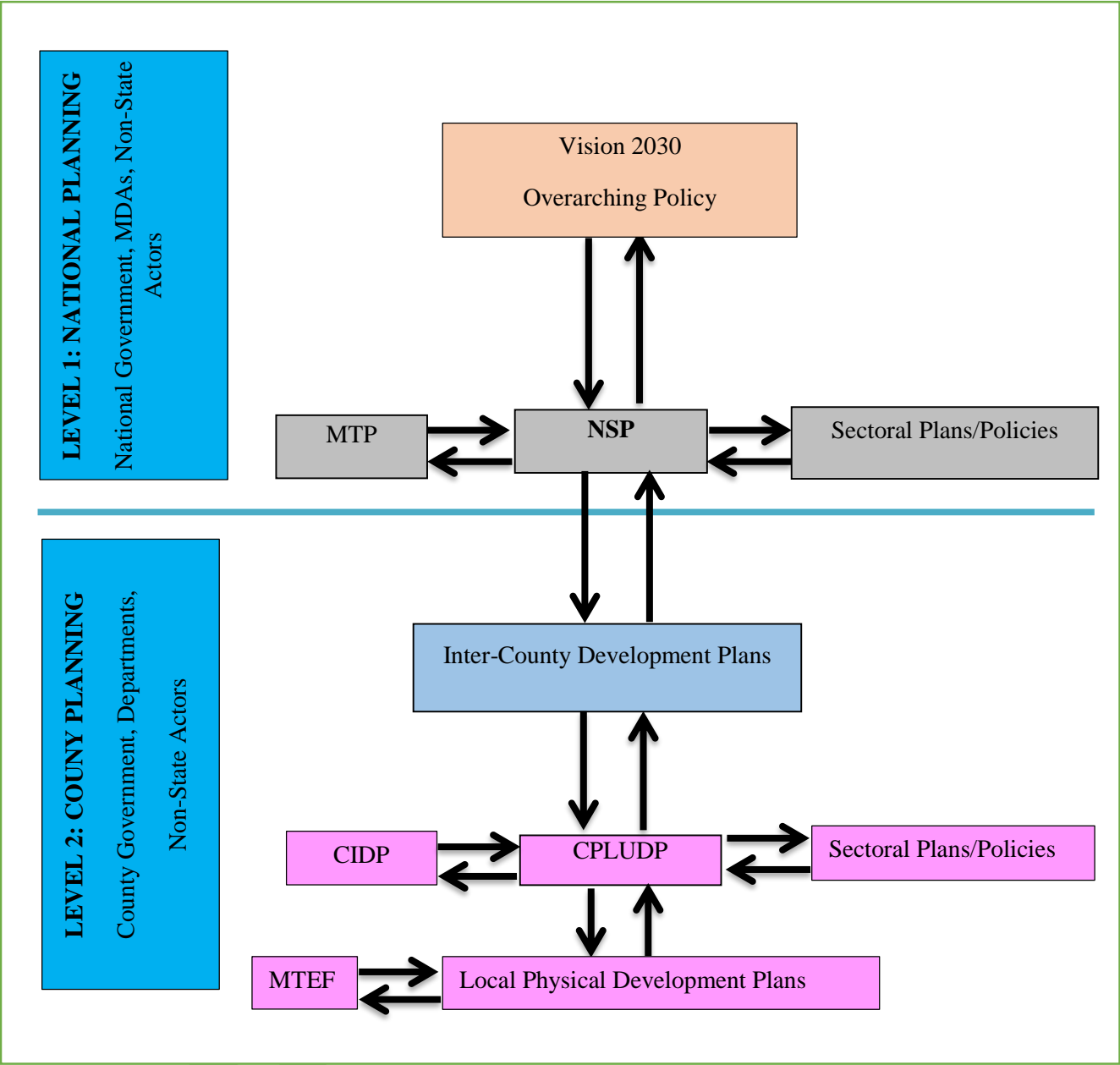
The linkage of the National Spatial Plan (NSP) to county and other lower-level plans is key to realization of its aspirations and the successful actualization of these plans. The NSP provides a spatial framework to ground the Vision 2030 flagships projects and form a basis for coordination of County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

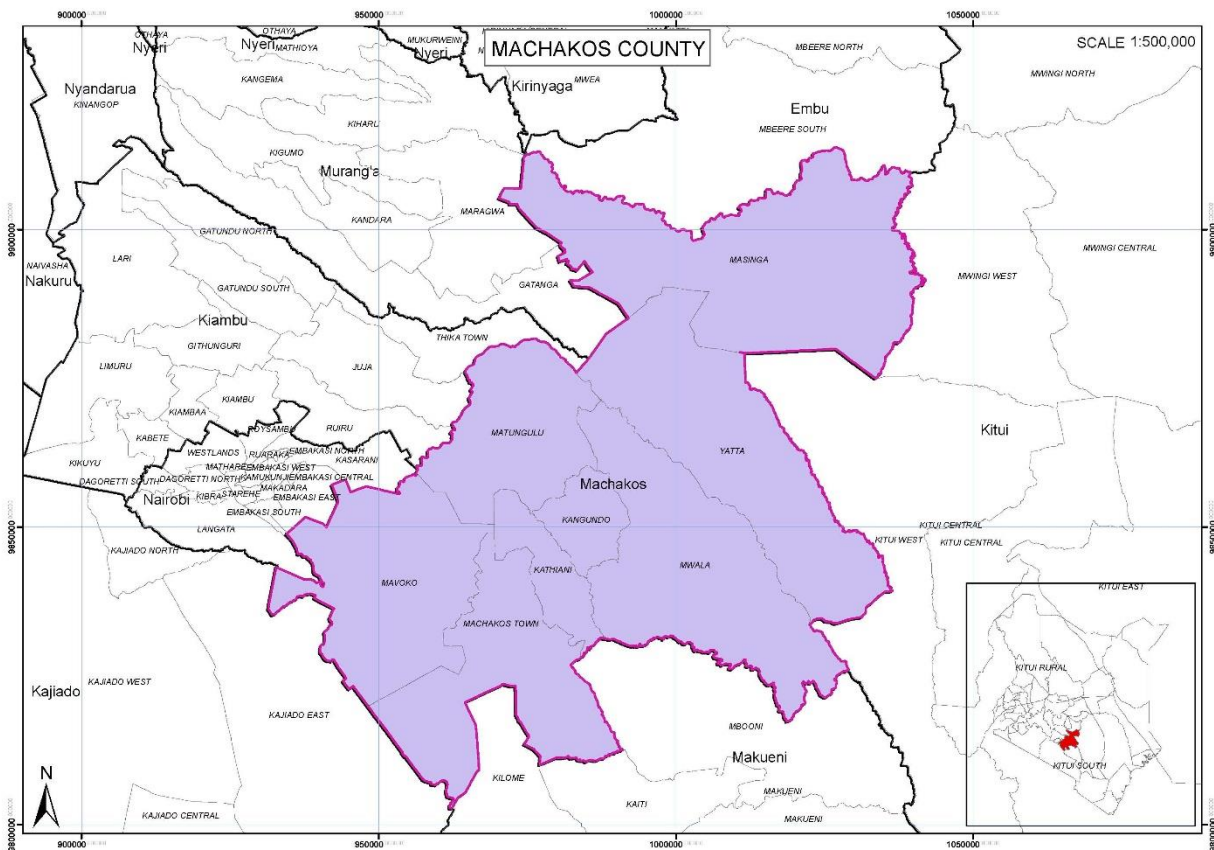
3 County Profile

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

3.1 Locational Context

Machakos County is located approximately 90 Kilometers from Nairobi City and covers a total area of 6208.2 km². It lies between latitudes 0°45' South and 1°31' South and longitudes 36°45' East and 37°45' East. The County is within the greater Nairobi metropolitan Region and borders eight counties: Nairobi and Kiambu counties to the West; Embu to the North; Kitui to the East; Machakos to the South; Kajiado to the South West and Muranga and Kirinyaga to the North West. Map 1 below shows the locational context of Machakos County.

Map 1: Locational Context of Machakos County



Source: State Department for Physical Planning, 2022

3.2 Bio-Physical Characteristics

Machakos County has unique physical and topographical features that include; hills rising between 1800 – 2100m above sea level and Yatta plateau, which is elevated to about 1700m above sea level and slopes to the South East. The soils are well-drained, shallow, dark and red clay soils in the plains. In addition, the vegetation across the entire County varies according to the altitude. The plains are characterized by open grassland with scattered trees as compared to high altitude areas, which receive high rainfall and have dense vegetation.

The County is largely semi-arid and receives bimodal rainfall with short rains between October and December while the long rains from March to May. The rainfall range is between 500mm and 1250mm, which is unevenly distributed and unreliable. The high areas such as Mua, Iveti and Kangundo receive an average rainfall of 1000mm while the lowland areas receive about 500mm. Temperatures vary between 18°C and 29°C

throughout the year. The dry spells mainly occur from January to March and August to October.

3.3 Socio-economic Background

Demography: The total population of the County was 1,098,584 as per the 2009 Kenya Population and Housing Census. The projected population for the year 2018, 2020 and 2022 is 1,426,211, 1,511,377 and 1,601,629 respectively.

Main Economic activities

Agriculture: Agriculture is the main economic activity in the County, with over 75% of the land is being used for agricultural purpose. Most of the crops grown include maize, beans, fruits, vegetables and drought-resistant crops such as sorghum and millet.

Livestock keeping: livestock keeping is the main economic activity in Machakos County. It is practiced at both small scale and large scale (ranching) levels. The County has 13 ranches namely Kasisi, B&T Malinda, Carol Malinda, Machakos ranch, Kyelu, Lukenya, Game ranch, Maanzoni, Kakenyi, Kapiti, Mwambi, New Astra and Lisa.

Apiculture (Bee-keeping):

Apiculture contributes about Kshs 12,583,000 to the economy.

Trade and commerce: Industries in the County are mostly located in Athi River, Mavoko Sub-county. Some of these include cement industries, agro-chemicals industries, steel plants and textile industries in EPZ, among others. Trade across the County is mainly on small scale basis.

Tourism: The County is home to major tourist attraction sites. These include Ol Donyo Sabuk National Park, Fourteen Falls, Iveti hills, Lukenya hills, Mcmillian Castle, Kiyamwilu gravitational defying area, Komarock shrine, Masaku Footprint Rock in Kiima Kimwe, AIC Mumbuni (the first church in Machakos), wood carving in Wamunyu, Yathui traditional shrine, Masinga dam, Makongo valley, Yatta Plateau, Katoloni Prayer mountain, Maanzoni Sanctuary, Machakos People's Park and Kenyatta Stadium.

Mining: The County has mineral deposits including limestone, granite and sand. There are several major cement factories which are located in Mavoko Sub-county namely

Bamburi Cement, East Africa Portland, Mombasa Cement, Ndovu Cement, Simba Cement, Athi River Mining and Savanna Cement. Sand is mostly harvested along the river beds by private individuals. In addition, there are quarries for stone mining

DRAFT

3.4 Machakos County Comparative Advantage

Machakos County's Strategic Location

The County is strategically located as it is within the greater Nairobi Metropolitan Region consisting of four other counties including Nairobi, Kiambu, Muranga and Kajiado. In addition, the County's transportation network is well developed hence providing immense opportunities for secure and stable business environment, high ease and low cost of doing business, high quality and capacity of infrastructure, high supply of human capital, high quality of governance and quality of service delivery

Transportation network

The County boasts of good road network connecting all the sub-counties. Most of the major roads such as Mombasa Highway (A109), Namanga road, Machakos – Kitui road, Garissa road and Wote road pass through the County. Jomo Kenyatta International Airport is also within the County's proximity. The County also hosts Athi River SGR terminus.

Land and Natural resources

Water: Water resources in the County are mainly seasonal rivers, dams and springs. Furthermore, the County has two perennial rivers; Athi River and Tana River which form the County boundary with Embu and Tharaka Nithi counties. The dams include Maruba, which is the main source of the water consumed in Machakos town whereas Masinga dam on Tana River is shared between Machakos and Embu counties.

Forests and Parks which include Iveti Hills, Yatta Plateu, Kapiti Plains, Ol Donyo Sabuk National Park can be exploited for various economic activities such as tourism.

Other natural resources include sand, quarries, and limestone, which can be exploited for economic gain of the County.

Agricultural potential

The County has a great potential for new irrigation schemes and enlargement of the existing ones. The County has 12 irrigation schemes (3,220 acres) established by both

the National and County Governments. There are 15 proposed new irrigation schemes, which sum to 1,725 acres spread across six sub-counties. The location and topography of the county makes it suitable for irrigation production system. The potential for exploitable irrigation can be expanded through abstraction of water from Masinga Dam, Tana, Athi and Thwake Rivers.

Tourism and filming potential

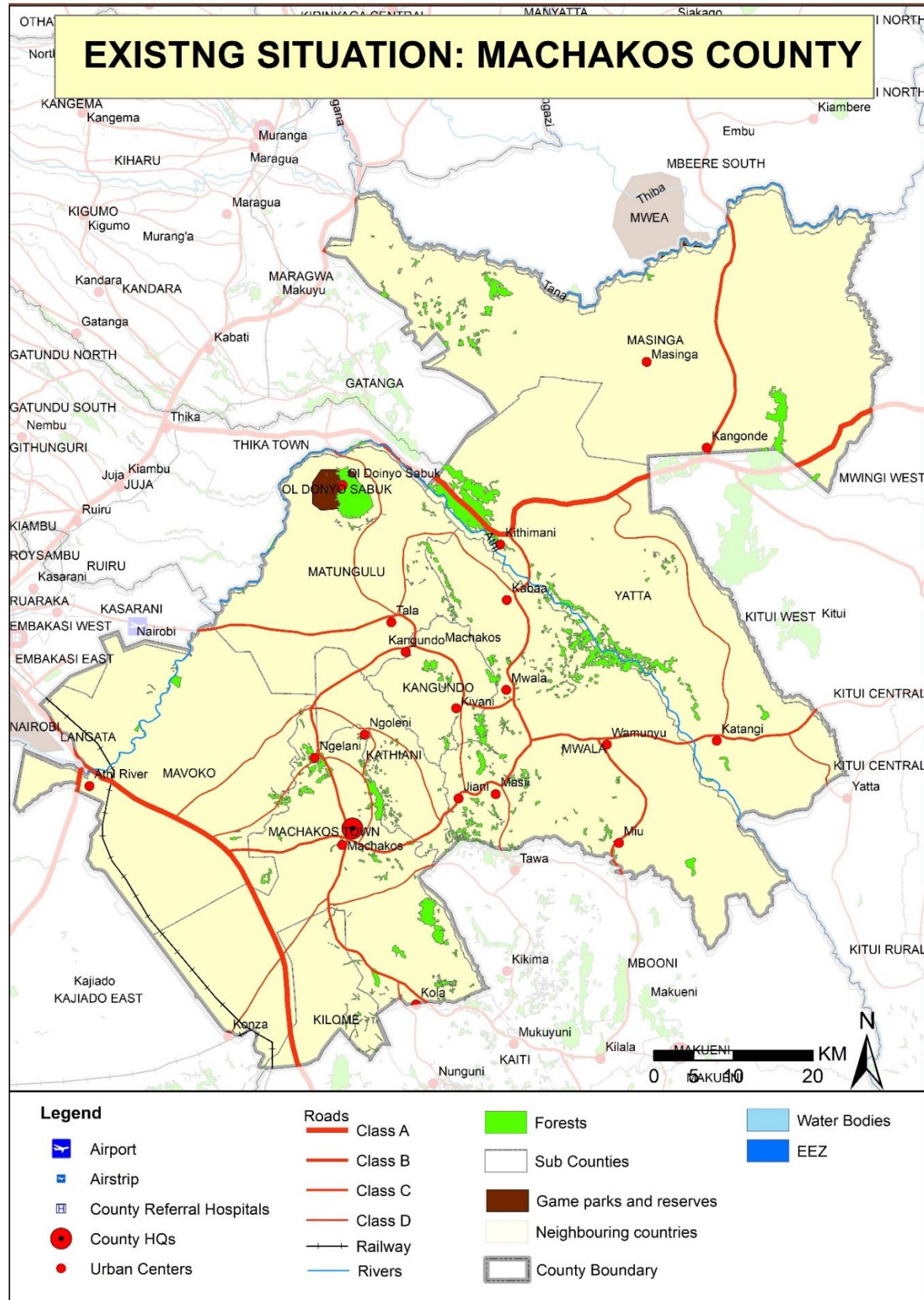
The presence of Iveti Hills, Yatta Plateau, Kapiti Plains, Ol Donyo Sabuk National Park, Kyamwilu Gravitational Defying Area, People's Park and Kenyatta Stadium among other attractions increase the County's tourism potential. In addition, the Kamba's culture, craftsmanship and artifacts also attract tourists into the County.

Renewable energy potential

Being arid and semi-arid County has a Machakos County has a high potential for solar and wind power generation. The County has a high potential for hydro power generation evidenced by the presence of Masinga dam.

Map 2 below presents the existing situation in Machakos County.

Map 2: Machakos County Existing Situation



Source; National Spatial Plan 2015-2045

4 County Specific Issues, Development Strategies And Policy Guidelines

4.1 Machakos County 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. Machakos County is classified under Arid and Semi-Arid Areas (ASAL) with high potential for irrigated agriculture and large livestock production.

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. The development strategies discussed are aimed at managing the global impacts, optimizing use of natural resources, creating a county balance and transforming rural areas. 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 Machakos County:

Strategies for Machakos County

Strategy 1: Towards increasing the County's competitiveness

Table 1: Machakos County Development Strategies

Potentials/Opportunities	Issues	Strategies
<p>Locational advantage Machakos County is within the Great Nairobi Metropolitan hence a gateway to the Country's Capital City.</p>	<ul style="list-style-type: none"> • The County's proximity to Nairobi dictates preference for land use hence high land values • Uncontrolled developments • Conversion of land use to real estate hence diminishing of land under livestock keeping. • Land speculation by private developers • Lack of full implementation of the existing development plans • Some urban areas lack development plans to guide development 	<ul style="list-style-type: none"> • Prepare and enforce policy guidelines to guide land use and enhance rational use of space. • Preparation and implementation of physical development plans to guide land use in the County •
<p>Thriving Real Estate The County is the dormitory to Nairobi's working. Popular estates include: Utawala, Ruai, Kamulu, Joska, Syokimau, Mlolongo, Athi River etc</p>	<ul style="list-style-type: none"> • High land prices • High housing costs hence disparity between housing supply and demand for affordable housing • Population increase hence existing infrastructure • High rate of sub-division of land • High rate of change of use to accommodate real estate development • Marked variation in housing in the urban, peri-urban and rural settlements 	<ul style="list-style-type: none"> • Government incentives and subsidies in housing provision • Enforcement of development control regulations for orderly development • Adoption of cheap construction technologies • Development of housing policies and regulations
<p>Industrial hub The County several industries including Cement processing industries, EPZ etc</p>	<ul style="list-style-type: none"> • Pollution (water, air and solid waste) from the industries around Athi River town and around the quarries 	<ul style="list-style-type: none"> • Enhanced enforcement of existing environmental laws • Use of clean technology.

	<ul style="list-style-type: none"> • High demand for water and energy for industrial <ul style="list-style-type: none"> • Unsustainable mining 	<ul style="list-style-type: none"> • Carry out environmental screening before implementation of projects and programmes to assess the possible environmental effects. • Encourage use of alternative sources of energy • Enhancing knowledge and communication; and reducing emissions from industries.
<p>Transportation hub</p> <ul style="list-style-type: none"> • Transportation hub • The County is well connected (SGR, A104, A109) • Athi River and Mlolongo as transit towns • Proximity to JKIA 	<ul style="list-style-type: none"> • Traffic Congestion • Lack of integration • Pollution • Encroachment on road reserves • Road accidents, 	<ul style="list-style-type: none"> • Integration of the various modes of transport • Expand and upgrade roads Prepare and implement a transport management plan • Complete the extension of the railway to Konza techno city • Encourage use of alternative modes of transport and high capacity buses
<p>ICT Hub The proposed Konza Technolis</p>	<ul style="list-style-type: none"> • Slow implementation of the proposed Konza Techno City • Lack of appropriate infrastructure 	<ul style="list-style-type: none"> • Hasten the implementation of the Konza techno city • Provide adequate infrastructure

Strategy 2: Optimizing the Use of land and natural resources

Sector	Potentials/Opportunities	Issues	Strategies
Agriculture (Agro-climatic Zone IV)	Irrigation potential <ul style="list-style-type: none"> • Vast land that is generally flat • Presence of a dam (Masinga) and Rivers (Thwake, Tana and Athi) • Fertile soils • Agricultural extension, training and research institutions • Demonstration Farms • Potential for agro-forestry 	<ul style="list-style-type: none"> • Declining water flow due to persistent droughts, • destruction of catchment areas • Poor water quality resulting from excessive industrial pollution around Athi River town and Nairobi city • Reduced soil fertility and depth due to mono culture; • Poor agricultural support infrastructure Inadequate adaptation of modern methods and technology. 	<ul style="list-style-type: none"> • Promote the use of appropriate farm inputs and technology by providing subsidies and incentives • Exploitation of underground water potential and rain water harvesting. • Encourage best farming practises and planting dry resistant crops • Provision of extension services • Enforcement of existing laws to ensure compliance • Monitoring of water quality downstream • Provide for a buffer zone between the irrigation schemes and ground water sources and natural water bodies.

	<p>Large scale livestock areas</p> <ul style="list-style-type: none"> • Rangeland areas for ranching • Agricultural extension, training and research institution • Demonstration Farms 	<ul style="list-style-type: none"> • Overstocking; • Insufficient water resources • Poor agricultural support infrastructure • Insecurity of tenure • Effects of climate change • Human-Human and human wildlife conflicts <p>Uncontrolled sub-divisions</p>	<ul style="list-style-type: none"> • Transportation infrastructure in rangeland areas should be improved • Establish the land carrying capacity • Encourage communal ranching to replace pastoralism • Mapping out of wildlife migratory corridors • Encourage Plan-led development that is responsive to local needs and resources • Inventorize, map and register community grazing areas. • Encourage the location of processing facilities in livestock rearing areas. • Encourage rotational grazing (wet season and dry season grazing areas) through regulated grazing procedures
<p>Environmental Conservation and protection Areas</p>	<p>Conservation areas (ASAL)</p>	<ul style="list-style-type: none"> • Air pollution and water pollution • Lack of sensitization to the residents on the importance of environmental conservation • Population pressure • Overstocking • Soil erosion • Underutilized tourism potential • Improper Proper waste disposal 	<ul style="list-style-type: none"> • Protection of water catchment areas and tree planting in the county. • Strict soil erosion control measures • Exploit tourism potential • Zone/ Map out water catchments areas in Hilltops, Hill sides, and Forests.

	<p>Protection Areas Rank 1 Water catchment areas Natural forest</p>	<ul style="list-style-type: none"> • Deforestation; • Encroachment by human activities • Pollution; 	<ul style="list-style-type: none"> • Restriction of development in these areas except for the purpose of eco-tourism and research. • Ensure at least 10% of land holdings are under trees (10% tree coverage)
	<p>Rank 2 Water bodies (rivers), Mountains, parks and conservancies.</p>	<ul style="list-style-type: none"> • Drying up of water sources; • Encroachment by human activities • Unsustainable abstraction of water 	<ul style="list-style-type: none"> • Control water abstraction • Mountain areas: Human settlement is not allowed beyond certain altitudes; Tourism related activities are allowed. • Provide buffer zones of between 2m - 30m width measured from the highest water mark for rivers/ streams depending on the width, water volume, whether permanent or seasonal and the use of that water. • Incorporate best management practices to prevent pollution of rivers, wetlands and streams • Ensure that all activities within riparian are reviewed and approved by relevant authority • Develop monitoring plans for discharge of effluents into the aquatic environment to ensure that standards are met.

			<ul style="list-style-type: none"> • Carry out Environmental Impact Assessment (EIA) for activities likely to have negative impacts on the river/stream, lake, wetland and ground water. Limit uses in these areas to conservation, compatible recreation and controlled agricultural purposes • Identify map and gazette wildlife migratory corridors and dispersal areas.
Land and Natural Resources	Vast land resource	<ul style="list-style-type: none"> • Insecurity of tenure • Subdivision of agricultural land in peri-urban areas • urban sprawl 	<ul style="list-style-type: none"> • Operationalizing of titling programs to ensure security of tenure • Urban growth limit to be established • Preparation and implementation of local development plans
	Renewable Energy Untapped potential for green energy generation including wind, biogas, hydroelectric power and solar.	<ul style="list-style-type: none"> • Inadequate technology and exploration infrastructure • High costs of exploiting available natural resources • Lack of policy on green energy generation and distribution 	<ul style="list-style-type: none"> • Optimal utilization of the available natural resource potential • Invest in appropriate technology and infrastructure • Undertake further exploration of the available natural • Inventorize and map potential renewable energy sites

			<ul style="list-style-type: none"> • Promote diversification of energy sources while providing incentives for clean energy production
	<p>Water: Permanent rivers Thwake, Tana and Athi and underground water</p>	<ul style="list-style-type: none"> • Inadequate technology and exploration • Lack of a regulatory framework in exploitation of underground water • Pollution 	<ul style="list-style-type: none"> • Optimize the use of underground water for irrigation in dry areas. • Invest in appropriate technology and Infrastructure • Regulatory framework • Proper waste management
	<p>Minerals : Limestone and sand</p>	<ul style="list-style-type: none"> • Trade in these natural resources is largely unregulated and leads to major environmental degradation. • Lack of appropriate technology for sustainable exploitation of the minerals and sand 	<ul style="list-style-type: none"> • Appropriate technology and exploration infrastructure • Formulation of regulatory framework in sand and mineral harvesting • Diversify energy products sources to reduce costs of production and enhance its reliability
Industrialization	<p>Industrial Potential Manufacturing based Industries: Presence of sand and minerals(Limestone)</p> <p>Agro-based industries:</p> <ul style="list-style-type: none"> • Raw agricultural products • Large scale livestock production areas <p>Cottage industries (Crafts and artifacts)</p>	<ul style="list-style-type: none"> • Low adoption of technology for value addition. • Poor linkage to markets • Inadequate transport infrastructure • Price fluctuations • Lack of established Value chains • Insufficient market for finished products • Lack of frameworks to safeguard Intellectual Property Rights (IPR) 	<ul style="list-style-type: none"> • Diversify energy production sources to reduce costs of production and enhance its reliability • Provide appropriate technology to enhance value addition. • Provide adequate, supportive transport and infrastructure • Promote the formation of cooperatives and Saccos to advance marketing

	<p>Quarries for stone mining</p>	<ul style="list-style-type: none"> • Lack of proper in waste proper management and enforcement of the existing regulatory framework. • Environmental degradation <ul style="list-style-type: none"> • Failure to rehabilitate mining fields after depletion of minerals leading to vast waste lands. 	<ul style="list-style-type: none"> • Sensitize players in the sector on the aspect of IPR and enforce regulations on the same • Promote assertive marketing campaigns for products both domestically and internationally • Siting of quarries should be in harmony with other land uses and defined buffer zone between quarries and other land uses shall e provided. • Undertake an EIA before setting up industries • Rehabilitation of degraded areas
<p>Tourism (Southern Circuit)</p>	<p>Tourism attraction sites Iveti Hills, Yatta Plateau, Kapiti Plains, Ol Donyo Sabuk National Park, Kyamwilu Gravitational Defying Area, People’s Park, Kenyatta Stadium, Kamba’s culture, craftsmanship and artifacts</p>	<ul style="list-style-type: none"> • Underdeveloped tourism sites and products • Underexploited tourism Potentials • Poor marketing strategies to promote tourism • Continued over reliance on safari and wildlife tourism • Poaching and human wildlife conflicts, • Security concerns leading to 	<ul style="list-style-type: none"> • Strict enforcement of the existing regulations for safeguarding protection areas. • Promote domestic tourism by providing incentives and subsidies • Open up under-utilized sites • Enhance security in tourism potential areas • Provide appropriate tourism support infrastructure and facilities

		<p>negative travel advisories,</p> <ul style="list-style-type: none"> • Encroachment of human activities into protected areas 	<ul style="list-style-type: none"> • Improve transportation infrastructure.
<p>Housing (Urban land requirements)</p>	<ul style="list-style-type: none"> • Existing housing units • Public-Private Partnerships in provision of housing • Existing supporting legislations 	<ul style="list-style-type: none"> • Lack of enforcement of existing legislation on housing development and land use • Housing demand outstrips supply • Little government involvement in housing provision • Slum proliferation • Appropriate transport infrastructure and utilities • Insecurity of tenure land ownership for speculative purposes and unregulated land acquisition for housing developments 	<ul style="list-style-type: none"> • Enforce, harmonize and regularly review the existing legislative and regulatory instruments; • Alleviate the wastage of land in informal settlement and encourage infill and mixed development • Bridge the gap between housing demand and supply • Inventorize all the slums and upgrade them; • Provide incentives to squatters to buy the land they occupy at subsidized rates • Provide adequate and appropriate infrastructure; • Government and/or PPP to provide site and serviced properties; • Vigorous land readjustment and provide infrastructure in informal settlements or in agricultural areas. • Impose a progressive tax over and above the current land rents and rates on vacant urban land; • Operationalize sectional titling to provide shelter other than

			<p>land. Encourage pooling of land for bulky housing.</p> <ul style="list-style-type: none"> • Promote measures to prevent proliferation of slums through adherence to housing standard, the provision of low cost quality houses and slum upgrading projects. • Enhance the efficiency of all buildings through provision of efficient management systems i.e., efficient use of water, energy, parking space, security, waste management and lighting, and provision for persons with special needs.
Transport	<p>Road Mombasa Highway(A109), Namanga road A104), Machakos – Kitui road, Garissa road and Wote road</p>	<ul style="list-style-type: none"> • Most roads are in poor condition; • Lack of coordination of activities by various agencies in charge of the sector; • Lack of NMIMT infrastructure; • Weak enforcement of regulations in bodaboda industry • Encroachment on road reserves; • Inadequate or lack of terminal facilities • Poor quality of transport services; • Inappropriate modal 	<ul style="list-style-type: none"> • Integrate transport corridor planning • Repossess and revert all illegally acquired land for roads infrastructure • Preserve and secure adequate land for future transport and other related infrastructural Development; • Promote the purchase and use of high occupancy public transport vehicles

		<ul style="list-style-type: none"> split; Transport system not fully integrated; lack of consideration for persons with special needs 	<ul style="list-style-type: none"> Create linkages to agricultural, tourist and urban areas; Enforce a regulatory standard requirement for all public transport service operators; Encourage private sector participation; Upgrading of all the roads Encouragement of use green transport; provide NMMT infrastructure
	Air transport <ul style="list-style-type: none"> Masinga airstrip. 	<ul style="list-style-type: none"> Poor runway condition Lack of basic airstrip facilities Insufficient and ineffective linkages between airstrips and other transport modes; 	<ul style="list-style-type: none"> Improve and expand existing airstrip Integration of all modes of transport Establish a sufficient buffer zone to control human developments around the airstrip
	Railway Transport Athi River SGR terminus.	<ul style="list-style-type: none"> Lack of integration to other modes of transport 	<ul style="list-style-type: none"> Integrate to other modes
Public Utilities	Water and Sanitation <ul style="list-style-type: none"> Underground water Rainfall Dams Existing sewerage system 	<ul style="list-style-type: none"> High rate of urbanization Unreliable access to clean and sufficient water Water pollution Inappropriate sanitation 	<ul style="list-style-type: none"> Invest in water harvesting technologies and storage facilities in areas classified as water stressed areas Protection and rehabilitation of waters sources and catchments areas such as aquifers, dams, and water recharge areas Develop appropriate water reticulation network

			<ul style="list-style-type: none"> Establishment and upgrading of appropriate sanitation infrastructure Regulation on discharge of wastes
	<p>Solid waste management</p> <ul style="list-style-type: none"> Existing SWM facilities 	<ul style="list-style-type: none"> High rate of urbanization Inadequate and poorly managed solid wastes management facilities 	<ul style="list-style-type: none"> Construction and upgrading of solid waste management facilities Promote the , Reduce, Reuse, Recycle (3Rs) Waste collection points, transfer site and disposal site (landfill or incinerator) should be well designated and properly functioning. Provide adequate buffer zone between waste disposal sites and the surrounding communities
	<p>Energy</p> <ul style="list-style-type: none"> High solar intensity Strong winds Masinga dams Biogas 	<ul style="list-style-type: none"> High energy demand by the numerous industry Inadequate technology and infrastructure; High initial costs for harnessing renewable energy High rate of urbanization Lack of proper assessment and research Adverse environmental effects in exploiting green energy 	<ul style="list-style-type: none"> Develop infrastructure for harnessing, transmitting and distributing renewable energy Formulate policy framework to guide exploitation of green energy Implement Energy efficiency systems and energy demand management systems to ensure efficient and productive use of energy.

		<ul style="list-style-type: none"> Lack of relevant policy framework to guide tapping and use of energy sources 	<ul style="list-style-type: none"> Map and develop strategic areas suitable for different forms of energy production. Develop and provide incentives for clean energy production. Promote use of energy saving technologies/devices
	<p>ICT</p> <ul style="list-style-type: none"> Existing fiber optic cable High demand for ICT services <p>Konza Tecno City</p>	<ul style="list-style-type: none"> Low coverage/skewed distribution Poor connection High costs 	<ul style="list-style-type: none"> Building ICT relevant infrastructure Expansion of the existing network to all urban areas and rural growth areas Mainstream ICT in all sectors to promote service Increase efficiency and productivity of the existing platforms such as Huduma center Expand the fiber optic network to all urban centers
	<p>Sporting and social facilities</p> <ul style="list-style-type: none"> 3 public talent academies/centres Sports facilities: Kenyatta Stadium Machakos golf club, Masinga airstrip TT (car racing), Masinga dam water sport, Portland sports club, Lukenya motorcross, Stone Athi for shooting etc two information documentation centres 	<ul style="list-style-type: none"> Inadequate sporting facilities and coaching services Dilapidated stadia, community cultural centers and social halls Minimal involvement of youths in sporting activities Untapped/underutilized potential in sports 	<ul style="list-style-type: none"> Construction and rehabilitation of sporting facilities Rehabilitate all the social facilities (stadia, cultural centres and social halls) Promote sports in the county by engaging young people in sporting and nurturing talents Formulation of a sports management legislative policy to govern sporting activities in the County

	<ul style="list-style-type: none"> • 1 Library • 1 ICT Centre 		<ul style="list-style-type: none"> • Procuring of tools and equipment and hiring of coaches
Health care <ul style="list-style-type: none"> • Machakos Level 5 Hospital • Level 4 hospitals in Kathiani, Mwala, Matuu and Kangun • Other health facilities within the County 	<ul style="list-style-type: none"> • Continued technological advances in the field of medicine in the form of invention of more efficient equipment and therapies • Advances in training of niche-specialized healthcare professionals in the country • Greater drive by both county and national governments to upgrade these facilities • High rate of population growth 	<ul style="list-style-type: none"> • Extremely high numbers of patients, straining the available infrastructure and resources • Disproportionate healthcare professionals to patients ratio • Inadequate medical supplies • Little adoption of new technologies relevant to provision of modern healthcare • Unaffordability of specialized care and advanced medical procedures • Inappropriate working conditions for personnel and subordinate staff • Poor road networks 	<ul style="list-style-type: none"> • Increase the number of beds in hospitals by building and furnishing more wards as may be necessary • Strive towards reaching the WHO recommended professional to patient ratio • Frequent refresher courses for medical professionals • Adequate annual budgetary allocation for medical supplies • Improve working conditions for personnel • Subsidize the cost of specialized services to increase accessibility by low income earners • Improve transport network to enhance accessibility of health facilities • Provide adequate care facilities for the elderly, which are easily accessible by public transport
Education <ul style="list-style-type: none"> • 1,468 ECDE centres • 1,114 primary schools (both 	<ul style="list-style-type: none"> • Increasing population • Education has been largely embraced • Government policy on compulsory basic education 	<ul style="list-style-type: none"> • High teacher-students ratio • Low retention of pupils in schools • Poor or inadequate infrastructure in terms of classrooms and equipment 	<ul style="list-style-type: none"> • Strengthen staffing levels of ECDE • Development and upgrading of education Infrastructure • Domestication of the ECDE Policy

<p>private and public)</p> <ul style="list-style-type: none"> • 434 secondary schools (both private and public) • 37 youth polytechnics • 3 fully fledged universities :Machakos University, Daystar University and Scott Christian University • 2 special schools 	<ul style="list-style-type: none"> • Free primary and day secondary school education 	<ul style="list-style-type: none"> • Low transition rates from Primary to secondary schools • Challenges in acquisition of land for expansion of learning institutions • Inadequate Technical Vocational Education and Training Institutions (TVET) in the County 	<ul style="list-style-type: none"> • Establishing County Libraries • Embrace new technologies in education • Locate in close proximity to residential areas and community facilities. • Integrate with major communal open spaces whenever possible to encourage the sharing of open spaces and play grounds Encourage vertical development to maximize space
--	---	--	---

DRAFT

Strategy 3: Balanced regional growth

Potentials/Opportunities	Issues	Strategies
<ul style="list-style-type: none"> • Resource endowment • Transportation network • Enabling policy framework • Devolution Untapped agricultural potential 	<ul style="list-style-type: none"> • Inadequate infrastructural facilities and services • Under-exploitation of natural resource potential Locational opportunities • Weak linkages between rural and urban areas. • Skewed regional growth in urban areas that are around Nairobi growing faster compared to other urban areas. • Unequal distribution of benefits from resources • Ethnicized governance system • Inadequate use of knowledge and innovation. • Skewed and biased development policies and programs 	<ul style="list-style-type: none"> • Develop and enhance economic infrastructure such as water services, waste management, energy and ICT • Establish strong rural urban linkages • Encourage equitable exploitation and sound management of mineral resources while ensuring local participation for improved economic development • Promote investment in sustainable tourism including eco-tourism • Promote irrigation activities for improved productivity in quantity and quality of yield within the potential regions. • Promote industrialization and value addition through the provision of support infrastructure in the less developed regions as well as strengthening the better developed regions.

Strategy 4: Rural development

Potentials/Opportunities	Issues	Strategies
<ul style="list-style-type: none"> • Resource endowment in rural areas (agriculture, large-scale livestock production and tourism) • Human resource (both skilled and unskilled) • Enabling policy framework • Existing infrastructure • Agriculture science and technology indicators • Devolution 	<ul style="list-style-type: none"> • Weak rural-urban linkages • Underutilization of the resources in the rural areas, • The dispersed nature of the human settlements, • Little government involvement in housing provision which has left in the hands of private developers • Lack of appropriate transport infrastructure and utilities • Rural Urban migration 	<ul style="list-style-type: none"> • Enforce, harmonize and regularly review the existing legislative and regulatory instruments; • Bridge the Gap between housing demand and supply by: offer incentives, tax rebates and subsidies to lower construction materials; promote the use locally available building material and indigenous knowledge; • Provide adequate and appropriate infrastructure; • Vigorous land readjustment and provide infrastructure or in agricultural areas. • Control agricultural imports that threaten local farmers and industries. • Encourage the application of cost effective irrigation methods in areas of low agricultural potential.

Strategy 5: Urbanization

Potentials/Opportunities	Issues	Strategies
<ul style="list-style-type: none"> • Human resource (both skilled and unskilled) • Enabling policy framework • Existing infrastructure • Devolution 	<ul style="list-style-type: none"> • Rapid urbanization rates, • Weak rural-urban linkages • Deteriorating infrastructure, • Proliferation of informal settlements, • Weak and uncoordinated development control and enforcement systems. • Lack of enforcement of existing legislation on urban development and land use • Lack of appropriate transport infrastructure and utilities • Poor implementation of development plans and planning policies • Poor solid waste management • Land governance issues. 	<ul style="list-style-type: none"> • Enforce, harmonize and regularly review and update existing development plans; • Bridge the Gap between housing demand and supply • Provide adequate and appropriate infrastructure; • Government and/or PPP to provide site and serviced land; • . • Impose a progressive tax over and above the current land rents and rates on vacant urban land; • Operationalize sectional property titling to provide shelter other than land. • Encourage pooling of land for comprehensive housing. • Provide transport infrastructure that integrates NMT • Promote high-rise buildings as opposed to horizontal growth to save on available space • Encourage urban agriculture to enhance food security • Enhance the efficiency of all buildings through provision of efficient management systems i.e., efficient use of water, energy, parking space,

		<p>security, waste management and lighting as well as provisions for persons with special needs.</p> <ul style="list-style-type: none">• profile for all slums and undertake upgrading programs.•
--	--	--

DRAFT

4.2 Spatial Policy Guidelines

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. They aim at enhancing global competitiveness and economic efficiency, optimizing the use of land and natural resources, promoting the regional balanced development and conservation of the environment. 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 ensure that the county is globally competitive as an investment especially in emerging sectors such as the ICT. The policies shall also be implemented by the county government's agencies responsible for planning and development control as well as the authorities responsible for land administration.

The following are policies and measures specific to Machakos County.

NSP Policy Guidelines for Machakos County

Table 2: NSP Policy Guidelines

S.No	Sector	Policy Guideline	Measures
1.	Framework for Development of Spatial Growth Regions (Region 2: Eastern, South Eastern and North Western) Key Urban Centres: Machakos, Matuu, masinga, tala, mwala kangundo, makutano	<ul style="list-style-type: none"> Enhanced agricultural and food production Investment in physical and social infrastructure Development of tourism infrastructure Mineral mapping and exploitation Environmental protection and conservation 	<ul style="list-style-type: none"> Infrastructure provision to support human settlement Small and medium urban Centres development Rural development through provision of infrastructure, agricultural sector development and related economic activities Restrict/control human activities on the environment Sustainable exploitation of natural resources
2.	National Spatial Structure	<ul style="list-style-type: none"> The National Spatial Plan structure as a framework to achieve an integrated and sustainable physical/spatial development of the country. 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"> All Regional, County and Local physical/spatial plans shall be guided by the objectives and policies of the NSP. Existing physical/spatial plans shall be reviewed to conform to the objectives and policies of NSP. All sectoral policies shall take cognizance of the objectives and policies of NSP Planning authorities at the national and county levels shall be supported with adequate human, financial and technical resources to promote sustainable Physical/spatial planning and development. Prepare and implement County spatial plans
3.	Modernizing Agriculture (Agro-climatic zone iv)	Agro climatic zones IV, V and VI (rangelands) shall be developed and used optimally for large scale commercial production of livestock	<ul style="list-style-type: none"> Prioritize provision of requisite infrastructure to support ranching and ranching related activities Modernize livestock keeping through appropriate animal husbandry, product processing and timely marketing

		to support downstream processing of livestock products and promote balanced regional development	<ul style="list-style-type: none"> • Increase livelihood diversification, productivity and competitiveness and create an investment environment • Provide transport connectivity and adequate inter and intra-road networks as well as other social and physical infrastructure • Value addition to agricultural and livestock products. • Enhance ASAL climate change adaptation and mitigate desertification
		The irrigation potential of the country shall be optimized by promoting investment in irrigation agriculture for high value crops	<ul style="list-style-type: none"> • Rehabilitate and expand existing irrigation schemes a • Undertake research to identify the irrigation potential in all counties • Establish new irrigation in areas with irrigation potential • Encourage small holder irrigation schemes through sensitization campaigns and provide subsidies and incentives
4.	Conserving the natural environment	All environmentally sensitive areas shall be protected and utilized in a sustainable manner	<ul style="list-style-type: none"> • Prepare and implement integrated management plans for Environmental sensitive areas • Support effective implementation of related policies and laws. • Involve and empower communities in the management of environmentally sensitive areas and ASAL ecosystems and promote environmental education and awareness • Develop and implement an Integrated Land Use (Development) Plan for the ASALs. • Strengthen Environmental Governance and harmonize sectoral policies, legislation and regulations. • Aim for zero carbon building standards by 2032 and ensure all buildings meet energy efficiency criteria
		All environmentally fragile areas shall be conserved and utilized in a sustainable manner	
		Integrate environmental concerns in policy formulation, resource planning and development processes.	
5.	Rapidly Industrializing County	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"> • Mineral-based industries to be located in-situ where the minerals are found • Locate cottage industries and crafts in-situ • Establish infant industries in rural and rangeland areas for value addition and investments opportunities • Promote value addition in processing of local produce.
		Specific sites for industrial development shall be identified,	

		planned and serviced with the appropriate infrastructure	<ul style="list-style-type: none"> • Develop SME and Industrial Parks in select subcounties • Provide appropriate support and transportation infrastructure for industrial activities • Integrate the industrialization process and environment conservation • Increase availability of clean water and improve sanitation • Provide special tariffs
		Adequate and affordable energy supply for the industrial sector shall be provided	<ul style="list-style-type: none"> • Provide alternative ,reliable and affordable energy infrastructure • Promote the adoption of energy efficient technologies
6.	Diversifying Tourism (Southern Circuit)	The NSP shall promote diversification of tourism by offering diverse products in the different tourist circuits	<ul style="list-style-type: none"> • Southern Circuit shall be developed to offer; safari and wildlife, cultural and heritage, ecological, archeological and historical, filming, ecotourism and adventure tourism.
		Appropriate Tourism support infrastructure and facilities shall be provided	<ul style="list-style-type: none"> • Carry out an inventory of tourism infrastructure and facilities in Sothern circuit. • Control human activities within ant around tourist sites • Formulate planning regulations and standards to guide tourist specific infrastructure and facilities. • Develop and upgrade the existing tourism facilities and infrastructure. • Adopt low carbon and green tourism infrastructure options. • Increase bed capacity in tourist attraction areas and towns in E County • Provide and upgrade the ICT infrastructure to support tourism.
		Tourist attraction areas and sites shall be conserved and protected	<ul style="list-style-type: none"> • Identify, map and protect all wildlife migratory corridors. • Prepare subject plans for the wildlife migratory and dispersal corridors and wildlife habitat as a unit. • Strictly regulate developments within the tourist attraction sites. • Protect wildlife and wildlife watering points
		Governance of the tourism sector shall be enhanced.	<ul style="list-style-type: none"> • Prepare integrated spatial plans to guide development of the tourism sector.

			<ul style="list-style-type: none"> • Prepare plans to implement National Policies on land use, wildlife and tourism; • Undertake research to identify more tourist attraction areas and sites, inventorize Agro tourism sites • Undertake awareness campaigns on the value of eco-tourism to the industry players both locally and globally; • Facilitate access to eco-tourism development incentives
		Spatial Development plans shall be prepared to guide implementation of the flagship projects for the tourism sector	<ul style="list-style-type: none"> • Prepare local physical and land use development plans to actualize the Premium Parks Initiative • County Government in conjunction with national government to Prepare ecosystem area plans for all parks and reserves to address problems of unplanned development of lodges and poor access roads.
7.	Managing Human Settlements	Alternative urban areas shall be developed and supported to promote balanced regional Development and spur growth.	<ul style="list-style-type: none"> • Develop urban centres as intermediate centres between the rural and the principal towns. • Provide principal towns and urban centres with the requisite infrastructure to support their growth and development. • Prepare local physical development plans to define the urban growth limits for the principal urban centres. • Enforce strict regulations and justifications on development control processes. • Intensify the supply of urban infrastructure within the area contained to make it attractive for investment
		Rural growth centres shall be rationalized and supported to act as central places and settlements clustered to free the rich agricultural land	<ul style="list-style-type: none"> • Provide basic services such as extension services, health facilities, markets, sanitation, water, power and education to improve the quality of rural life. • Undertake sensitization and awareness campaigns on the need to conserve agricultural land by discouraging land fragmentation. • Progressively link growth centres by means of secondary roads as a minimum. • Promote sectors such as agriculture that have potential to stimulate rural development

			<ul style="list-style-type: none"> • Incorporate disaster management and mitigation in planning of rural settlements.
		<p>Human settlements shall be developed in line with environmental and natural resources conservation to improve living conditions</p>	<ul style="list-style-type: none"> • Map out and prohibit development in environmental sensitive areas. • Plan and provide an integrated waste management system. • Prepare and implement zoning guidelines to ensure compatibility of land uses in human settlement areas. • Promote social organization and environmental awareness through the participation of local communities in the identification of public service needs. • Strengthen the capacity of the local governing bodies to effectively deal with environmental challenges associated with rapid and sound urban growth. • Empower community groups, nongovernmental organizations and individuals to assume responsibility and authority for managing and enhancing their environment. • Deliberately provide adequate and functional open spaces in urban places. • Prescribe planning standards for open/green space on private development. • Encourage non-motorized transport (NMT) and re-introduction of public transport in major cities and urban centres •
		<p>The NSP advocates for the provision of an efficient, reliable and effective transport system for human settlements</p>	<ul style="list-style-type: none"> • Plan and develop an integrated urban transport system to enhance provision of relevant modal split. • Integrate land use and transportation planning • Establish an effective transport management system • Improve the road conditions and expand the linkages to human settlements • Integrate NMT with existing transport infrastructure. • Incorporate the concept of green energy in transport systems planning and redevelopment.

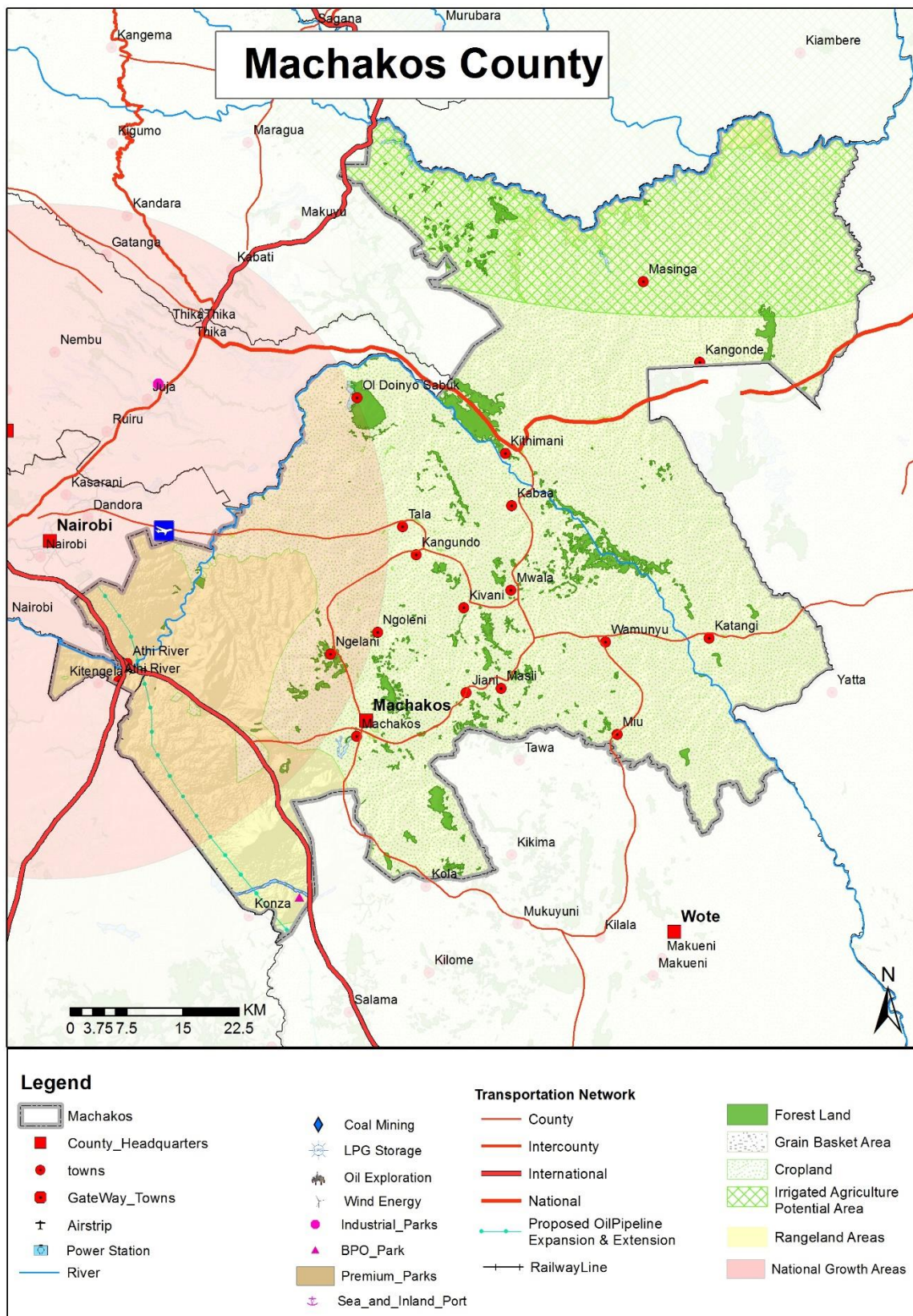
			<ul style="list-style-type: none"> • Prepare a transportation strategy for each urban area or city, as part of the integrated urban development plan required under the Urban Areas and Cities Act 2011, in collaboration with the National Government.
		The management and governance of Human Settlements particularly the urban areas shall be improved.	<ul style="list-style-type: none"> • Build institutional capacities of the urban areas management boards • Integrate technology in management of human settlements to strengthen urban data systems. • Coordinate and strengthen development control mechanisms • Provide adequate human resource and improve their capacity in management of human settlements in the sectors of; housing, settlement, land, infrastructure, construction, energy and disaster management • Conduct research into migration trends to inform effective planning and provision of human settlements. • Enable public private partnerships in the provision of housing.
		NSP shall advocate for upgrading of the existing settlements and forestalling of new informal settlements	<ul style="list-style-type: none"> • Encourage redistribution of urban income through integrated development planning encompassing social, economic and physical factors • Prepare Local Physical Development Plans for purpose of renewal and/or redevelopment of the informal settlements. • Formulate a housing policy that will focus on providing affordable and accessible housing. • Ease the process of issuance of ownership documents to the legal owners in order to encourage formal developments • Enforce development control regulations and adherence to building code and standards. • Enhance coordination of donor agencies activities within informal settlements by relevant authorities for optimal returns.
		<ul style="list-style-type: none"> • Peri-urban development shall be managed and controlled to contain urban growth within its 	<ul style="list-style-type: none"> • Formulate and implement planning legislation on peri-urban planning and management • Institute sanctions on idle land to encourage productive and sustainable land utilization.

		limits and protect rural land uses.	<ul style="list-style-type: none"> • Create green belt buffer zones to define the urban and peri-urban areas. • Incentivize local farmers to preserve agricultural land by promoting local production and providing ready markets for agricultural produce
8.	Integrating the Transportation network	<ul style="list-style-type: none"> • An integrated and functional transport system for the national and urban areas shall be developed. 	<ul style="list-style-type: none"> • Provide access, expand and linkage, between county headquarters (60M); county headquarters and sub county headquarters (30M); and for local access and link them to national transportation corridors.
		<ul style="list-style-type: none"> • An efficient and affordable Mass Public Transport for all urban areas in the country shall be developed 	<ul style="list-style-type: none"> • Integrate land use with urban transport planning for all urban areas. • Undertake research on the optimal modal split for various categories of urban centers
		<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Develop a public transport framework to regulate planning and management of public transport • Incorporate an integrated transport network in county, city and urban development plans
9.	Providing Appropriate Infrastructure	<ul style="list-style-type: none"> • Safe, adequate, reliable and affordable solar/green nenergy for both urban and rural settlements shall be provided. 	<ul style="list-style-type: none"> • Increase access to electricity through upgrading and expansion of the national power transmission and distribution network. • Tap into solar for large scale production in Machakos County for sale to the national grid. • Mainstream and enforce green energy options in the design of buildings
		<ul style="list-style-type: none"> • 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"> • Incorporate water provision in all physical development plans • Construct and rehabilitate water supply systems in the ASAL counties • Restore all the water towers.

		<ul style="list-style-type: none"> • A network of functional, efficient, safe, accessible and sustainable national health referral infrastructure shall be established. 	<ul style="list-style-type: none"> • Develop the service provider’s capacity to offer services and appropriately refer at each level of the healthcare system; • Improve the system’s ability to transfer clients and specimens between the different levels of the health care system;
		<ul style="list-style-type: none"> • Appropriate, quality, efficient and cost effective ICT infrastructure in both rural and urban areas shall be promoted 	<ul style="list-style-type: none"> • Develop and upgrade ICT Infrastructure in all counties • Extend ICT infrastructure to cover all the rural and local growth centres. • Mainstream use of ICT in all levels of government and the private sector (e-government).
		<ul style="list-style-type: none"> • The expansion of sewerage systems and waste management facilities shall be promoted to improve sanitation in human settlements 	<ul style="list-style-type: none"> • Develop the service provider’s capacity to offer services and appropriately refer at each level of the healthcare system; • Improve the system’s ability to transfer clients and specimens between the different levels of the health care system;
		<ul style="list-style-type: none"> • Sporting infrastructure shall be planned, developed, maintained and the existing rehabilitated to promote sports development. 	<ul style="list-style-type: none"> • Establish County Sports Talent Centers to act as feeds to the international centre to scout, nurture and develop sports talents at the sub-national levels. • Rehabilitate all the 47 county stadia to international standards

Source; National Spatial Plan 2015-2045

Map 3 below shows some proposals for Machakos County, as spelt out by the National Spatial Plan
Map 3: NSP Proposals



Source: National Spatial Plan 2015-2045

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-levelled 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**

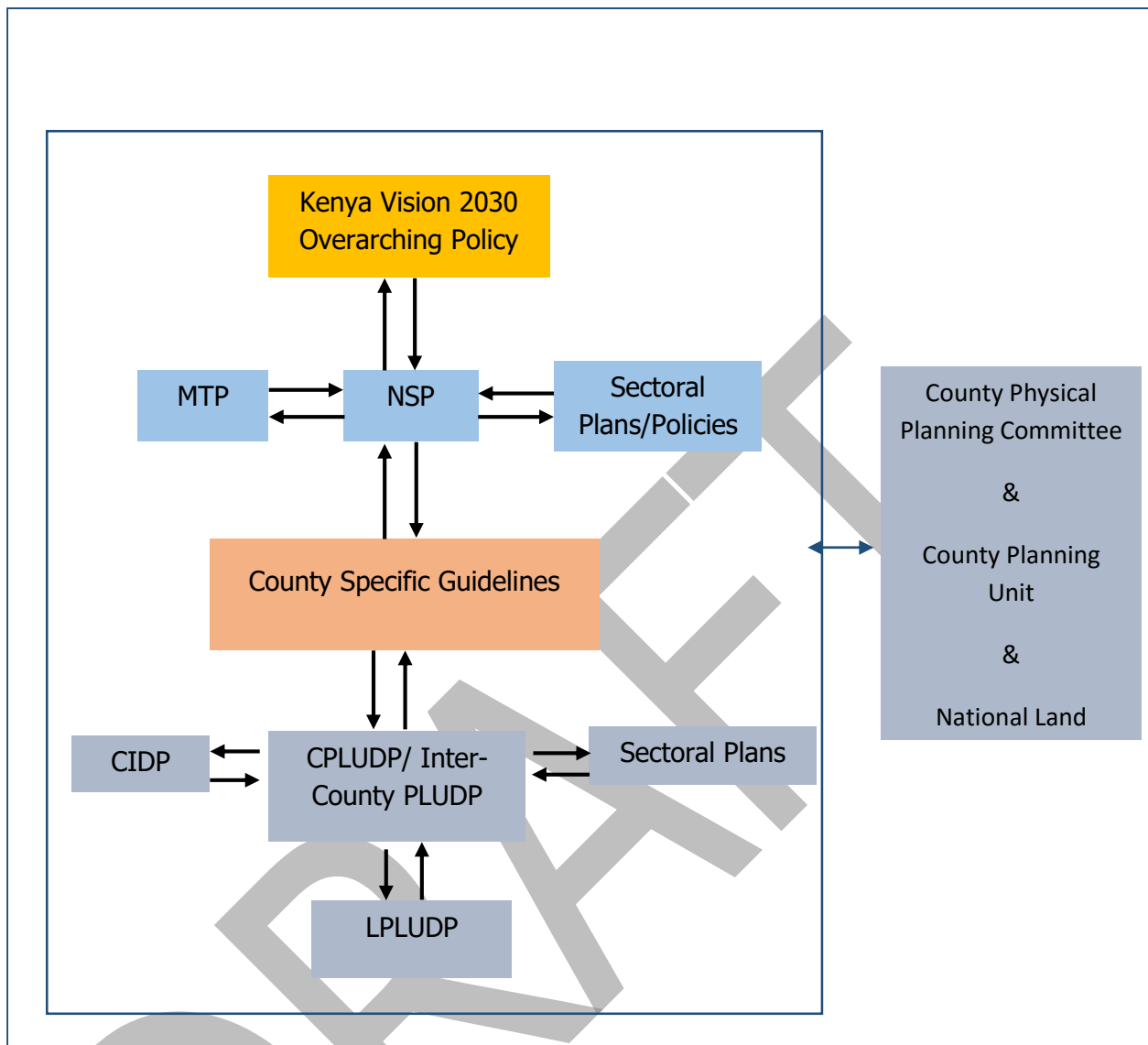
Implementation of the guidelines will be monitored and evaluated to measure both outputs and outcomes and ensure that the intended actions are implemented in a timely manner. To facilitate attainment of the objectives of the guidelines, performance indicators will be developed by the County Physical 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 Machakos County Government which will be responsible for implementing various county specific initiatives proposed by the guidelines.

The National Government, County Government of Machakos, 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.

