



NATIONAL SPATIAL PLAN IMPLEMENTATION GUIDELINES FOR TURKANA COUNTY



MINISTRY OF LANDS AND PHYSICAL PLANNING

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ACKNOWLEDGMENTS

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.

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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, liveability, 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.

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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 of the Guidelines

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 of the Guidelines

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;

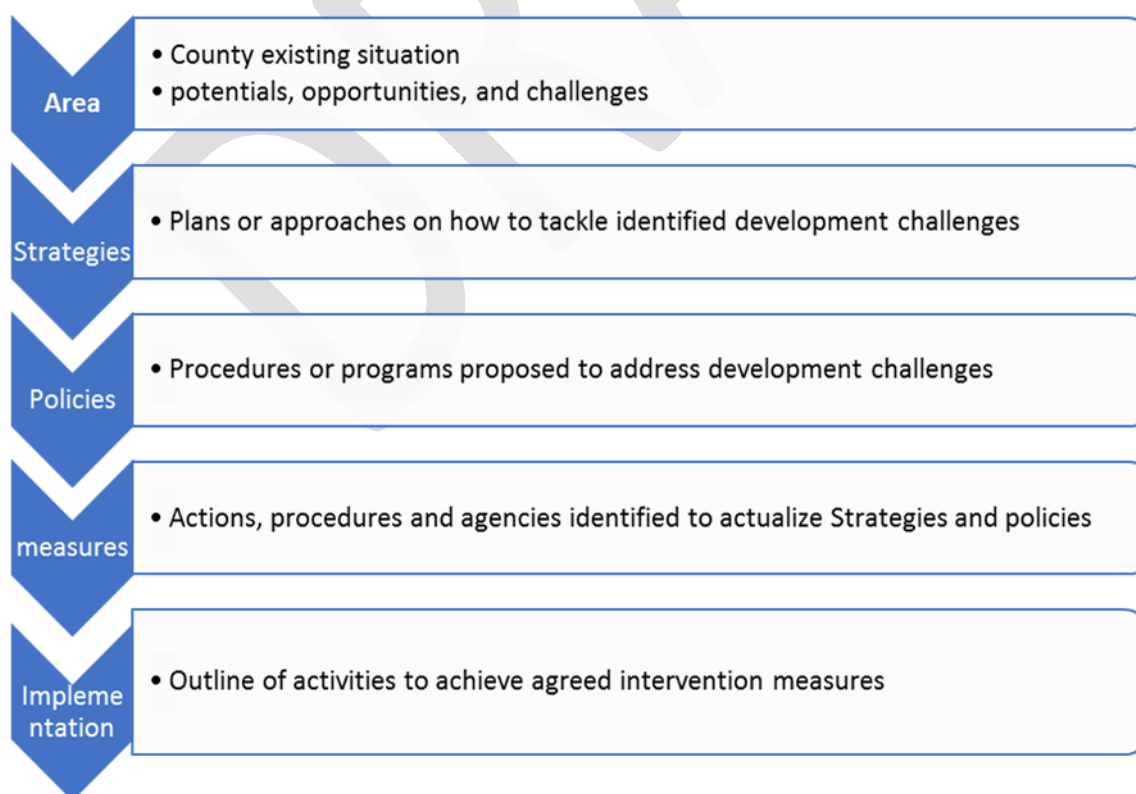
1. To sensitize the County on the provisions of the NSP
2. To promote synergy between National and County planning
3. To guide the County, implement the NSP
4. To identify the roles of the different actors in the implementation of the NSP.

1.4 Scope

The guidelines and strategies are specific to Turkana County and cover the entire territory of the county measuring approximately 77,000 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.

The guidelines further describe the scope as the areas being addressed as;

Figure 1: Scope of the guideline



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 Turkana 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.

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1.8 Targeted users of the guideline

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

Table 1: Target 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 • 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	<ul style="list-style-type: none"> • Comprehend the County priority sectors and County Plans and policies • Complement County spatial planning and implementation measures

and investors	<ul style="list-style-type: none">• 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

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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 Framework

2.2.1 Sessional Paper No.10 of 2012 on The 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. 1 of 2009 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 Framework

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, 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 enhance the capacity to prepare the various county level plans that meet the recommended quality and standards.

2.3.3 The 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

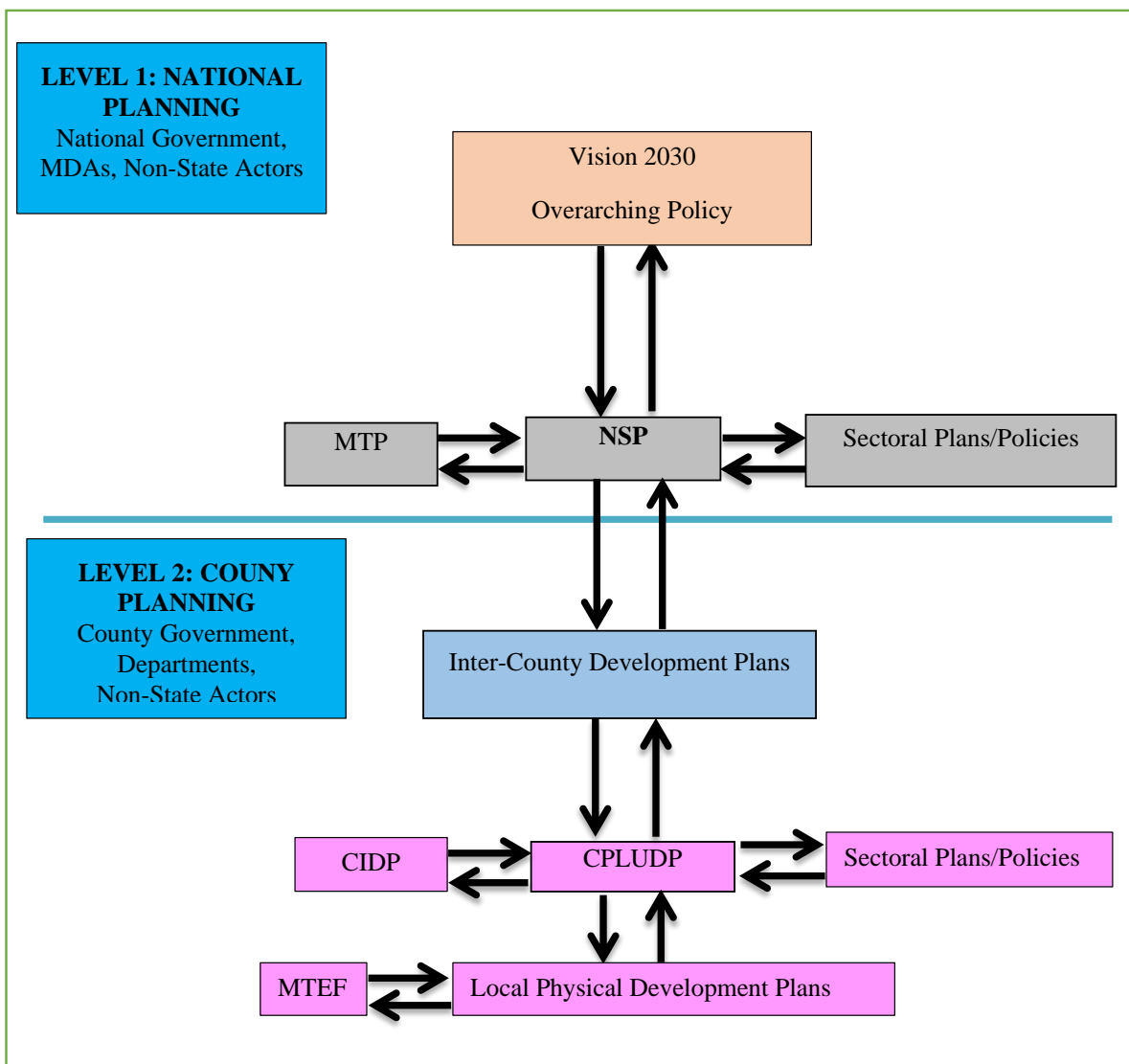
The linkage of the National Spatial Plan (NSP) to county and other lower-level plans is key to realization of its aspirations and the successful actualization of these plans. The NSP provides a spatial framework to ground the Vision 2030 flagships projects and form a basis for coordination of County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

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Figure 3: NSP Linkages to Other Plans



Source: The National Spatial Plan, 2015-2045

3 COUNTY PROFILE

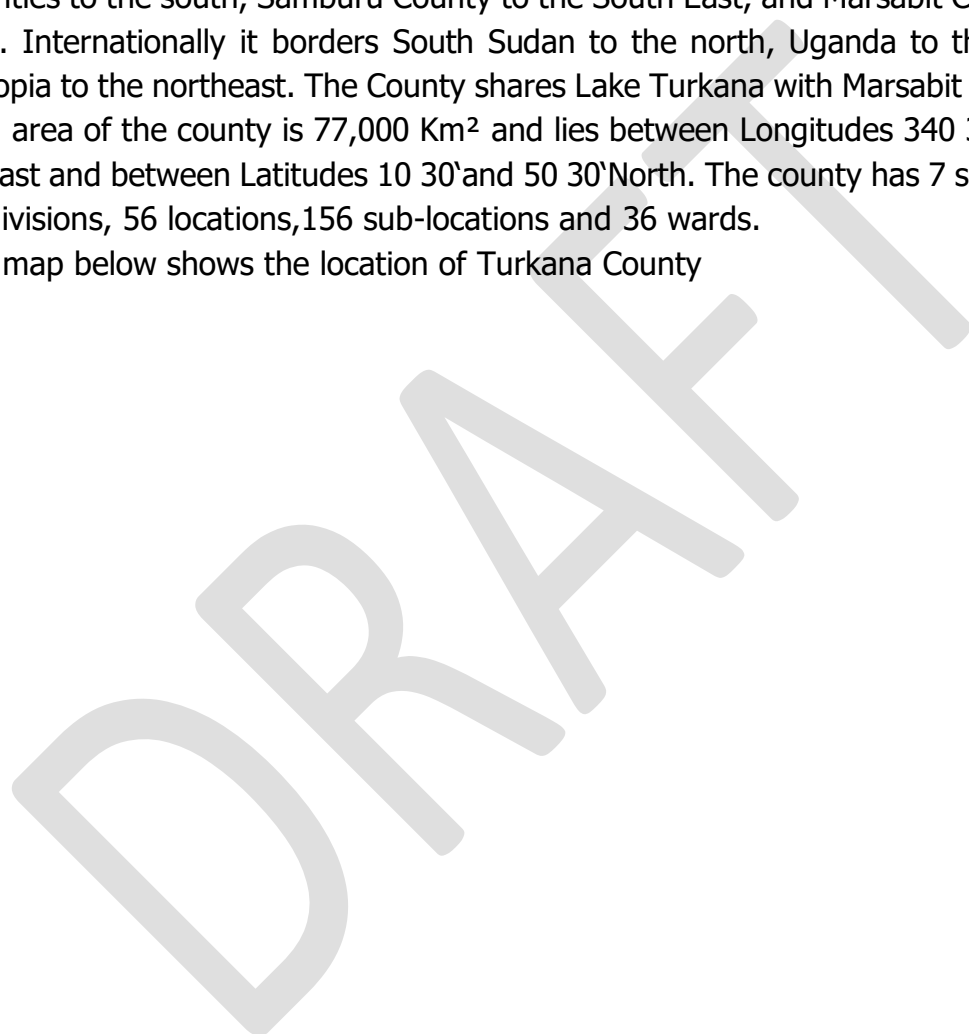
3.1 overview

It provides information on the location, size, bio-physical features, socioeconomic status and looks at the comparative advantage of Turkana County as compared to the other Counties in Kenya.

3.2 Location and Size

Turkana County is situated in North Western Kenya bordering West Pokot and Baringo Counties to the south, Samburu County to the South East, and Marsabit County to the East. Internationally it borders South Sudan to the north, Uganda to the west and Ethiopia to the northeast. The County shares Lake Turkana with Marsabit County. The total area of the county is 77,000 Km² and lies between Longitudes 34° 30' and 36° 40' East and between Latitudes 1° 30' and 5° 30' North. The county has 7 sub-counties, 17 divisions, 56 locations, 156 sub-locations and 36 wards.

The map below shows the location of Turkana County



Map 1: Location of Turkana County



Source: National Department of Physical Planning (2022)

3.3 Bio-Physical Context

3.3.1 Topography and Relief

The physiographic features in the county include low lying open plains, mountain ranges and river drainage patterns. The main mountain ranges of the county are Loima, Lorengippi, Mogila, Songot, Kalapata, Loru, Kailongol and Silale mountains and are green and covered with dense bushes and high woody cover. The ranges support important economic activities like honey production, grazing during the dry season, wood production, and charcoal production and are also water catchment areas. The hills in the county are characterized by large forests and they include; Tepes, Lokwanamor, Lorionotom, Pelekech and Loima Hills.

3.3.2 Climate

Turkana county falls is characterized by warm and hot climate with temperatures ranging between 20°C and 41°C. The rainfall pattern and distribution are erratic and unreliable with both time and space & ranges between 52 mm and 480 mm annually with a mean of 200 mm. The county does not receive adequate and reliable rainfall.

3.3.3 Natural Resources

The county is endowed with the Lake (Lake Turkana), which is a world heritage (UNESCO) and the only permanent desert lake in the world. It is also the largest and most saline of the Rift Valley lakes without outlets.

It also has a number of rivers that flow into the lake including Turkwel, Omo, Kerio among others that are seasonal.

There are neither gazetted nor non-gazetted forests in the county but the forests are held in trust by the County Government where communities utilize all natural resources without many restrictions. Wildlife is found in the game reserves (lions, cheetahs, zebras, hyenas, elephants, gazelles e.t.c) and lake and they include hippos, crocodiles and fish species in the lake. The county has huge deposits of minerals including gold, gem stones and also prospects of oil deposits.

3.4 3.1.2.4 Land Tenure

The land tenure system of the county which is communal has dragged its development by barring the local communities and other development agents from investing in the county. The land is owned in trust by the local authorities in the area and not more than 5 persons with title deeds in the entire county. Environmental degradation is mainly through charcoal burning (deforestation)

3.5 3.2. Population and Demography

According to the population census of 2019, the county population stood at 926,955 and with a growth rate of 3.35%, it is expected to increase to 2,183,392 by 2045.

The table below gives a brief description of the population characteristics and projected trends of the county;

Table 2: Population characteristics

Year	2019	2020	2025	2030	2035	2040	2045
Population Size	987,633	998,497	1,054,636	1,113,932	1,176,562	1,242,713	1,312,583
Male	478,087	499,355	529,249	557,961	588,333	621,513	656,400
Female	448,868	499,142	525,387	556,241	588,229	621,200	656,186
Household Nos.	176,363	178,303	188,327	198,916	210,100	221,913	234,389
Area	77,000 km ²						
Density	12.8	12.9	13.6	14.4	15.2	16.1	17.0

3.6 3.2.2 Human Settlement

The County is characterized by a clustered settlement with most of the urban centers highly populated than the rural areas. It has 3 main urban centres namely Lodwar, Kakuma and Lokichoggio. Lodwar is the most developed with more infrastructural and social amenities. There are also nine market centres in the entire county. Most of the rural areas are settled with the nomadic pastoral communities with temporary housing structure due to their movement in search of water and pasture for their livestock. It also hosts a refugee camp in Kakuma, with various refugees from the neighboring countries such as Sudan, Ethiopia, Uganda, Somalia and Burundi.

3.7 3.3 Socio-Economic Characteristics

The major economic activities in the county are Agriculture, Tourism, Industry, and trade and commerce.

3.8 3.3.1 Agriculture

The agricultural activities include crop farming, livestock production, fish production and poultry farming. Farming is mainly practiced at household level (subsistence-) through irrigation along the Rivers Turkwel and Kerio. No cash crop being grown but cotton was being done at Katilu Irrigation Scheme but stopped. Livestock production is the main source of livelihood in the county and it is done at a large scale (pastoralism) and the main types of livestock bred in the county are cows, goats and sheep (shoats), camels, donkeys and poultry and are mainly indigenous.

Fishing is the major activity in Lake Turkana and there are many species of fish that are harvested in the lake including tilapia, mudfish, Nile perch and king fish among others. The county has twenty three registered landing beaches and some of these are Long`ech, Eliye Springs, Kalimapus/Namadak, Merier, Lowareng`ak, Lomekwi, and Kalokol.

3.9 3.3.2 Tourism

The main tourism attractions in the county are; Lake Turkana, which is protected by UNESCO as a World Heritage Site, Central Island Marine parks within the lake, and Turkana South Game Reserve.

3.10 3.3.3 Industry

There exists only one industry in the county known as Turkana Meat Processors Limited is the only industry in the county though there is potential for fish, mineral water and cement industries due to the availability of enough raw materials. The mining activities of gold prospects and gemstones occur in small scale.

3.11 3.3.4 Trade and Commerce

The county has three urban centres namely Lodwar, Kakuma and Lokichoggio. Lodwar is the most developed with more infrastructural and social amenities. There are nine market centres in the entire county. There are few lending institutions due to unfavourable business environment, which has limited access to financial services and lack of properly organized marketing in the county.

3.12 3.4 Infrastructure

3.13 3.4.1 Transport Infrastructure

The county road network is poorly developed with a total road network of 5,496.2 km of which 488.5 km are bitumen, and 5007.7 km earth surface. Air transport in the county is not developed and there is only one airport in Lokichogio and 22 air strips across the county.

3.14 3.4.2 Water & Sanitation

The main water sources in the county are hand dug shallow wells, piped water and river water which are of low quality and access to quality water is still a big problem for the county. The county has only one water supply company called LOWASCO that only supply water in Lodwar town and the rest of the areas get water from the boreholes, and shallow wells dug which respective Water Users Associations manage. The latrine coverage is between 6 -14 % in the whole county hence it remains a big challenge.

3.15 3.4.3 Health

Access to health facilities in the county is still low due to few health facilities compared to the land mass and the local population. There are four level IV hospital, 9 health

centers and 71 dispensaries. Staffing of existing facilities is low; Doctor Population ratio stands at 1:70,000 while nurse/population ratio is 1:5,200 which is inadequate.

3.16 3.4.4 Education

The county has low level of educational establishments with only two university campuses and two colleges (KMTC and ECD Teachers College). The campuses are Mount Kenya University has a satellite campus in Lodwar which is a branch of the institution 's Eldoret campus while the University of Nairobi has a campus in Lokichoggio. There are also two polytechnics namely Kakuma Women Home Crafts and Lodwar Youth Polytechnic.

3.17 3.4.5 Energy

The county has limitation in power supply and there is high potential for wind and solar energy. The hydro-electric power from the national grid only connects to Kainuk Centre in the south.

3.18 3.4.6 Information and Communication Technology

This is a major driver to the economy but the connection to the Internet access is limited in the county.

3.19 3.5 County's Comparative Advantage

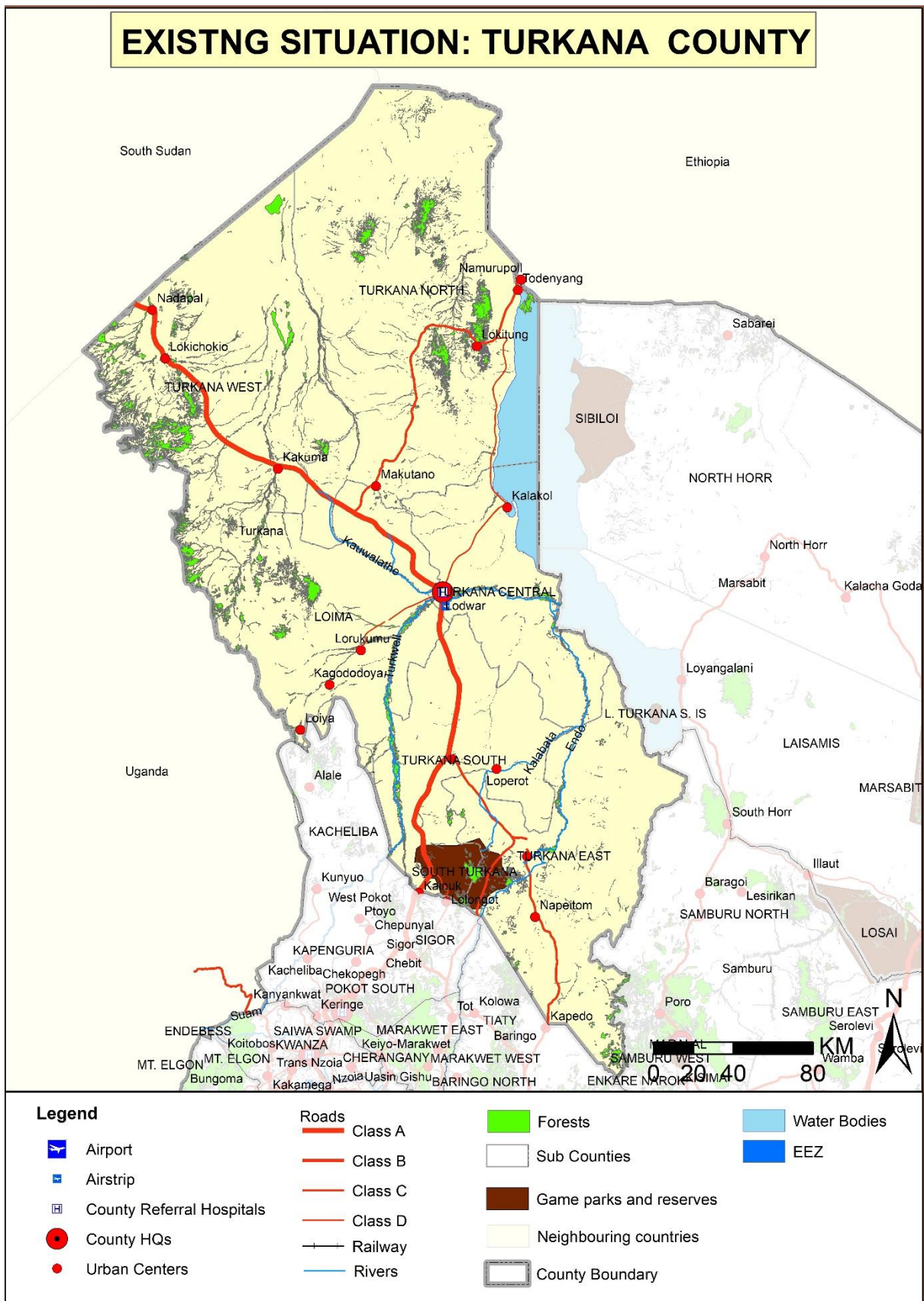
- i. Key natural resources which include
 - Water resources- Lake Turkana(largest permanent desert and alkaline lake in the world), underground water aquifers at Loitipis and Lodwar basin, 3 rivers(Omo, Turkwel, Kerio and Suam) ,Eliye spring, Turkwell dam
 - Huge mineral deposits Gold & Gemstones, Crude oil at Lokichar Basin
 - The presence of mountain such as Loima, Lorengippi, Mogila, Songot, Kalapata, Loru, Kailongol and Silale .The hills include Tepes, Lokwanamor, Lorionotom Hills, Pelekech Hills and Loima Hills characterized with dense forests
 - Wildlife including crocodiles,hippos, lions, cheetahs, zebras, hyenas, elephants, gazelles, dikdiks among others.
 - Parks - 3 national parks (Sibilo, Central Island National Park, South Island National Park and Lake Turkana National Park listed as one of the world heritage sites),
 - Museums- Loiyangalani national museum,
- ii. Presence of key national projects such as (Lamu Port South Sudan and Ethiopia Transport Corridor) LAPSET which connects Kenya with Ethiopia and South Sudan from Lamu
- iii. Existing National Trunk roads (Nairobi –Liboi and Isibania-Lokichoggio)
- iv. Presence of Lokichoggio International airport and 22 airstrips including Lodwar airstrip, Lokichar airstrip and Kakuma airstrip among others.
- v. Largest county in Kenya in terms of land size measuring 77,000 Km² with varying potentials
- vi. High green energy potential in wind and solar.

- vii. Presence of Turkana Meat Processors Limited in the county and the only industry.
- viii. Strategic geographical location of the county as it borders Ethiopia, South Sudan and Uganda

The table below describes the existing situation of Turkana County;

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Map 2: Existing situation of Turkana County



Source: Department of Physical Plann

4 DEVELOPMENT STRATEGIES AND POLICY GUIDELINES FOR TURKANA COUNTY

4.1 County Specific Issues and Development Strategies

This section provides strategies for spatial growth and development of the County by addressing the factors that prevent the County from achieving the intended development goals and objectives.

The development strategies aim at managing the overall development impacts, optimizing use of natural resources, creating a balanced County 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
- Promoting balanced Intra- County development
- Rural development in the county
- Urbanization

The following are detailed NSP sector-specific issues and strategies that apply to Turkana County:

Table 3: County Specific Issues & Development Strategies

Strategy 1: Managing Global Competitiveness		
Opportunities	Constraints	Strategies
Rich natural resource endowment comprising of extractive minerals(oil), wildlife(crocodiles), water including lake Turkana and 3 major rivers, energy resources- (solar, Wind) which present numerous opportunities for industrialization, fishing, tourism and energy production.	<ul style="list-style-type: none"> ✓ Underdeveloped transport system ✓ Unsupportive land tenure system ✓ Insecurity ✓ Low investment & under exploitation of the potentials i.e. energy 	<ul style="list-style-type: none"> ✓ Develop integrated national and county transport system in Turkana County such as LAPSSSET ✓ Harness the renewable and green energy sources to increase the energy capacity and reduce the cost ✓ Secure land for harnessing the green energy ✓ Promote blue economy through exploitation of Lake Turkana water masses and its resources ✓ Optimize resource exploitation in the

		<ul style="list-style-type: none"> ✓ Encourage locations of resource-based industries where resources are located like Oil
High potential for tourism through diverse sites such as Lake Turkana, wildlife and archeological sites.	<ul style="list-style-type: none"> ✓ Poor infrastructure connecting ✓ Insecurity (highway banditry and cattle rustling) ✓ Under developed tourism potential 	<ul style="list-style-type: none"> ✓ Develop tourism infrastructure ✓ Maximize the exploitation of tourism potentials in the county ✓ Enhance community policing in the county
Conducive environment and resources such as land for large scale production of livestock	<ul style="list-style-type: none"> ✓ Regular drought and famine ✓ Poor cultural practices ✓ Insecurity (cattle rustling) ✓ Unreliable Supply and High Cost of Energy 	<ul style="list-style-type: none"> ✓ Promote large scale livestock production and livestock products value addition ✓ Public sensitization on the need for change in cultural practices
Strategic location- The county is strategically well-positioned to benefit from within and outside countries that it borders such as Ethiopia, South Sudan, Uganda and Somalia	<ul style="list-style-type: none"> ✓ Poor road connectivity in the county 	<ul style="list-style-type: none"> ✓ Provide land for development of transport infrastructure to the neighboring countries and the rest of the country
Strategy 2: Optimizing Land and Natural Resources		
Sector: Agriculture		
Opportunities	Constraints	Strategies
Large scale livestock areas (rangeland areas)- Land capable for supporting large scale livestock production <ul style="list-style-type: none"> ✓ Availability of livestock such as cows, goats and sheep (shoats), camels and donkeys among others ✓ Vast land 	<ul style="list-style-type: none"> ✓ Regular droughts and unreliable rainfall ✓ Poor agricultural support infrastructure ✓ Poor animal husbandry-only indigenous breeds ✓ Insecurity of land tenure ✓ Effects of climate change ✓ Urban sprawl to pastoral land 	<ul style="list-style-type: none"> ✓ Improve transportation infrastructure in agricultural areas ✓ Modernize livestock production ✓ Diversify livelihood ✓ Improve security in the county ✓ Encourage Plan-led development that is responsive to local needs and resources ✓ Develop and implement approved plans to contain urban growth
Irrigation Potential Areas- <ul style="list-style-type: none"> ✓ Taking place along River Turkwel and Kerio ✓ Existence of cotton irrigation Scheme at Katilu that is not functional 	<ul style="list-style-type: none"> ✓ Poor agricultural support infrastructure ✓ Inappropriate land use practices -subsistence farming (no cash crop) ✓ Inadequate water for irrigation ✓ Inadequate area under irrigation ✓ Dilapidated irrigation scheme structures ✓ Inadequate institutional capacity and linkages 	<ul style="list-style-type: none"> ✓ Promote the use of appropriate farm inputs and technology by providing subsidies and incentives ✓ Improve transport infrastructure in agricultural areas ✓ Modernize and diversify agricultural productivity ✓ Provide agricultural support infrastructure that match the function ✓ Intensify irrigated agriculture

<p>Lake and river fishing areas:</p> <ul style="list-style-type: none"> ✓ Presence of Lake Turkana and the 3 major rivers. ✓ Presence of 23 registered landing beaches. 	<ul style="list-style-type: none"> ✓ Pollution of water bodies and unsustainable over-abstraction of ✓ Lack of appropriate fishing infrastructure ✓ Untapped river potential for fishing 	<ul style="list-style-type: none"> ✓ Enforce existing regulations on water pollution and regulate the abstraction of water ✓ Map, gazette and protect all important fishing areas ✓ Develop fishing infrastructure in the county. ✓ Expand the fishing potentials
Sector: Conservation and Protection Areas		
<p>Conservation areas (ASALs):</p> <ul style="list-style-type: none"> ✓ Potential for large scale livestock production and tourism ✓ The largest county in Kenya (77000km²) 	<ul style="list-style-type: none"> ✓ Soil erosion ✓ Overstocking ✓ Inadequate water ✓ Underutilized tourism potential 	<ul style="list-style-type: none"> ✓ Enhance and adopt soil erosion control and conservation measures ✓ Commercialize livestock keeping ✓ Provide requisite livestock support infrastructure ✓ Exploit tourism potential
<p>Protection Areas (Rank 2 Water bodies (Lakes and rivers), parks, mountains, hills and conservancies): Tourism</p> <ul style="list-style-type: none"> ✓ The presence of Lake Turkana ✓ The presence of mountain and Hills. ✓ Presence of 3 National parks. 	<ul style="list-style-type: none"> ✓ Drying up of water sources due to Unsustainable abstraction ✓ Pollution and destruction of lakes and rivers ecosystem ✓ Encroachment by human settlement and activities 	<ul style="list-style-type: none"> ✓ Control water abstraction ✓ Preserve and conserve natural biodiversity ✓ Control development in the parks and only hotels to be permitted; No change of use is permitted except for conservation purpose
Sector: Natural Resources		
<p>Energy – wind, geothermal, solar & hydroelectric energy potentials. Opportunities include reduced energy costs And transition to green energy sources</p>	<ul style="list-style-type: none"> ✓ Inadequate energy (low electric power coverage) ✓ Untapped energy potentials ✓ Inadequate technology and exploration infrastructure ✓ High costs of exploiting available energy resources 	<ul style="list-style-type: none"> ✓ Sensitize the community to use other renewable energy sources ✓ Optimize utilization of the available renewable energy potentials ✓ Invest in appropriate technology and infrastructure ✓ Undertake further exploration of the available energy resources such as geothermal, solar and wind
<p>Minerals - oil, gold , gemstones and crude oil (Lokichar Basin)</p> <ul style="list-style-type: none"> ✓ Oil exploration in the county ✓ LAPSSET corridor development 	<ul style="list-style-type: none"> ✓ Underutilized potential ✓ Inadequate technology and exploration infrastructure 	<ul style="list-style-type: none"> ✓ Enhance cooperation and partnerships in minerals exploration in the county ✓ Invest in appropriate technology and infrastructure ✓ Optimize the utilization of the available minerals in the county
<p>Underground water- Existence of water resources i.e springs, rivers & lakes</p> <ul style="list-style-type: none"> ✓ Increase of water stock ✓ Expansion of economic possibilities such as irrigation, production of hydroelectric power 	<ul style="list-style-type: none"> ✓ Untapped potential ✓ Uncoordinated, unsustainable & inadequate technology in exploitation of underground water in urban areas ✓ Prolonged drought & dropping of the underground water table levels 	<ul style="list-style-type: none"> ✓ Regulate the exploitation of underground water potential ✓ Optimize the use of underground water for irrigation in dry areas. ✓ Invest in appropriate technology and infrastructure
Sector: Industry		

<p>Urban & Rural Based Industries Agro-based industries Cottage industries and crafts Mineral-based industries Availability of raw materials</p> <ul style="list-style-type: none"> ✓ Existence of rural growth centres ✓ Large scale livestock & fishing potential ✓ Mineral mining potential ✓ Basketry & Weaving potential 	<ul style="list-style-type: none"> ✓ Limited no of industries ✓ Low adoption of technology for value addition ✓ Poor transport linkage to markets ✓ Underdeveloped markets ✓ Inadequate energy 	<ul style="list-style-type: none"> ✓ Direct raw material-oriented industries to rural growth centres and high potential areas ✓ Diversify energy production sources to reduce costs of production and enhance reliability ✓ Provide adequate infrastructure and utilities, skilled labor and favorable government policies ✓ Establish industrial parks in the county ✓ Provide adequate supportive infrastructure i.e transport
Sector: Tourism		
<p>Northern circuit: Tourism potential-The main tourism attraction sites in the county are; Lake Turkana, Central Island Marine parks within the lake, and Turkana South Game Reserve. Cultural tourism (4 sites of Stone Age cultures. Others include; Sibilo National Park and two islands on Lake Turkana</p>	<ul style="list-style-type: none"> ✓ Underdeveloped and Underexploited tourism potentials (sites and products) ✓ Limited safety and security measures ✓ Poor marketing strategies to promote tourism ✓ Weak integration of ICT in the development and management of the tourism value chain 	<ul style="list-style-type: none"> ✓ Strict enforcement of the existing regulations for safeguarding protection areas. ✓ Promote domestic tourism by providing incentives and subsidies ✓ Undertake rapid tourism resource inventory, mapping & zoning ✓ Invest in ICT infrastructure and capitalize on online marketing ✓ Enhance security in tourism potential areas ✓ Sensitize public on the tourism activities.
Sector: Housing		
<p>Housing requirement in the County</p> <ul style="list-style-type: none"> ✓ Availability of land for housing development ✓ Room for PPP ✓ Availability of local building materials and technology that are more affordable ✓ Availability of infrastructure in some areas 	<ul style="list-style-type: none"> ✓ Lack of enforcement of existing legislation on housing development and land use ✓ Deficit in good quality housing supply ✓ Little government involvement in housing provision ✓ Slum proliferation ✓ Insecurity of tenure, land ownership for speculative purposes and unregulated land acquisition for housing developments ✓ Inadequate transport infrastructure and utilities 	<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 ✓ 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 ✓ Impose a progressive tax over and above the current land rents and rates on vacant urban land
Sector: Transport		
<p>Road:</p> <ul style="list-style-type: none"> ✓ Presence of key national projects such as (Lamu Port South Sudan and Ethiopia Transport Corridor) LAPSSSET. ✓ Existing National Trunk roads; Nairobi - Liboi and Isibania-Lokichogio. <p>Opportunities; Exploitation of untapped resources and</p>	<ul style="list-style-type: none"> ✓ Poorly developed road network and conditions ✓ High cost of road construction and maintenance ✓ Inadequate road and NMT infrastructure ✓ Encroachment and/ or grabbing of road reserves ✓ Unexploited regional role of the transport system 	<ul style="list-style-type: none"> ✓ Improve and open up more roads ✓ Develop road infrastructure including drainage and bridges ✓ Beef up security along the major roads ✓ Integrate transport corridor planning ✓ Improve road & NMT infrastructure ✓ Repossess and revert all illegally acquired land for roads infrastructure

opening up of undeveloped areas such the northern parts of Kenya	<ul style="list-style-type: none"> ✓ Transport system not fully integrated ✓ Urban environmental pollution 	<ul style="list-style-type: none"> ✓ Preserve and secure adequate land for future transport and other related infrastructural development ✓ Encourage the use of green transport; ✓ Connect the county headquarters (Lodwar) with proper transportation system ✓ Formulate regulations and guidelines to control development along transportation corridors
Air: Presence of International airport in Lokichoggio and 22 air strips across the county. Opportunities; Increased trade and investments and opening up of undeveloped areas such as northern parts of Kenya	<ul style="list-style-type: none"> ✓ Poor conditions of the airstrips ✓ Insufficient and ineffective linkages between airports and other transport modes ✓ High maintenance cost ✓ Encroachment/ grabbing of airports/airstrip influence area 	<ul style="list-style-type: none"> ✓ Improve and expand existing airport and airstrips ✓ Improve linkages between airport and the urban centres ✓ Enforce development control measures within and around airport and airstrips ✓ Plan and implement spatial plans
Pipeline: Proposed pipeline under LAPSSSET	<ul style="list-style-type: none"> ✓ The pipeline's interface with other transport modes like roads and water transport need to be planned and integrated efficiently 	<ul style="list-style-type: none"> ✓ Develop the pipeline and provide the requisite infrastructure ✓ Integrate the pipeline transport with other transport modes such as road, air and water in the county ✓ Expand the pipeline to enhance regional integration
Sector: Public Utilities		
Water and Sanitation: <ul style="list-style-type: none"> ✓ Presence of water resources i.e.hand dug shallow wells, boreholes, piped water as other sources of water supply ✓ Existence of LOWASCO ✓ Government and NGOs support 	<ul style="list-style-type: none"> ✓ Inadequate accessibility to portable water points (Long distance coverage to water points) ✓ Inadequate & poor water quality ✓ Inadequate equipment for water storage ✓ High operation costs ✓ Encroachment of human activities into catchment areas ✓ Prevalence of water-borne diseases ✓ Inadequate sanitation facilities in urban and rural areas ✓ Declining water levels in boreholes, wells and springs due to climate change 	<ul style="list-style-type: none"> ✓ Protect waters sources including dams, rivers, underground water aquifers, springs and lakes among others ✓ Develop appropriate technology to desalinate water ✓ Invest in water harvesting technology and storage facilities ✓ Establish proper water resource mapping in the county ✓ Exploit underground water to increase the total supply of water ✓ Develop and expand appropriate water reticulation network beyond Lodwar town ✓ Develop and upgrade appropriate sanitation infrastructure. ✓ Develop sewerage system in the major towns
Solid waste management: <ul style="list-style-type: none"> ✓ Existing policies on waste management activities in the County ✓ Private – Public partnership 	<ul style="list-style-type: none"> ✓ Lack of systems of solid waste management ✓ Limited proper disposal sites 	<ul style="list-style-type: none"> ✓ Construct and upgrade integrated solid waste facilities to enable proper collection, sorting, treatment and disposal of solid waste ✓ Promote the 7Rs (Rethink, refuse, reduce, reuse, rot, refill, recycle) guidelines for waste management

<p>Energy:</p> <ul style="list-style-type: none"> ✓ Availability of resources for green energy such as strong winds, geothermal and solar ✓ Growing energy demand 	<ul style="list-style-type: none"> ✓ Inadequate supply of energy ✓ Under exploitation(untapped) of green energy potentials ✓ Inadequate public awareness on alternative energy sources ✓ Inadequate technological support 	<ul style="list-style-type: none"> ✓ Invest in renewable energy sources (solar, wind and geothermal) ✓ Develop a policy to guide and regulate the exploitation and use of potential green energy sources by developing standards and promoting research and planning
Sector: Information and Communication		
<p>Provision of Efficient ICT Services in the County:</p> <ul style="list-style-type: none"> ✓ Availability of skilled and affordable labor ✓ Emergence of private ICT centers 	<ul style="list-style-type: none"> ✓ Limited ICT development in the county ✓ Limited access to internet in both rural and urban areas ✓ Poor connection and reliability ✓ High connection costs 	<ul style="list-style-type: none"> ✓ Mainstream ICT at all sectors to promote service, increase efficiency and productivity and improve on existing platforms such as Huduma centre, BPO services and E-government ✓ Expand the fiber optic network
Sector: Social Infrastructure		
<p>Higher Education: Existence of two university campuses and two colleges;</p>	<ul style="list-style-type: none"> ✓ Low literacy levels& High levels of poverty ✓ Insecurity (inter-boundary bandits) ✓ Inadequate education infrastructure & facilities ✓ Inadequate human resource ✓ Little emphasis on innovation and research in courses offered ✓ Skewed distribution of institutions in favor of urban areas 	<ul style="list-style-type: none"> ✓ Revive and operationalize the existing training institutions such as youth polytechnics and home crafts ✓ Develop more institutions of higher learning and equip them with requisite infrastructure. ✓ Encourage specialization in tertiary learning based on county and region's potentials ✓ Promote access to higher learning institutions ✓ Encourage the active fusion of innovation and research into coursework taught by colleges and universities
<p>Sporting Infrastructure:</p> <ul style="list-style-type: none"> ✓ Existence of active youths in the county ✓ Goodwill and support from development partners in the county ✓ Availability of land for infrastructure development 	<ul style="list-style-type: none"> ✓ Insecurity ✓ Negative cultural practices & beliefs on youth ✓ Poor management of existing infrastructure ✓ Skewed distribution ✓ Little modernization and upgrading of sporting infrastructure ✓ Little promotion of sports as a potential income earner in the county 	<ul style="list-style-type: none"> ✓ Revamp and upgrade the existing sporting infrastructure ✓ Address imbalances in distribution of sporting infrastructure by establishing modern stadium in the county ✓ Beef up security in the county ✓ Encourage private entities to take part in the development and management of sporting infrastructure ✓ Set up talent academies to harness sporting talent throughout the county and increase utilization of the infrastructure
<p>Health Care:</p> <ul style="list-style-type: none"> ✓ Existence of 4 level four hospitals in the county ✓ Presence of many NGOs in the health centre in the county 	<ul style="list-style-type: none"> ✓ Inadequate health facilities ✓ Understaffing ✓ Extremely high numbers of patients, straining the available infrastructure and resources 	<ul style="list-style-type: none"> ✓ Establish more health facilities to increase accessibility to health services ✓ Increase the number of beds in hospitals by building and furnishing more wards as may be necessary

<ul style="list-style-type: none"> ✓ Greater drive by both county and national governments to upgrade the existing facilities ✓ Interest by foreign and internal research agencies to conduct research and donor support ✓ Devolution 	<ul style="list-style-type: none"> ✓ Inadequate medical supplies ✓ Little adoption of new technologies ✓ Unaffordability of specialized care and advanced medical procedures ✓ Inappropriate working conditions for personnel and subordinate staff 	<ul style="list-style-type: none"> ✓ Strive towards reaching the WHO recommended professional to patient ratio by training employing more qualified staffs ✓ Improve working conditions for personnel by hiring new staff to augment the existent workforce ✓ Subsidize the cost of specialized services to increase accessibility by low-income earners
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STRATEGY 3: PROMOTING BALANCED REGIONAL DEVELOPMENT

North Region:

Opportunity	Constraint	Strategy
Potentials include; <ul style="list-style-type: none"> ✓ Minerals for mining ✓ Irrigated agriculture ✓ Tourism sites /Filming ✓ Large scale livestock production ✓ Fishing ✓ Oil and renewable energy ✓ 	<ul style="list-style-type: none"> ✓ Inadequate and unreliable rain ✓ Low mechanization in agriculture. ✓ Inadequate market for produce. ✓ Limited community knowledge on i.e drought resistant crop ✓ Inadequate technical support from National Government and Development Partners. ✓ Low level of adoption of technology 	<ul style="list-style-type: none"> ➤ Strengthen the already established North Rift economic bloc ✓ Encourage equitable exploitation and sound management of mineral resources ✓ Promote investment in sustainable tourism including eco-tourism ✓ Promote irrigation activities ✓ Promote industrialization and value addition through the provision of support infrastructure

STRATEGY 4: PROMOTING RURAL DEVELOPMENT

TRANSITIONAL (Poverty level below 50-70%) Potentials include; <ul style="list-style-type: none"> ✓ Resource endowment-agriculture, large scale livestock production, tourism-based resources ✓ Mixed agriculture and commercial livestock production ✓ Urbanization ✓ Existing infrastructure ✓ Existing policy framework 	<ul style="list-style-type: none"> ✓ Under-exploitation of resources like oil and water in the county ✓ Weak rural-urban linkages ✓ Inefficient and dilapidated infrastructure facilities and services 	<ul style="list-style-type: none"> ✓ Develop appropriate transport and infrastructural facilities and services ✓ Promote rural industrialization & tourism, agro based industries through establishment of production units in the rural areas in relation to their potential ✓ Promote urban containment to reduce effects of urban sprawl ✓ Promote sustainable land uses ✓ Provide a spatial framework for harnessing renewable energy ✓ Enhance climate change adaptation and desertification mitigation in the county
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STRATEGY 5: URBANIZATION STRATEGY

<ul style="list-style-type: none"> ✓ Turkana county; Lodwar town as county headquarters and gateway town, Eliye Springs as a resort city and all the urban centres that will grow as a result of LAPSSET Corridor development. 	<ul style="list-style-type: none"> ✓ Skewed development of urban centers in the County ✓ Urban sprawl ✓ Lack of specialization of the urban and rural centers ✓ Unreliable transport system ✓ Governance challenges and slow implementation of development plans ✓ Poor waste management 	<ul style="list-style-type: none"> ✓ Plan and provide requisite infrastructure in the towns ✓ Promote the development of centres as per their potential and population; local, market, rural and urban centres ✓ Create an enabling environment for investors ✓ Provide alternative areas for development of urban centres and
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<ul style="list-style-type: none"> ✓ Existing and proposed infrastructure development like LAPSSET Transport Corridor ✓ Supporting policies ✓ Devolution 		<ul style="list-style-type: none"> provide services and infrastructure to stimulate rural growth ✓ Strengthen urban rural linkages through provision of integrated transportation and communication systems ✓ Prepare and implement development plans to contain human settlements ✓ Develop major towns in the county such as Lodwar, Lokichoggi and Kakuma to serve their relevant function
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4.2 National Spatial Plan Policy Guidelines and Measures for Turkana County

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 and national competitiveness and economic efficiency, optimizing the use of land and natural resources, promoting 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 nationally competitive as an investment destination, especially in emerging sectors such as the ICT. The policies will 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 Turkana County.

Table 4: NSP Policy Guidelines for Turkana County

Thematic Area	Policy guideline	Measures
<p>Resource growth potential: Region 3-North</p> <ul style="list-style-type: none"> ✓ Livestock production ✓ Water resources ✓ Fisheries ✓ Culture and tourism ✓ Agriculture (irrigation) ✓ Mineral resources 	<ul style="list-style-type: none"> ✓ Sustainable use and exploitation of natural resources ✓ Environmental Conservation ✓ Balanced growth ✓ Increased investment in social and physical infrastructure 	<ul style="list-style-type: none"> ✓ Adopt selective development concentration ✓ Construct key infrastructure to support resource exploitation and development ✓ Conduct resource mapping and exploitation ✓ Protect the environmentally sensitive areas and mining zones ✓ Utilize water resources for agriculture and food production sustainably ✓ Develop urban areas around key human settlement and investment hubs such as Lodwar, Kakuma, Lokichoggio ✓ Enhanced agriculture and food production along the major rivers like Turkwel, Kerio and Suam

Thematic Area	Policy guideline	Measures
<p>Enhancing National competitiveness Lodwar is proposed as urban conurbations due to locational advantages to act as alternative growth areas. Discovery of oil prospect in the county and LAPSSET Corridor</p>	<p>Adoption of selective concentration in planning and location of urban based economic activities in all counties to leverage on national competitiveness</p>	<ul style="list-style-type: none"> ✓ Concentrate urban based economic activities in selected urban area such as Lodwar to spur its economic development ✓ Exploit natural resources endowments in the County ✓ Prioritize the preparation of Spatial Development Plans in the selected towns to guide development in the County
	<p>The major urban areas within the County shall be planned and provided with appropriate infrastructure to enhance efficiency and quality of life</p>	<ul style="list-style-type: none"> ✓ Enhance the Livability Index for urban areas through provision of appropriate infrastructure and services ✓ Establish an efficient public transportation system ✓ Provide appropriate trunk infrastructure in the form of reliable energy, water, sanitation and ICT. ✓ Advance technological readiness through the provision of technological centers linked to different levels all over the county eg Science parks, Research laboratories etc. ✓ Improve the road infrastructure by providing for modal split, linkages and interchanges.
	<p>Optimal and Sustainable utilization of land and natural resources of the less developed areas to enhance national competitiveness</p>	<ul style="list-style-type: none"> ✓ Encourage the transformation from traditional farming and livestock keeping methods to modern practices. ✓ Widen the economic base of the less developed regions and places through strengthening of agricultural downstream processing of agricultural products. ✓ Identify and develop the tourism potential within the northern circuit. ✓ Explore and exploit the mineral, energy and water potentials. ✓ Provide transportation networks and other infrastructure necessary to support exploitation of land and other natural resources. ✓ Support development of urban areas in the less developed areas in the county to catalyze development
	<p>Enhancing the efficiency of the transportation network to take advantage of the strategic location and position of the county.</p>	<ul style="list-style-type: none"> ✓ Develop the LAPSSET corridor to spur economic development in the northern region and improve linkage to Northern Africa region. ✓ Provide for robust transportation for efficient, modern and low -cost connectivity by air, road, water (lake) and fibre optic. ✓ Prepare spatial development plans for the main transportation corridors (Nairobi-Liboi and Isibania-Lokichogio) to guide the planning and development of the corridors for sustainable economic development and transportation

Thematic Area	Policy guideline	Measures
	Enhancing cooperation in spatial and economic planning with member states of the East African Community (EAC) and the Common Markets of East and Southern Africa (COMESA).	<ul style="list-style-type: none"> ✓ Undertake joint planning of trans-boundary resources such as River Omo, transport corridors (LAPSSET) and infrastructure with the neighboring counties like Ethiopia
	Promoting the development of the Blue Economy and its integration into the economy of the County	<ul style="list-style-type: none"> ✓ Develop human capacity in partnership with the academia to conduct research, explore and exploit the resources of Lake Turkana. ✓ Ensure the formulation and implementation of an integrated lake and land use plan ✓ Plan, manage and effectively govern the use of lake space and resources, applying inclusive methods and the ecosystem approach. ✓ Develop and apply standards, guidelines and best practices that support a sustainable blue economy i.e applying the global sustainability standards, guidelines and best practices. ✓ Develop the requisite infrastructure for the development of the Blue Economy (lake) ✓ Establish and implement a framework for beach management that ensures public access as well as protection and conservation of the beaches within Lake Turkana
Modernizing Agriculture	Agro climatic zones IV, V and VI (rangelands) to be developed and used optimally for large scale commercial production of livestock to support downstream processing of livestock products and promote balanced regional development	<ul style="list-style-type: none"> ✓ Prepare spatial plans within the identified zone to guide and promote the development of large-scale livestock productions. ✓ Prioritize provision of requisite infrastructure (water pans, dams, cold storage facilities and laboratories) to support ranching in the county ✓ Modernize livestock keeping through appropriate animal husbandry (high-yielding breeds, extension services and research and disease control), product processing and timely marketing. ✓ Adopt appropriate rangelands management practices including observance of carrying capacity, conservation of the natural vegetation and adaptation and mitigation against climate change and its impacts. ✓ Educate communities to be more resilient to the perennial drought cycles by developing early warning systems, prompt response and recovery systems. ✓ Provide transport connectivity and adequate inter and intra-road networks as well as other social and physical infrastructure ✓ Enhance the county's comparative advantage in tourism i.e archaeological sites ✓ Increase livelihood diversification, productivity and competitiveness and create an investment environment based on local dynamics and internal potentials

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Establish infant industries in rural and rangeland areas for value addition and investments opportunities
	<p>Promoting investment in irrigation agriculture for high value crops by optimizing the irrigation potential of the county along the rivers like Turkwel, Kerio and Suam</p>	<ul style="list-style-type: none"> ✓ Rehabilitate and expand existing irrigations schemes (the defunct Katilu cotton irrigation scheme). ✓ Undertake research to identify the irrigation potentials in the county ✓ Establish new irrigation schemes in areas with irrigation potential ✓ Encourage small holder irrigation schemes through sensitization campaigns and reducing the cost of irrigation equipment
	<p>Optimizing the fishing potential of the county to increase the food stock and export earnings</p>	<ul style="list-style-type: none"> ✓ Protect the inland fishing in Lake Turkana from over fishing, pollution and destruction of the breeding grounds ✓ Encourage small holder farmers to establish fish farms in areas with potential throughout the county ✓ Undertake research to identify the areas with potential for fish farming(aquaculture) ✓ Provide appropriate infrastructure to support the fishing industry ✓ Increase access to fishing equipment by making them affordable through reduced taxation
<p>Diversifying Tourism</p>	<p>Promoting diversification of tourism by offering diverse products in the different tourist circuits throughout the county.</p>	<ul style="list-style-type: none"> ✓ Plan and develop the Northern Circuit (inter-county) to offer; safari and wildlife, cultural and heritage, archeological and historical, filming ecotourism and adventure tourism products.
	<p>Provision of appropriate tourism support infrastructure and facilities</p>	<ul style="list-style-type: none"> ✓ Carry out an inventory of tourism infrastructure and facilities in the county. ✓ Develop the requisite tourism support infrastructure and facilities. ✓ Upgrade the existing tourism facilities and infrastructure. ✓ Adopt low carbon and green tourism infrastructure options. ✓ Increase bed capacity in tourist attraction areas and towns throughout the county. ✓ Provide and upgrade the ICT infrastructure to support tourism.
	<p>Protection and conservation of all tourist attraction areas and sites</p>	<ul style="list-style-type: none"> ✓ Identify, map and protect all tourist attraction sites and areas ✓ Prepare subject plans for the tourist sites ✓ Prohibit the location of incompatible land use activities. ✓ Strictly regulate developments within the tourist attraction sites.
	<p>Provision of appropriate transport infrastructure to link the different tourist circuits, attraction areas and sites</p>	<ul style="list-style-type: none"> ✓ Prepare and implement an integrated Tourism Transportation Master Plan. ✓ Upgrade the existing land transportation facilities. ✓ Upgrade the air transportation facilities. ✓ Encourage application of low carbon options in transport infrastructure

Thematic Area	Policy guideline	Measures
	Enhancing of governance of the tourism sector.	<ul style="list-style-type: none"> ✓ Prepare integrated spatial plans to guide development of the tourism sector. ✓ Prepare and implement national policies on land use and tourism ✓ Undertake research to identify more tourist attraction areas and sites. ✓ Enhance tourism dedicated security to the tourism sector. ✓ Identify and map potential eco-tourism development sites ✓ Undertake awareness campaigns on the value of eco-tourism to the industry players both locally and globally ✓ Develop standards for eco-tourism establishments ✓ Facilitate access to eco-tourism development incentive
	Preparation of spatial development plans to guide implementation of the flagship projects for the tourism sector	<ul style="list-style-type: none"> ✓ Prepare Lake Turkana (Eliye Springs) Resort City local physical development plan. ✓ Prepare local physical development plans to actualize the Premium Parks Initiative ✓ Prepare Ecosystem area plans for all parks in the county and the county government to address problems of unplanned development of lodges and poor access roads. ✓ Prepare a local physical development plan to actualize the two phases of the Eden Cradle of Humankind project to position the Lake Turkana Basin as the renowned place for human origins internationally.
Managing Human Settlements	Anticipation and accommodation of the expected increase in population in urban areas particularly for the main growth areas (Lodwar, Kakuma & Lokichoggio).	<ul style="list-style-type: none"> ✓ Increase the housing stock by planning and redeveloping existing housing areas. ✓ Plan and designate land for new housing schemes in the county ✓ Upgrade the existing and provide additional infrastructure and facilities to support housing development in the urban areas within the county. ✓ Formulate enabling local policy frameworks to support employment and income generation. ✓ Locate industrial and service development activities with the global reach in the main urban areas ✓ Provide efficient transportation and quality infrastructure in human settlements to support industrial and service sectors. ✓ Promote adoption of technology and fiscal incentives and market support for the informal sector.
	Developing and supporting of the alternative urban areas to promote balanced regional development and spur growth.	<ul style="list-style-type: none"> ✓ Develop Lodwar in accordance with its regional potentials as an alternative to Nairobi, Mombasa and Kisumu ✓ Develop other urban centres as intermediate centres between the rural and the principal town(Lodwar).

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Provide Lodwar and other urban centres with the requisite infrastructure to support their growth and development. ✓ Prepare local physical development plan to define the urban growth limits for Lodwar. ✓ 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.
	Rationalization and supporting of rural growth centres to act as central places and settlements clustered to free the rangelands	<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 rangelands by discouraging land fragmentation. ✓ Progressively link growth centres by means of secondary roads as a minimum. ✓ Incorporate disaster management and mitigation in planning of rural settlements.
	Developing human settlements in line with environmental and natural resources conservation to improve living conditions	<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. ✓ 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-introduce public transport in the major urban centres ✓ Aim for zero carbon building standards by 2032 and ensure all buildings meet energy efficiency criteria
	Provision of an efficient, reliable and effective transport system for human settlements	<ul style="list-style-type: none"> ✓ Plan and develop an integrated urban transport system to enhance provision of relevant modal split (road, water, air). ✓ Integrate land use and transportation planning to encourage development patterns which reduce transport demands ✓ Establish an effective transport management system that enhances the reliability and efficiency of the transport system

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ 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.
	Improving the management and governance of human settlements particularly the urban areas	<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.
	Managing and controlling peri-urban development to contain urban growth within its limits and protect rural land uses.	<ul style="list-style-type: none"> ✓ Formulate policy for urban containment and densification ✓ Formulate and implement planning legislation on peri-urban planning and management. ✓ Institute sanctions on idle land to encourage productive and sustainable land utilization. ✓ 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
Conserving the Natural Environment	Protecting and utilizing all environmentally sensitive areas in a sustainable manner	<p>Wetlands</p> <ul style="list-style-type: none"> ✓ Prepare integrated wetland resource management plans to promote sustainable use of freshwater and wetland resources (lakes, rivers, springs, dams) ✓ Develop and implement catchment-based wetland management plans for the Ramsar sites through a participatory process. ✓ Rehabilitate and restore the degraded wetlands, river banks and lake shores and promote and support establishment of constructed wetlands. ✓ Involve and empower communities in the management of fresh water and wetland ecosystems ✓ Promote and institutionalize payment for environmental utility services to support catchment protection and conservation. <p>Forest Ecosystems</p>

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Prepare integrated forest resource management plans to promote sustainable use of forest resources ✓ Develop and implement a national strategy for rehabilitation and restoration of degraded natural and indigenous forests and protect water catchment areas with active community involvement/participation ✓ Support effective implementation of the forest and other related policies and laws. ✓ Encourage development and implementation of appropriate forestry-based investment programmes and projects ✓ Involve and empower communities in the management of forest ecosystems ✓ Determine potential areas for farm/agro and dry land forestry ✓ Promote a forestation and agro-forestry through County Spatial Plan ✓ Map out potential areas for commercial plantation forestry ✓ Gazette, protect and rehabilitate degraded forests through re-forestation by replanting trees on land that were previously forests. ✓ Enforce legal and regulatory provisions for forest management and protection. ✓ Identify and protect indigenous forests from logging. ✓ Involve and empower communities in the management of forest ecosystems through controlled logging, agro-forestry, re-forestation and natural regeneration ✓ Encourage development and implementation of appropriate forestry-based investment programmes and projects.
	<p>Conserving and utilizing all environmentally fragile areas in a sustainable manner (ASALS)</p>	<ul style="list-style-type: none"> ✓ Develop and implement an Integrated Land Use (Development) Plan for the county (ASAL). ✓ Promote integrated natural resource management in the county. ✓ Ensure application of Integrated Water Resources Management (IWRM) in the county. ✓ Promote efficient adaptation measures for productive and sustainable resource management in the county. ✓ Mainstream dry land issues into all national development plans and policies. ✓ Involve and empower communities in the management of county ecosystems and promote environmental education and awareness ✓ Gazette and manage emergency drought reserve areas and encourage the development of buffer areas of crop and forage production as part of contingency planning.

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Mainstream climate foresight and climate adaptation into planning at all county levels by strengthening the climate resilience of communities in the county and promoting sustainable livelihoods ✓ Protect and increase forest cover, riverine vegetation and critical water catchment areas (rivers, lakes and springs) in the county
	<p>Integration of environmental concerns in policy formulation, resource planning and development processes to be done by county government agencies</p>	<ul style="list-style-type: none"> ✓ Manage waste and control pollution through research, legislation, use of viable technologies and enforcement of statutory mechanisms for the disposal of human and industrial waste, elimination of harmful emissions including those from factories and motor vehicles. ✓ Develop and maintain an inventory of all vital habitats in the county, and create a biodiversity information data base of all plant and animal species, indicating their potential use. ✓ Identify species which are rare and endangered with the aim of protecting them from extinction through the establishment, where necessary, of more biosphere reserves, national parks and reserves, and through their propagation and captive breeding. ✓ 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. ✓ Jointly with neighboring counties develop and implement harmonized Inter-county plans for sustainable management of trans-boundary resources like L.Turkana ,River Turkwel and River Suam ✓ Devise means to measure the value of unexploited natural resources, especially biodiversity, in economic terms. ✓ Translate into practical conservation actions the provisions of international conventions and agreements relating to conservation of biodiversity to which Kenya is a party. ✓ Implement the National Climate Change Strategy and the National Climate Change Action plan. ✓ Strengthen Environmental Governance and harmonize sectoral policies, legislation and regulations.
	<p>Mainstreaming of Community participation in the protection and conservation of natural resources</p>	<ul style="list-style-type: none"> ✓ Sensitize communities living around the natural resources on the need for conservation of the resources ✓ Develop mechanisms for sharing benefits accruing from the natural resources by the conservation agencies in consultation with the local communities

Thematic Area	Policy guideline	Measures
	Mainstreaming of climate change into the planning processes by the County Physical Planning department	<ul style="list-style-type: none"> ✓ Identify and map all disaster-prone areas for sustainable management. ✓ Build and strengthen research capacity on climate change and related environmental issues. ✓ Promote water conservation including rehabilitation and restoration of all water catchments. ✓ Promote the growing of drought tolerant traditional high value crops. ✓ Support sustainable livelihoods in the county which is a drought prone ✓ Develop and promote the use of green energy
Integrating the National Transportation Network	Integrating national/county transport and Land use planning	<ul style="list-style-type: none"> ✓ Establish a hierarchy of transportation systems comprising road, water (lake) and air services to link all major economic production areas in the county. ✓ Establish a comprehensive county road management information system by the Ministry/department responsible for roads for reference and compliance by all transport network providers. ✓ Incorporate the needs of persons with disability in all the planning, development and management of the transport network ✓ Repossess all illegally acquired land for transport infrastructure ✓ Plan urban based activities to support mass transit systems and reduce the need for travel. ✓ Enhance the planting of trees, greenery and mounds as buffer zones to roads and airports
	Developing an integrated and functional transport system for the national and urban areas	<p>Air Transport</p> <ul style="list-style-type: none"> ✓ Expand Lokichoggio airport. <p>Rail Transport</p> <ul style="list-style-type: none"> ✓ Develop the proposed priority railway route of Lamu-Lodwar <p>Road Transport</p> <ul style="list-style-type: none"> ✓ Extend the national transportation corridors consisting of road: <ul style="list-style-type: none"> i) Connect the northern corridor to the LAPSET corridor, Migori to Lokichar ii) Provide links between Marsabit and Lodwar ✓ Provide access and linkage, between county headquarter; neighboring county headquarters, sub-county headquarters and for local access and link them to national transportation corridors. ✓ Expand all roads connecting county headquarter to at least 60m and developed to bitumen standard (tarmac). ✓ Expand all roads connecting county headquarter (Lodwar) to sub-county headquarters to at least 30m and develop them to bitumen standard.

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Develop roads connecting infrastructure installations of national importance (LAPSET) and resource areas to bitumen standard.
	<p>Developing an efficient and affordable Public Transport for all urban areas in the county</p>	<ul style="list-style-type: none"> ✓ Adopt transit-oriented development in the planning, design and development of all public urban transport. ✓ Design and develop integrated transport networks that considers all different modes of transport ✓ Prioritize public transport while planning for urban transportation and progressively promote a modal split of 50:50 ✓ Undertake research on the optimal modal split for various categories of urban centres ✓ Designate, harmonize and regulate terminal, interchange and pick-up and drop-off facilities ✓ Establish a comprehensive transport management information system for all transport modes.
	<p>Developing of an urban transport policy that facilitates an integrated, balanced and environmentally sound urban transport system in which all modes efficiently play their roles.</p>	<ul style="list-style-type: none"> ✓ Develop policies to limit use of private transport and maximize on public transport ✓ County government to prepare its urban areas to provide a framework for development and management of public service termini by the private sector through public private participation ✓ 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 ✓ Plan and develop satellite towns to complement and decongest major urban areas ✓ Incorporate an integrated transport network in county and urban development plans ✓ Designate, plan and regulate strategic areas for taxis operation in all urban areas to enhance safety and order ✓ Promote the use of green energy in all transportation systems
	<p>Upholding of environmental conservation in the planning, development and management of the transportation network</p>	<ul style="list-style-type: none"> ✓ Construct and manage the transport network to abide by environmental regulations and standards ✓ Provide guidelines to regulate environmental conservation in the development and maintenance of the transport network during the preparation of integrated transport master plan, inter county, county and local spatial plans ✓ All transport network providers to implement international environmental legislation/ agreements e.g. the Clean Air Initiative resolutions that commit African countries to adopt less polluting fuels

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Enforce emission testing in all transport modes and set standards and guidelines for decommissioning of vehicles ✓ Promote the use of green energy in all transportation systems
Providing Appropriate Infrastructure	Provision of safe, adequate, reliable and affordable electricity for both urban and rural settlements	<ul style="list-style-type: none"> ✓ Tap into solar for large scale production in northern Kenya and other arid lands that have strong reliable sunshine throughout the year for sale to the national grid ✓ Provide safe connections for all informal settlements in urban areas for safety. Policy models need to be developed that aim to be pro-poor by increasing sensitivity to low-income urban residents ✓ Mainstream and enforce green energy options in the design of buildings ✓ Support the flagship projects that are geared towards increasing electricity supply from both renewable and non-renewable sources i.e. the on-going Geothermal power plant Olsuswa ✓ Increase access to electricity through upgrading and expansion of the national power transmission and distribution network.
	Promotion of the expansion and improvement of water reticulation systems to facilitate the access to clean, safe, adequate, reliable and affordable water in human settlements.	<ul style="list-style-type: none"> ✓ Construct and rehabilitate water supply systems in in the county. ✓ Incorporate water provision in all physical development plans ✓ Develop rainwater harvesting strategy and water storage investment and revise building by-laws to require all new development to have rain water harvesting. ✓ Plan all the villages and urban centres; ✓ Expand water supply in the proposed resort city of Lodwar(Eliye Springs) ✓ Construct and rehabilitate 150 rural water schemes annually, drill an average of 70 boreholes annually in areas lacking adequate surface water and construct 160 small dams/pans in the county (ASALs) ✓ Develop small dams/pans in the county. ✓ Build water kiosks and yard taps, develop water supply pipeline systems and sewers, and a comprehensive mapping of all water supplies systems in the rural settlements
	Promotion of a globally competitive, accessible and affordable higher education, training and research facilities	<ul style="list-style-type: none"> ✓ All universities and other tertiary institutions to invest in research, technology & innovation ✓ 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. ✓ Restructure higher education institutions to offer courses based on regional endowment to promote competitiveness and regional balance

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Mainstream ICT in higher education and training to provide online content to increase access ✓ Develop and upgrade physical infrastructure in all higher education institutions to increase their capacity ✓ Promote the delivery of university education and training system that is internationally competitive
	Establishment of a network of functional, efficient, safe, accessible and sustainable health infrastructure	<ul style="list-style-type: none"> ✓ Increase the utilization of services at lower levels of the health services and reduce self-referral to the higher levels of care ✓ 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 ✓ Improve reverse referral and feedback information systems ✓ Improve preparedness and response to emergencies and disasters ✓ Strengthen outreach systems for provision of health services to marginalized and vulnerable population ✓ Provide quality emergency health services at the point of need ✓ Establish fully fledged low – cost diagnostic centres and provide adequate screening and treatment facilities for persons with chronic or terminal conditions, including cancer, diabetes and kidney failure in every county
	Promotion of appropriate, quality, efficient and cost effective ICT infrastructure in both rural and urban areas	<ul style="list-style-type: none"> ✓ Integrate e-youth ICT platforms and the ICT department to establish a youth portal to enhance information access by the youth ✓ Develop and upgrade ICT Infrastructure in all the county ✓ Extend ICT infrastructure to cover all the rural and local growth centres. ✓ Mainstream use of ICT in all levels of county government and the private sector (e-government).
	Promotion of improvement of sanitation in human settlements through expansion of sewerage systems and waste management facilities	<ul style="list-style-type: none"> ✓ Service all urban settlements by a centralized sewerage treatment system and solid waste disposal facilities. ✓ Expand sanitation in the proposed resort city of Lodwar (LAPSSSET) corridor. ✓ Make provision for development of sewer systems, treatment works and solid waste disposal sites in all spatial plans prepared. ✓ Expansion of urban boundaries to be guided by investment in infrastructural services. ✓ Adopt the 7Rs (Rethink, refuse, reduce, reuse, rot, refill, recycle) in waste management. ✓ Undertake rehabilitation of storm water drainage systems in all urban areas.

Thematic Area	Policy guideline	Measures
		<ul style="list-style-type: none"> ✓ Construct waste water treatment and solid waste management plants in established permanent settlements in the county(arid)
	<p>Promotion of sports development through planning, developing, maintaining and rehabilitating the existing sporting infrastructures</p>	<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 the county stadium to international standards to enable the youth to actively develop and tap the immense talent in sports
<p>Towards a Rapidly Industrializing Nation</p>	<p>Promotion of the cluster development strategy to focus on proximity to raw materials and markets of region-specific products</p>	<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 ✓ Concentrate livestock produce industries in the county's rangelands ✓ Promote value addition in processing of local produce.
	<p>Identification, planning and servicing with appropriate infrastructure the specific sites for industrial development</p>	<ul style="list-style-type: none"> ✓ Plan and set aside land for industrial development in the county ✓ Develop SME and Industrial Parks in the county ✓ Integrate the industrialization process and environment conservation ✓ Provide an integrated, efficient, reliable and sustainable road transport infrastructure ✓ Increase availability of clean water and improve sanitation ✓ Encourage discharge of safe/ clean industrial waste into water bodies shall be encouraged ✓ Encourage adoption and utilization of ICT in the county
	<p>Provision of adequate and affordable energy supply for the industrial sector</p>	<ul style="list-style-type: none"> ✓ Provide reliable energy infrastructure by extending the national grid network ✓ Expand, modernize and upgrade electricity generation and supply ✓ Adopt renewable energy generation programmes by provision of incentives and enforcement of building laws requiring utilization of renewable energy ✓ Incentivize large industries to promote co-generation of power ✓ Promote the adoption of energy efficient technologies to lower the demand for energy

Map 3: NSP Proposal for Turkana



Source: Department of Physical Planning

5 IMPLEMENTATION AND ADOPTION OF THE GUIDELINES

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.

5.1 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 neighbourhood 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

5.2 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;

5.2.1 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.

5.2.2 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.

5.2.3 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.

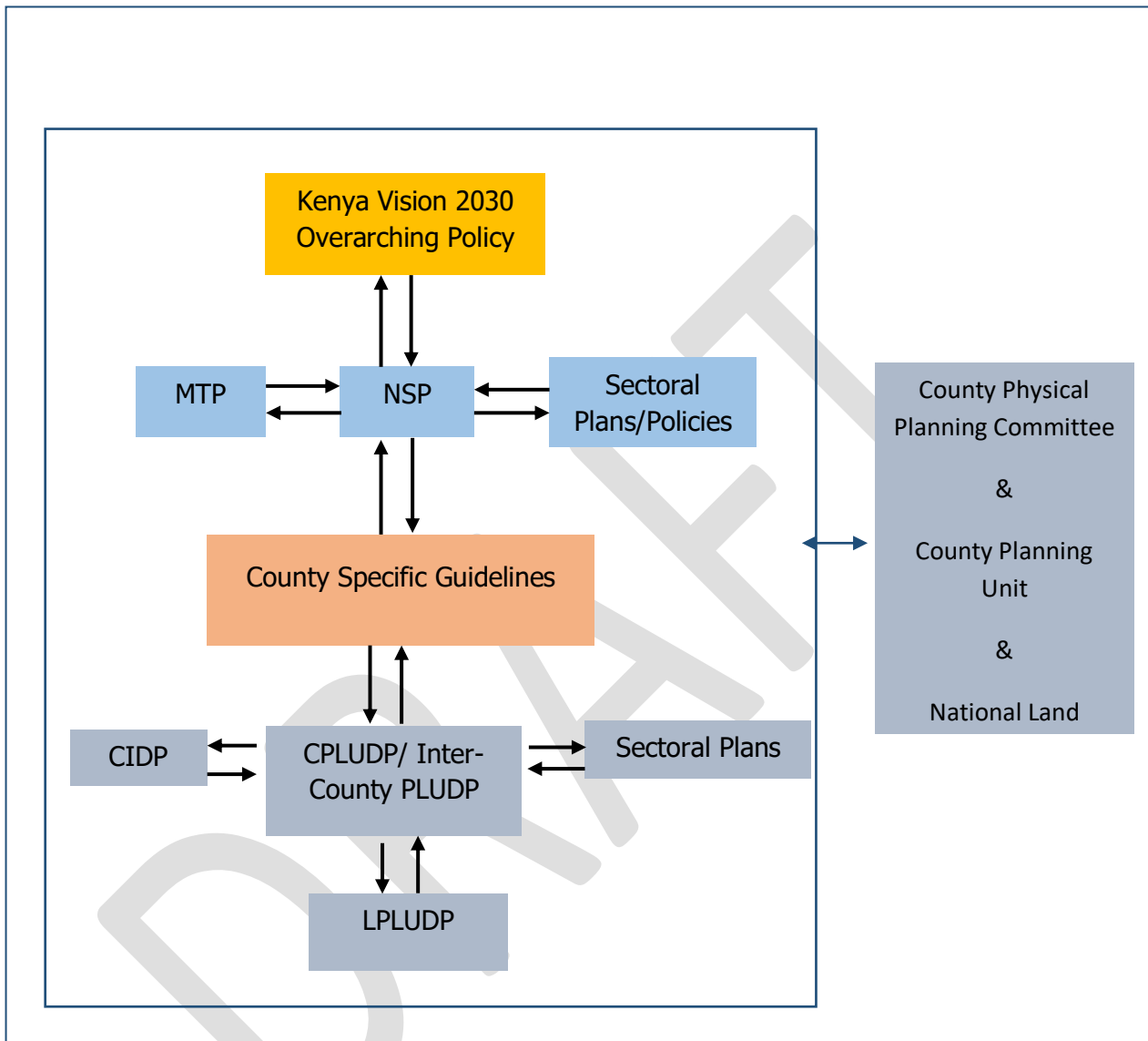
- i. To ensure that relevant planning authorities carry out their functions as required by law.
- ii. To make recommendations for improvements of the planning systems in the county.
- iii. To mobilize resources to support physical/land use planning.

5.3 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.

Figure 4: NSP Implementation structure



Source: State Department for Physical Planning, 2022

5.4 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 Turkana County Government which will be responsible for implementing various county specific initiatives proposed by the guidelines.

The National Government, County Government of Turkana, 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.