

KERICHO COUNTY SPATIAL PLAN

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A sustainable Agro-industrialized county fostering equitable socio-economic growth and environmental values

KERICHO COUNTY SPATIAL PLAN , 2017 - 2027

THE PLAN REPORT

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Foreword

The Governor



County Spatial Planning is a critical step in ensuring that all resources within the County are fully utilized for the wellbeing of the people. County Spatial Plan (CSP), therefore, is a very important document that will inform and guide the socio-economic development for Kericho in the next ten years. I am delighted to have been part of this significant achievement and wish to thank and congratulate all the people who made this possible.

The CSP is informed by the needs and aspirations of the people of Kericho as well as the opportunities and threats that exist in the economic environment. The essence of this planning effort is to ensure that all the identified opportunities are fully utilized and threats neutralized. We have since identified and appreciated our weak areas and will ensure that they are duly addressed. Our strengths shall form our competitive edge and the products from this great County will sufficiently cover our needs and those of others who will source from us. This CSP has made reference to other high-level plans including Vision 2030, which is the National main development blue print and the National spatial plan, to ensure that our progress is in tandem with that of the entire country.

In order to achieve the desired development goals, I urge all the arms of my government to refer to this blue print while formulating their annual development plan. This CSP, alongside the County Integrated Development Plan (CIDP) shall form the basis for other plans and budgets from now henceforth, in line with the constitution of Kenya 2010 and the applicable statutes. The opportunities as provided for in this CSP have been made available to all, including the private sector and development partners. These opportunities exist in all sectors; including agriculture, healthcare, manufacturing, housing among others. I encourage you to fully exploit them, and to support our programs as a government whenever you are able to. Let us all team up with one aim to make Kericho County A sustainable Agro-industrialized county fostering equitable socio-economic growth and environmental values.

I wish to commend the department of Land, Housing and Physical Planning for a job well done. I urge you to enforce this plan, and to cascade it to lower level plans without delay. I also thank the County Assembly of Kericho for its support. The people of Kericho will thank you for finding it important to prioritize this project despite the limited resources. Thanks to all the departments, agencies, staff and consultants who ensured that this project is a success.

May God bless you all. God bless Kericho.

H.E. Prof. Paul K. Chepkwony,
The Governor,
County Government of Kericho.

Foreword

The Deputy Governor



Kericho County Spatial Plan (CSP) 2017-2027 is a ten-year plan that has been formulated to guide development and facilitate the transformation of the lives of the residents of the county. The plan interprets national and regional policies to county level, provide a framework for guiding land use, integrates sectoral policies and provide programs on which to anchor county level development plans. Preparation of the plan is anchored in the Constitution of Kenya (2010), County Government Act (2012) and other enabling legislations.

The Preparation of the spatial plan involved collection spatial and aspatial data which is then synthesized for rational development of plan proposals. In spite of its diversity and rich natural resources, the County faces a myriad of development challenges including: low levels of access to portable water, inadequate support infrastructure for industrial development; stagnating economy due to low agricultural productivity and value addition, inadequate health services, few skill development centers and recreational facilities. Kericho is also faced with environmental degradation, lack of a land information management system, unbalanced development and poor urban management.

Public participation was actualized through sub-county stakeholder meetings, focus group interviews, administration of questionnaires, technical, executive and county assembly meetings to ensure aspirations of Kericho residents were captured in the plan.

Through this plan a Geographic Information System laboratory was established and staff trained on latest land use management technologies. A detailed inventory of county physiographic, economic, social and physical infrastructure, agriculture, settlements, and environmental resources was prepared. Development challenges in all sectors were identified, strategies, policies, programs and projects were then formulated with an implementation framework outlining priority areas, phasing and cost estimates including key actors. All these projects aim at attainment of Vision 2030, Sustainable Development Goals, Africa Union Agenda 2063, other regional and international cooperation frameworks and the National Government's transformative agenda —The Big Four initiatives.

H.E. Hon. Susan Kikwai, OGW

The Deputy Governor

County Government of Kericho

Preface



The department of Land, Housing and Physical Planning has an obligation to secure competitive, equitable and dynamic land use practices for a sustainable economic development of Kericho County. Inspired by the County Government's vision and mission, we are delighted to have completed the Kericho County Spatial Plan (CSP) for the Period 2017-2027. This ten-year framework integrates all aspects of development in Kericho County. The plan presents the socio-economic situation, resource potentials and future needs that are based on demographic trends. The proposals are presented along key thematic areas that include

agriculture, water and environment, education and social development, transport and infrastructure among others. The CSP aims to ensure that residents of Kericho find most of the essential services within their reach. It also aims to transform Kericho County into a net producer of goods and services, resulting in benefits that will greatly boost the household incomes for the residents. Among the key proposals in this plan include healthcare services within reach for all residents, safe and clean water for all, skill and social development facilities within reach, enhanced conferencing and a tourism to exploit the lush green Kericho environment. Accessibility to farms and markets will be greatly enhanced through the proposed upgrading of road networks and enhanced transport linkages, Strategic Economic Planning Areas (SEPAs) as well as the establishment of food hubs and value addition industries.

The County Spatial Plan is an initiative of the County government as provided for by the Constitution of Kenya (2010), The County Government Act (2012) among other legislations. The County planning and development is enshrined in the Fourth Schedule of the constitution Part 2 (8), and Article 184 (1) of the Constitution of Kenya. County Governments by law have an inalienable obligation to undertake physical planning to ensure coordination and competitiveness in socio-economic development. The development plans must be balanced, harmonious, and strategic across space, sector and demography and should be enabled by a Geographical Information System (GIS) technology.

I wish to thank H.E. Prof. Paul K. Chepkwony, the Governor of Kericho, and Deputy Governor H.E. Hon. Susan Kikwai, for their unequivocal support, guidance and inspiration during the county spatial planning process. Special thanks to the County Assembly of Kericho through the Assembly's Committee on Lands, Housing and Physical Planning for their support. A special mention to all county officers under spatial planning technical implementation committee for a job well done. We have given to the people of Kericho the first ever spatial plan that will help transform the county by providing a blueprint for resource utilization in a sustainable way.

God bless you all. God bless Kericho.

Hon. Barnabas Ng'eno

**County Executive Committee Member; Lands, Housing and Physical Planning,
County Government of Kericho.**

Acknowledgement



The preparation and completion of Kericho County Spatial Plan is a big success and this was made possible through support received from all stakeholders. The general public supported the process fully and turned up in big numbers to express their views on how the county should grow. Together with the consultant and the County technical team, they developed a shared vision and went further to select preferred and prioritized projects. The support received from the general public was immense and the County Government of Kericho feels encouraged. In the same spirit we hope to implement the County Spatial Plan since every individual has a stake and will play a part in the development of the county.

The commitment by the county executive which was witnessed by the presence of Hon. Barnabas Ng'eno, CEC in charge of Lands Housing and Physical Planning, gave the planning process the impetus needed. The CEC was present in stakeholders meeting to engage with the public during the vision and projects prioritization process.

Spatial Planning Implementation Team (SPIT) chaired by Eng. Bittar Odoyo gave all the needed support during the planning process. We are grateful to the chair and entire team which included Plan. Sylvia Inziani who was the team secretary, Eng. Vincent Monari, Mr. John Mibei, Ms Lily Koech, Mr. David Ruto and Mr. Kevin Amani. Their presence was highly felt as they accompanied the planning consultant to various data collection missions and stakeholders' engagement meetings. We also acknowledge the immense support we received from various technical heads who freely provided information on planned and ongoing projects from their sectors funded by County or National Government. The presence and active participation of the National Land Commission (NLC) through their representative Mr. Simeon Ting'aa was well received and a big boost in understanding the principles of inclusiveness during planning process.

The SPIT was very active in organizing meetings with the entire County technical departmental heads during review meetings and technical review of projects proposed by general public and came up with a priority list. Under the chairmanship of Eng. Odoyo, the SPIT reviewed all reports on time and gave comments which improved the quality of all technical reports which were part of the input. Special Mention goes to Mr Willy Keter, my predecessor, who started this project and laid a solid foundation that has seen fruitful completion.

We also recognize and acknowledge GeoMaestro Consult Africa, the consultant, on their understanding and commitment to project implementation. The consulting team was able to deliver on time. Engagement with the county and public was sufficient enough to collect information which led to informing the projects selected in this plan.

Ms. Emily Sang,
The Chief Officer; Department of Lands, Housing and Physical Planning,
County Government of Kericho.

Certification

I certify that the Kericho County Spatial Plan (2017-2027) has been prepared as per the requirements of the County Government Act, 2010 and Physical Planning Act, CAP 286.

Certified



.....Date 20th November 2018

Plan. Fawcett O. Komollo (RPP 00161)

Lead Consultant, GeoMaestro Consult Africa Limited



.....Date 20th November 2018

Ms. Sylvia Inziani

County Physical Planner, Department of Lands, Housing and Physical Planning; County Government of Kericho

Recommended by

.....Date

Ms. Emily Sang

The Chief Officer, Department of Lands, Housing and Physical Planning; County Government of Kericho

Adopted by

.....Date

Hon. Barnabas Ng'eno

County Executive Committee Member, Department of Lands, Housing and Physical Planning; County Government of Kericho

Approved by

.....THE COUNTY ASSEMBLY OF KERICHO.....

.....Date

Approval Number

.....APPROVED DEVELOPMENT PLAN No. PLAN REFERENCE No.

Executive Summary



The Kericho County Spatial Plan (2017-2027) seeks to organize and distribute population and development activities across the 2,569 square kilometers geographical area of the County to achieve its vision of “**a sustainable agro-industrialized County fostering equitable socio-economic growth and environmental values**”.

The plan sets a framework for public sector action and private sector investment for the stated 10-year period legally mandated by the Constitution (2010), the County Government Act (2012) and the Physical Planning Act (1996). Though it is a medium to long term strategy, it also sets the direction for early projects to be implemented which will provide quick wins for improving the lives and livelihoods of the people of Kericho County.

Central to Kericho County’s success in the future will be its ability to transform its predominantly raw-product, undifferentiated, low yielding and weak value chain agricultural-based economy to an agro-industrialized, market connected economy while at the same time securing the sustainable socio-economic well-being of its people. To this end the spatial plan is anchored on 3 key pillars. The first is **improved livelihoods** which analyzes how the County can be positioned strategically in order to best take advantage of economic opportunities to build a stronger value-added economy with multiplier effects of better employment and private investment. The second pillar is **food security and sustainability** which seeks not only to guarantee that all households will have their staple food on the dinner table, but further underwrite that the pathways of providing for the household today do not in any way endanger the ability of future generations to have adequacy of need. The third pillar is **improved access to water, sanitation and health services**. The plan clearly sets the tone that “a healthy County is a wealthy County” and suggests strategies that bring clean water, better sanitation and adequate health services closer to the people of Kericho County.

The plan was developed over an 18-month intensive period commissioned by the County department of Land, Housing and Physical Planning and executed by GeoMaestro Africa Consult with oversight by the County Spatial Planning Team. The process involved detailed mapping of the whole County; generating high density maps; locating and mapping key facilities within the County; engaging key stakeholders including all the departments of the County Government of Kericho, Kenya Wildlife Service, Kenya Power, KURA, KERRA, Kenya Forest Service, Security Agencies, NLC through the County coordination office, KEWASCO, CBOs as well as a strong contingent of the stakeholders representing different public and private interest groups. The constitutional spirit of public participation was actualized through 18 sub-County stakeholder meetings, focus group discussions, structured interviews, over 400 survey responses; as well as technical, executive and

County assembly meetings to ensure aspirations of Kericho residents were captured in the plan.

The major output of this process is the **County Development Structure Plan** which visualizes the desired Kericho County in 2027. This is further elaborated by 8 policy goals with supporting policy statements and detailed Capital Investment Plans.

- (i) **Agriculture:** Transform Kericho County’s agriculture through sustainable agricultural intensification and modernization of agro-based enterprises into commercially-oriented and competitive economic activities that boost food security, enhance local economic growth and provide gainful employment to the residents of Kericho.
- (ii) **Economy:** Promote economic prosperity through sustainable sector developments and enhancing market system.
- (iii) **Social Services:** Promote social inclusion, diverse cultural prospects and quality life through provision of basic social services.
- (iv) **Energy:** Enhance exploitation, harnessing and utilization of various forms of energy.
- (v) **Human settlement:** Enhance systematic and ordered human settlements through proper land-use planning.
- (vi) **Water and Sanitation:** Ensure sustainable access to safe water and sanitation to all.
- (vii) **Transport and Infrastructure:** Improve transport infrastructure and systems to enhance accessibility, linkages and free circulation.
- (viii) **Environment:** Promote sustainable development through proper utilization of the available natural resources and ensuring a clean and safe environment for all.

The plan contains various proposals to realize these policy goals. Some of the key proposals under each sector are highlighted below:

| Sector | Key proposals |
|-------------|--|
| Agriculture | <ol style="list-style-type: none"> 1. Develop a mobile based database to record each farmer, farm acreage, GPS location of farm, LR number, agricultural produce and contact of the farmer. 2. Improve Farmer-to-extension officer ratio towards attaining the global recommendation of 1:450. The service will be enhanced to include market information. 3. Regulate and enforce policy on sub-division of agricultural land. It is recommended minimum land sizes of 1.0 ha for medium and 0.4 ha for high agricultural potential zones. |

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| Economy | <ol style="list-style-type: none"> 1. Designate three Strategic Economic Planning Areas (SEPA's) based on the land potential and projected market nodes 2. Plan and prioritize agro-industrialization of identified ten “viable to scale” products – Tea, Milk, Maize, Sweet Potato, Pineapples, Sugarcane, Banana, Irish Potato, Beef and Beans. 3. Set up four food hubs located on identified market demand nodes near Sondu, Kapkatet, Roret and Fort Ternan. This strategy, being aligned to the big 4 agenda, provides an avenue for the County to collaborate with national government for capital and technical input. |
| Social-Services | <ol style="list-style-type: none"> 1. Equip and operationalize 31 identified health facilities (6 Level IV, 15 Level III and 10 Level II) to meet the demand of a 2027 projected population of 1.2 million persons 2. Set up 19 secondary schools to meet the projected demand in 2027. The optimal location of the schools has been suggested based on national standards applied to spatial and demographic characteristics. 3. Set-up 50 community development centers in addition to equipping and repurposing existing tertiary education facilities. These centers will improve well-being as well as participation of the local community in social and economic development. |
| Energy | <ol style="list-style-type: none"> 1. Incentivize households and institutions to utilize renewable energy sources (including solar power and biogas from septic tanks which is the most common liquid waste disposal method in Kericho as well as waste from farms using bio-digesters) and establish woodlots for fuel. 2. Establish regulations to require new developments such as urban housing and street lighting to incorporate solar energy. |
| Human settlement | <ol style="list-style-type: none"> 1. Prioritize the review and finalization of Urban area Development Plans with supporting legislation on land use management to support and control development in the following towns with the projected land demand deficit as indicated: Kericho town (301 hectares); Sondu (13.94 hectares); Litein (17.5 hectares); Kabianga (12.9 hectares) and Kapkatet (11.5 hectares). 2. Prioritize the development of Mtaragon and Kapsorok with supporting services to serve as growth nodes for balancing development in the northern part of Kipkelion West Sub-County. 3. Improve of Sondu – Kapsorok – Kipsitet road; and Kipkelion – Mtaragon – Nandi road to support equitable human settlement and development. |
| Environment | <ol style="list-style-type: none"> 1. Establish a one-stop environment and natural resource inventory which will be regularly updated and analyzed. 2. Promote public sensitization through establishing a monthly environmental day and tree planting initiatives with a special focus on establishing a Nyando Basin environmental regeneration plan. 3. Harmonize national and County level legislation and enforcement to protect sensitive areas including riparian corridors, steep slopes (above 25% slope) hills and forests. |

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| <p>Water</p> | <ol style="list-style-type: none"> 1. Prioritize the completion of development of a County Integrated Water and Sanitation Master Plan that will outline strategies for universal access of water and sewerage services in the County. 2. Provide offtake from Itare dam to supply Chepsir, Chepseon, Kedowa and Londiani Junction water 3. Provide offtake from Masaita dam to supply Londiani, Kipkelion and Fort Ternan leveraging on gravity supply. 4. Upgrade water and sewer reticulation to enhance utilization of current capacity and reduce Unaccounted for Water (UFW) currently at 46%. 5. Encourage household water harvesting measures through use of tanks to promote sustainable water supply. |
| <p>Transport and Infrastructure</p> | <ol style="list-style-type: none"> 1. Prioritize review of the organization and connectivity of Sondu to leverage on its market potential with the proposed SGR railroad and terminal facility to traverse Kericho County through Bureti and Soin/Sigowet sub-counties. 2. Upgrade two key roads due to their importance in achieving the County’s vision: 30km of Sondu-Kapsorok-Kipsitet and 15km of Fort tenan-Kokwet. 3. A local tourist circuit road has been proposed through the multi-national tea estates to promote agro-tourism. 4. Upgrade of key link roads and routine maintenance of all roads |

To support the realization of the plan, a GIS laboratory was established in the Department of Land, Housing and Urban Development. This fully equipped facility is envisioned to play a key role in supporting the implementation of the Kericho County Spatial Plan (2017 - 2027). Selected technical staff across several departments were adequately trained on GIS skills for spatial planning.

The maxim *“failing to plan is planning to fail”* is not merely a cliché. The County Government of Kericho has made a strong statement for the development of the County with the preparation of the **Kericho County Spatial Plan (2017 - 2027)**. The strong commitment to its implementation will definitely launch the County forward towards to achieve its vision of **“A sustainable Agro-industrialized County fostering equitable socio-economic growth and environmental values”**.



Plan. Fawcett O. Komollo,
Lead Consultant,
GeoMaestro Consult Africa.

Acronyms & Abbreviations

| | |
|-------|--|
| AD | Anno Domini |
| AI | Artificial Insemination |
| ASALs | Arid and Semi-Arid Lands |
| ATIs | Agricultural Training Institutes |
| BC | Before Christ |
| CBD | Central Business District |
| CBOs | Community Based Organizations |
| CDF | Constituency Development Fund |
| CEC | County Executive Committee |
| CGK | County Government of Kericho |
| CIDP | County Integrated Development Plan |
| CoG | Council of Governors |
| CSP | County Spatial Plan |
| ECDE | Early Childhood Development Education |
| EIA | Environmental Impact Assessment |
| ESA | Environmentally Sensitive Areas |
| EMCA | Environment Management and Co-Ordination Act |
| ESP | Economic Stimulus Package |
| FC | Football Club |
| FMHB | Farm Management Handbook |
| GDP | Gross Domestic Product |
| GIS | Geographic Information System |
| GoK | Government of Kenya |

| | |
|---------|--|
| Ha | Hectares |
| HFC | Housing Finance Corporation |
| ICT | Information, Communication and Technology |
| ISUD | Integrated Strategic Urban Development |
| KAA | Kenya Airports Authority |
| KALRO | Kenya Livestock Research Organization |
| KEMSA | Kenya Medical Supplies Agency |
| KeRRA | Kenya Rural Roads Authority |
| KEWASCO | Kericho Water and Sanitation Company |
| KFS | Kenya Forest Service |
| Kg | Kilogram |
| KIE | Kenya Industrial Estates |
| KISIP | Kenya Informal Settlements Improvement Project |
| KMTC | Kenya Medical Training College |
| KNBS | Kenya Bureau of Statistics |
| KPC | Kenya Pipeline Company |
| KRB | Kenya Roads Board |
| KTB | Kenya Tourism Board |
| KTTF | Kenya Tourism Trust Fund |
| KURA | Kenya Urban Roads Authority |
| KWS | Kenya Wildlife Service |
| LVBDA | Lake Victoria Basin Development Authority |
| LREC | Lake Region Economic Bloc |
| LVSCA | Lake Victoria Catchment Area |
| LVSWSB | Lake Victoria South Water Service Board |
| MDGs | Millennium Development Goals |
| MoE | Ministry of Education |
| MoH | Ministry Of Health |
| MoL&PP | Ministry of Lands & Physical Planning |
| NCPB | National Cereals and Produce Board |

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|----------|--|
| NEMA | National Environmental Management Authority |
| NGO | Non-Governmental Organizations |
| NHIF | National Health Insurance Fund |
| NLC | National Land Commission |
| NMT | Non-Motorized Transport |
| NSP | National Spatial Plan |
| NYS | National Youth Service |
| OD | Out Diameter |
| PDP | Part Development Plan |
| pH | Potential Hydrogen |
| PPA | Physical Planning Act |
| PSV | Public Service Vehicle |
| PWD | People With Disability |
| RIMs | Registry Index Maps |
| RVCA | Rift Valley Catchment Area |
| SACCO | Savings and Credit Co-Operative |
| SDGs | Sustainable Development Goals |
| SEPA's | Strategic Economic Planning Areas |
| SETs | Strategic Economic Towns |
| SGR | Standard Gauge Railway |
| SIA | Social Impact Assessment |
| SIMs | Small-Medium Industries |
| SPIT | Spatial Planning Implementation Team |
| TILWASCO | Tililbei Water and Sanitation Company |
| TIMPs | Technologies, Innovations and Management Practices |
| TRI | Tea Research Institute |
| UFW | Unaccounted For Water |
| WHO | World Health Organization |
| WRA | Water Resources Authority |
| WWTP | Waste Water Treatment Plant |

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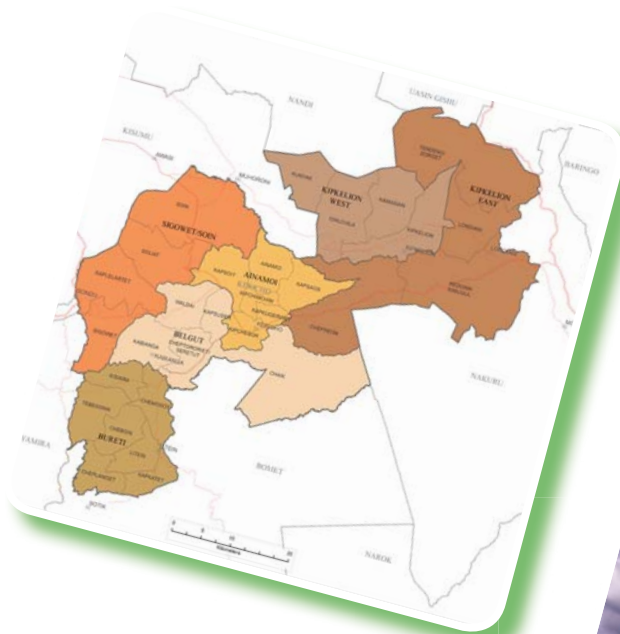
Structure of the Report

This report consists of fifteen chapters structured in four parts.

- a) **Part I. Introduction & Overview:** This part has been broken into two chapters. Chapter 1 provides project area description, project deliverables, the scope of works, vision statement and objectives. Chapter 2 summarizes the legal and policy framework guiding the preparation of a County spatial plan.
- b) **Part II. Situational Analysis:** This part entails chapters that summarize the situational analysis of the County. It is an appraisal based on thorough and structured collection, compilation, description, analysis, and interpretation of both spatial and non-spatial data on the prevailing situation. The chapters outline the base map, physiography, population and demography; land, human settlement and urbanization, transport and infrastructure, social infrastructure and services; environment and natural resources and; development interventions. An analysis of these information is also provided
- c) **Part III. Synthesis:** The chapters in this part provide Synthesis of problems and Development opportunities; and outlines the existing and proposed spatial Structure that informs rational formulation of the county development structure plan.
- d) **Part IV. The Plan:** The chapters in this part documents the county development structure plan, plan proposals, development strategies, policies, pillar programs and projects that will be implemented to actualize the vision of the plan by the year 2027. It also provides an implementation matrix and capital investment plan to aid in identifying relevant actors, funding strategy, monitoring and evaluation strategies.

Part I

Introduction & Overview





Chapter 1

Introduction

This part outlines the technical and spatial scope of the plan, problem statement and justification of the spatial plan, adopted planning processes and organization of the plan.



1.1. Overview

The constitution of Kenya (2010) has assigned planning functions to two levels of Government. The National Government is responsible for formulation of general principles of land use planning, providing technical support to the county governments and exercising oversight on preparation of land use plans. The County Government is responsible for County Spatial Planning, preparation of County Integrated Development Plan (CIDP) and Local Physical Development Plan. Kericho County has no existing County Spatial Plan, therefore, there is to need to prepare one in accordance with the law.

Pursuant to this role, the County Government Act of (2012) obligates each County to prepare a ten-year GIS-based County Spatial Plan (CSP) with respect to the entire area of jurisdiction. The plan is a broad framework for organizing and distributing population, activities and resources in the county to achieve National and County development objectives.

The County Spatial Development Plan interprets the National Level plans in terms relevant to the county and guides preparation of lower level plans such as local physical development plans. In light of this and the need for diagnosing the main planning issues, the County Government of Kericho embarked on a task of preparing a CSP to guide county development for a period of 10 years as provided in the County Government Act of (2012).

1.2. Purpose of the County Spatial Plan

Kericho County Spatial Plan (CSP) has been prepared to provide a broad framework for organizing and distributing population and activities in the County for the achievement of both National and County development objectives.

The plan will also serve the purpose of enabling the county government to strengthen the coordination of sectorial projects and programs and to mitigate duplication of efforts and the wastage of scarce resources.

The CSP interprets the national level plans and proposes development projects and programmes which will further form a basis for sectorial plan formulation.

1.3. Problem Statement and Justification

Kericho County is renowned worldwide as the home of Kenya's best tea and a home of Mau Forest Complex, the largest closed canopy ecosystem. The Mau forest complex provides a lush green environment enhanced by stunning scenery provided by the tea plantations. All these are naturally favoured by incredibly rich agro-climatic conditions. The county's location relative to the lake, Mt. Kenya & Aberdares and North Rift Regional Economic Blocs provide a strategic trading and economic focal point enhanced by road and rail networks. This is complemented by the locals who are known for their agility, athletic prowess and rich culture.

In spite of the natural resources, agricultural and trade potentials, the county faces a number of development challenges. These include environmental degradation through destruction of natural vegetation cover at water sources and riparian corridors, lack of land use planning culture, inadequate health, education and recreational services and

low levels of access to clean water. Additionally, there is lack of equitable development and poor road network across the county sphere. Finally, agricultural productivity is low with optimum returns to farmers compounded by poor value addition options and poor marketing systems.

This calls for a County Spatial Development Plan aimed at addressing the challenges through the following:

- i) Assess available resources, their level of utilization and potential
- ii) Evaluate infrastructure, services levels and distribution networks and enable the County Government prioritize investments in infrastructure development;
- iii) Set out basic guidelines for a land use management system in the county considering guidelines, regulations or laws as provided for under Article 67(2) (h) of the Constitution;
- iv) Set out a capital investment framework for the county's development programs;

1.4. Vision Statement and Objectives

The County vision is anchored on the following pillars:

- i) Improved livelihoods
- ii) Security and sustainability
- iii) Improved access to water, health services and sanitation

By focusing on these areas, the plan outlines various strategies to achieve sustainable prosperity for the people of Kericho County in a manner that is aligned to their unique identity and aspirations for *“A sustainable Agro-industrialized county fostering equitable socio-economic growth and environmental values”*.

1.4.1. Objectives

The objectives of Kericho County Spatial Plan are drawn from Section 103 of County Government Act of 2012. They are as follows:

- a) ensure harmony between national, county and sub-county spatial planning requirements
- b) facilitate the development of a well-balanced system of settlements and ensure productive use of scarce land, water and other resources for economic, social, ecological and other functions across a county
- c) maintain a viable system of green and open spaces for a functioning eco-system
- d) harmonize the development of county communication system, infrastructure and related services

- e) develop urban and rural areas as integrated areas of economic and social activity
- f) provide the pre-conditions for integrating under-developed and marginalized areas to bring them to the level generally enjoyed by the rest of the county
- g) protect the historical and cultural heritage, artefacts and sites within the county
- h) make reservations for public security and other critical national infrastructure and other utilities and services
- i) work towards the achievement and maintenance of a tree cover of at least ten per cent of the land area of Kenya as provided in Article 69 of the Constitution

1.4.2. County Development Principles

The plan is anchored on the following principles:

- Economic, environmental and social sustainability
- Inclusiveness and participation
- Integrated development
- Equity
- Wealth creation
- Infrastructure development
- Competitiveness

1.5. The Planning Process

Preparation of the Kericho CSP was addressed in three broad stages based on the classical planning approach, namely:

- a) Survey and Mapping: - this entails qualitative, quantitative and spatial data collection.
- b) Data Processing and Analysis: - this involves interpretation of collected data including projections, identifying service demands, development trends and integrating spatial and non-spatial datasets.
- c) Planning: - This is decision making based on the available analysed data, development models, existing development plans and observations by the stakeholders.

This approach had a strong component of stakeholder participation at all the key stages including:

- i) Mobilization, sensitization and problem identification;

- ii) Visioning and scenario setting; and
- iii) Planning and validation.

Our planning approach captured three broad areas and included specific tasks that led to the County Spatial Plan as summarized in *Figure 1* below.

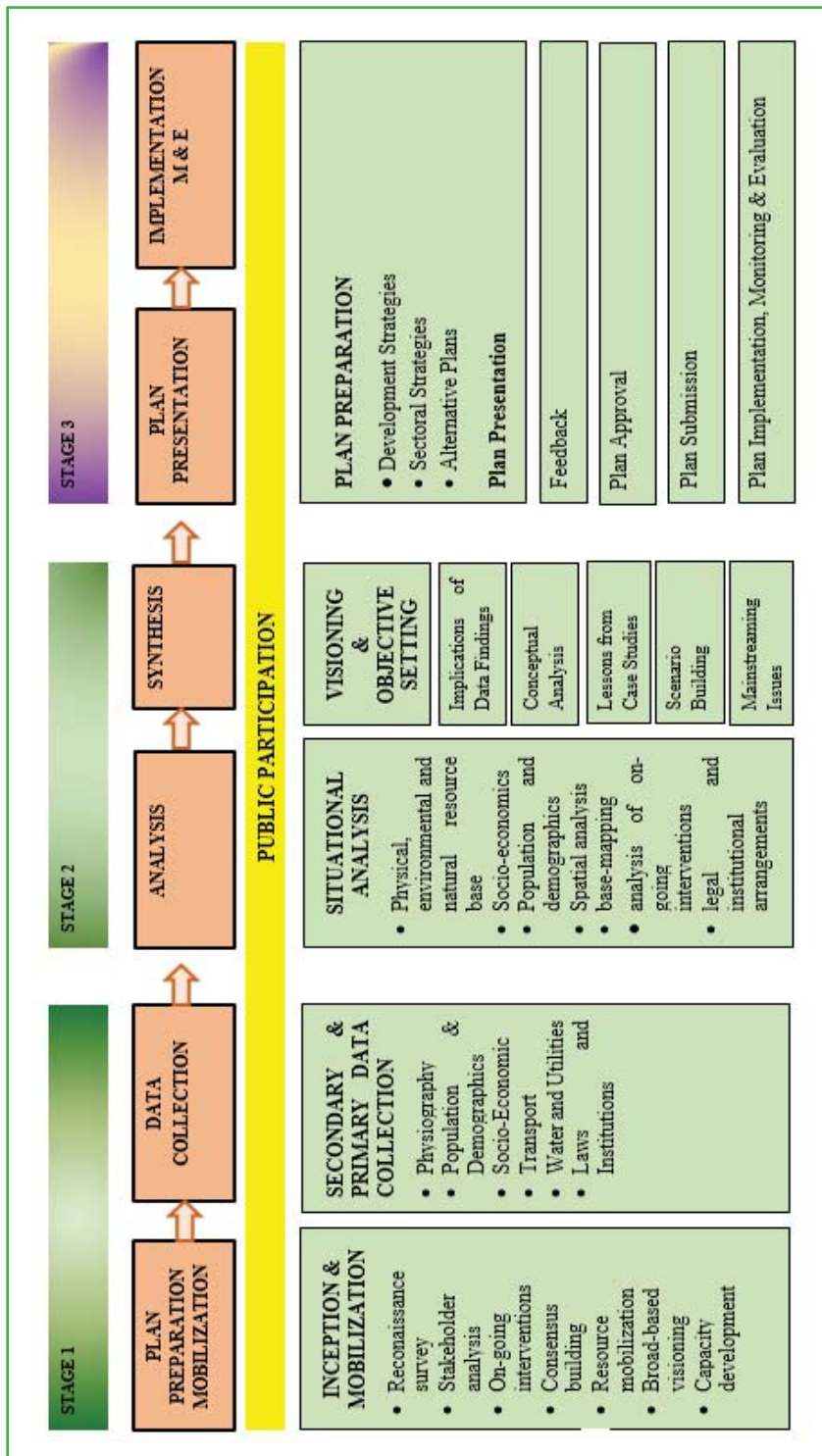


Figure 1: County Spatial Plan Preparation Process

1.6. The Geographical Context

Kericho County is located in the Western highlands of the Great Rift Valley in Kenya, which lies in South Western part of Kenya between latitudes $00^{\circ} 01' 30''$ N and $00^{\circ} 40' 55''$ S and between longitudes $35^{\circ} 00' 27''$ E and $35^{\circ} 39' 39''$ E. The County covers an area of approximately 2,569 km². It borders Nandi, Uasin Gishu and Baringo counties to the North, Nakuru County to the East, Bomet and Nyamira counties to the South and Kisumu County to the West.

Administratively Kericho County is comprised of six Sub-Counties namely: Bureti, Belgut, Ainamoi, Kipkelion East, Kipkelion West and Sigowet/Soin and further divided into thirty wards as shown in *Map 1*.



COUNTY GOVERNMENT OF KERICHO

Legal and Policy Framework

This chapter gives an account of the legal and policy framework that was used to guide the plan preparation process. The section also elaborates on the actors who will play a role in the plan implementation, monitoring and review.



2.1. Legal and Policy Framework

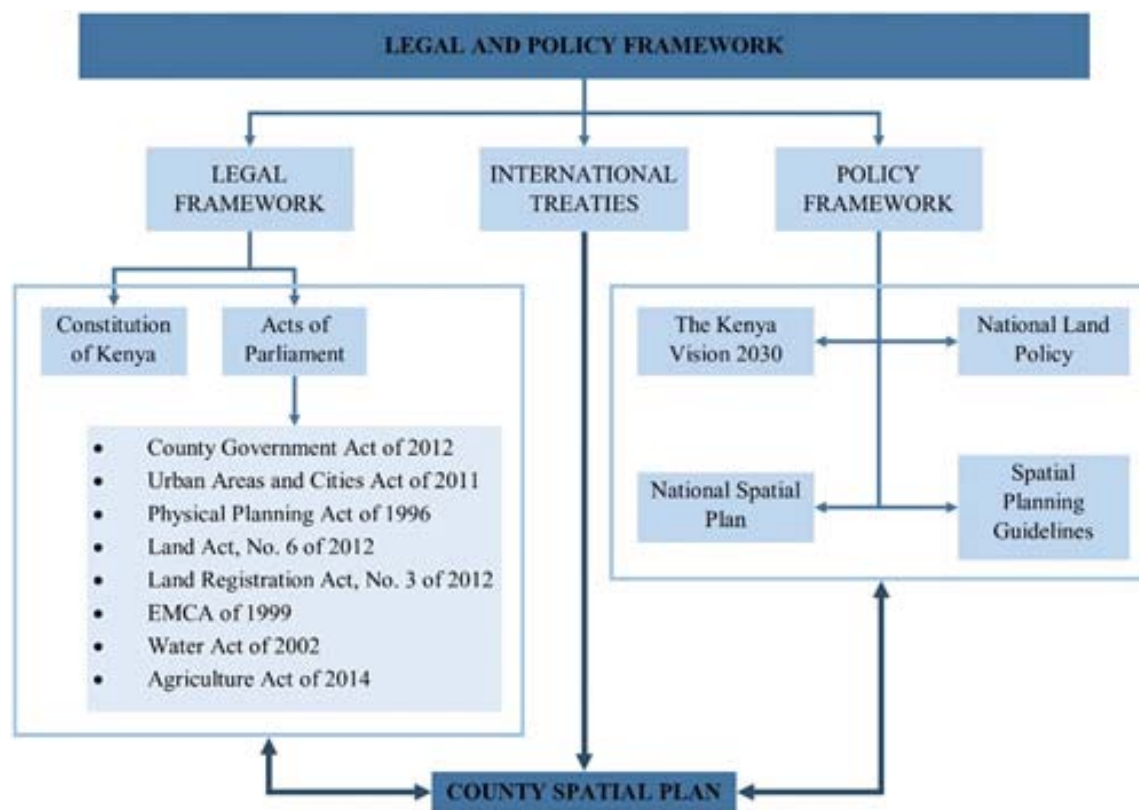


Figure 2: Illustration of legal and policy framework for the CSP

2.2. Legal Framework

Kericho County Spatial Plan preparation process was guided by various legislations and internal treaties constituting the legal framework.

2.2.1. The Constitution of Kenya (2010)

The Constitution of Kenya is the supreme law and in Article 66(1), it identifies planning as a main tool of regulating land use. Furthermore, section 67(2)(h) gives National Land Commission (NLC) oversight role in monitoring planning. Reference is also made on Article 185(4) which gives the County Assembly the mandate to receive and approve plans. The constitutional principles of equity and sustainable utilization of resources were embedded in the plan by ensuring that selected projects are spread all over the County. During the planning process the constitutional spirit of public participation was promoted as the planning team consulted stakeholders at sub-county and county level.

2.2.2. Acts of Parliament

County Government Act, (2012), establishes and outlines the functions of devolved units. The planning Terms of References were affirmed in Section 103 which spells out the objectives and content of County Spatial Plans. Other sections are 87, 102, 104 and 110 elaborating on participation principles, planning principles, obligation of county to plan and content of County Spatial Plans respectively.

Physical Planning Act, (1996), outlines the planning process and stakeholder engagement process. Other important legislations include Land Act, (No. 6 of 2012), Land Registration Act (No. 3 of 2012), Environment Management and Co-Ordination Act (EMCA), (1999), Water Act, (2002) and Agriculture Act, Cap 318 among others.

2.3. Policy Framework

While preparing Kericho County Spatial, national policy frameworks were reviewed to ensure conformity of the plan proposals with National development agenda.

2.3.1. The Kenya Vision 2030 (2007)

This is a national long-term development policy document whose vision is to move Kenya into a newly industrialized, middle income country providing a high quality of life to all its citizens in a clean and secure environment by the year 2030. The Vision is anchored on three key pillars: economic, social, and political governance. The economic pillar aims to achieve an economic growth rate of 10 per cent per annum and sustaining the same till 2030 in order to generate more resources to address the MDGs. The vision has identified a number of flagship projects in every sector to be implemented over the vision period. These policy guidelines direct that agro-processing be promoted for purpose of value addition.

2.3.2. National Land Policy

The National Land Policy has the vision to guide the country towards an efficient, sustainable and equitable use of land for prosperity and posterity of the nation. To conform to the spirit of integrated plans, all technical staff members at the county were involved in the visioning and project identification phase.

2.3.3. National Spatial Plan (NSP)

The guiding principles of NSP are sustainability and equity. The plan has adopted the same principles and proposes sustainable natural resource utilization and promotes equitable development through regional balance by distributing development projects based on inherent resources.

2.3.4. Spatial Planning Guidelines

The two documents prepared by National Land Commission (NLC) and Council of Governors (COG) were used as procedural guide during the planning process. They provide a step by step process for preparation of the County Spatial Plan and the content to be covered.

2.4. International Treaties

Through the planning process, a number of projects were identified to attain Sustainable Development Goals. The Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs include six goals with a significant land component mentioned in the targets. To achieve the objectives of Agenda 21 considerations were made to ensure that all proposals made were to promote sustainable land-use planning and management, integrated provision of environmental infrastructure (water, sanitation, drainage and solid-waste management) and sustainable energy and transport systems in human settlements.

Part II

SITUATIONAL ANALYSIS





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Chapter 3

Introduction to Situational Analysis

This chapter presents a summary of the Situational Analysis of the County. It is the foundation upon which planning work has been based. It presents the characteristics of the county by illustrating spatial, physical environment, population and demographic and the human geographical attributes of development.



3.1. Overview

Kericho county is located in the Western highlands of the Great Rift Valley in Kenya. It lies in South Western part of Kenya covering an area of approximately 2,569 km². It borders Nandi, Uasin Ngishu and Baringo counties to the north, Nakuru county to the east, Bomet and Nyamira counties to the south, and Kisumu and Homa Bay counties to the west.

According to the 2009 Population and Housing Census, the county's population stood at 739,429 with a population density of 295 persons/km². The labour force stood at 392,733 which is 53% of the total county's population. Current population projection places the total county population size at 910,676 people which is almost a 20% increase from the 2009 figures. The 2009 census data shows that the urban population of Kericho county stood at about 285,789 persons, constituting 38% of the total population (KNBS, 2009).

The major source of income for the people of Kericho county comprises of proceeds from farm produce such as tea, pineapples, coffee, sugarcane, potatoes, maize, horticultural crops and livestock. Employment by multinational companies such as tea farms and factories is another key source of income. Urban areas also provide employment opportunities in the off-farm economic activities. From analysis, the various sectors reveal both potential and constraints which the plan aims to address. The main issues that emerged include: poor state of physical infrastructure, increasing levels of poverty, urban sprawl and unsustainable use and subdivision of land, among others.

A number of development initiatives have been put in place by the national and county governments with support from development partners to alleviate these problems. The developments cut across the various sectors and thematic areas, including environment, natural resources and conservation, agriculture, economy, social amenities and services, transport and infrastructure, urbanization and settlements. Development initiatives are handled through direct and indirect cooperation. For instance, the national government, through the Kenya National Highways Authority is constructing major link roads, the county government is engaged in improving and upgrading rural link roads while the multinational corporations in the tea sector engage in constructing access roads to the tea plantations hence contributing towards the same goal of enhancing access and movement of goods and people in the county.

3.2. Rationale for Situational Analysis

The preparation of the Kericho County Spatial Plan adopted an in-depth analysis of aspects of physical and human environment. Situational analysis is an appraisal of the county based on thorough and structured collection, compilation, description, analysis, and interpretation of data on the prevailing situation. The analysis has been staged into inventory of thematic structural planning elements and spatial analysis (NLC, 2017). This was meant to supply the information that will enable preparation of a comprehensive Spatial Development Plan for the county.

An inventory of spatial planning elements was done through both primary and secondary information. Data was acquired through review of reports from county departments and county-level national agencies, stakeholder engagements, field surveys and investigations, existing policies, development programs and emerging issues. The

various thematic areas were clustered and information acquired to profile the status of the county.

To complete the situational analysis, a more in-depth spatial and suitability analysis of prevailing conditions was conducted. This assessment applied location-based technologies to evaluate suitability of land to support a given type of use. The process of land suitability entails evaluation and grouping of specific areas through a multi-criterion approach. Climatic, soil, topographic, catchment population, facility development standards and accessibility were some of the factors used among others. The objective of land use assessment is the prediction of the inherent capacity of land units to support specific land use for a considerable time without deterioration in order to minimize the socio-economic and environmental costs (Praktash, 2003).

In the recent past, the population in the country and the region has been growing. Food demand has subsequently increased and the farming community has to produce more in order to meet the demand. Under the current conditions -with limited factors of production especially land - there is pressure to produce enough food for the population. To understand this, the situation analysis documents spatial assessment for crop suitability, animal production, rural and urban land uses, transportation, market access and regional economy, social service delivery and conservation among others.

KERICHO COUNTY BASEMAP

Legend

- Market Center
- Rural Center
- Town
- Major Town
- Survey Point
- Contours 20m
- Contours 50m
- Airfield
- Railway
- Riparian Areas
- Forest
- County Boundary
- Sub County Boundary
- Ward Boundary

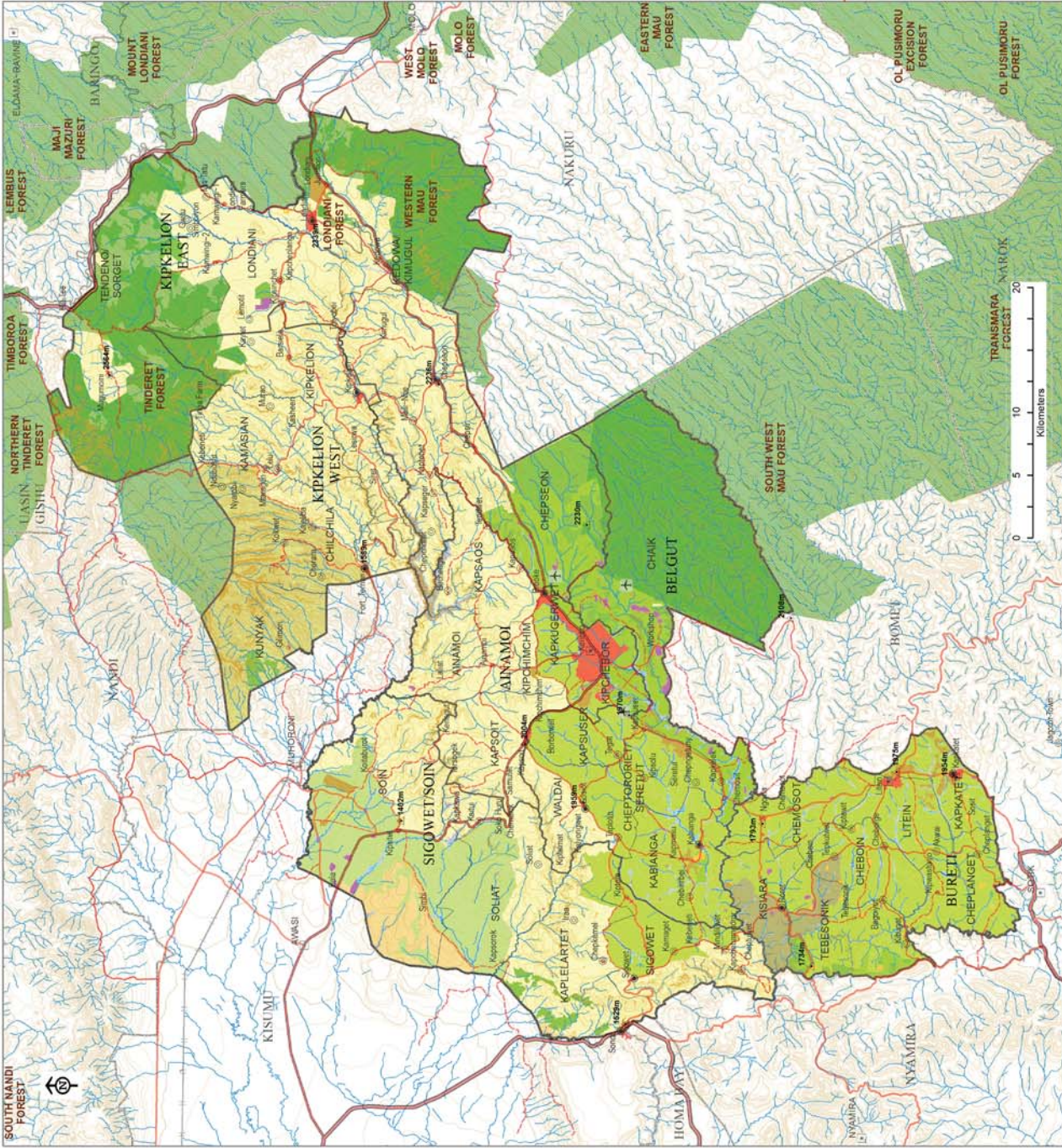
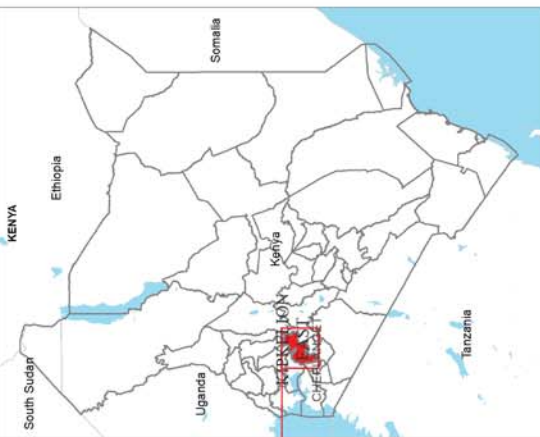
Landuse

- Commercial
- Conservation
- Educational
- Industrial
- Public Purpose
- Residential
- Coffee
- Horticulture
- Mixed Use Agriculture
- Sugarcane
- Extensive Tea
- Large Scale Tea
- Rangeland

Kericho County Spatial Plan 2017 - 2027



County Government of Kericho



Map 2: Base Map



Chapter 4

Physiographic Analysis

This chapter presents background information on the processes, characteristics and patterns in the natural environment of the county and the emerging issues.



4.1. Topographic Characteristics

Kericho county features forests, rivers, lowland areas and an undulating hilly terrain. Its terrain generally slopes westwards towards Lake Victoria forming a hilly shelf between the Mau Escarpment and the lowlands of Lake Victoria region as shown in *Map 3*. Surrounding the county are Tinderet Hills to the North and Mau Escarpment to the East and in between the gently rolling land which forms Londiani Hills. To the northwest, are the hilly areas of Kipkelion rolling towards Koru. The central part of the county rises eastward towards the 3,000m high Mau ridge. The Kericho plateau forms the central part of the county sloping gently from 2,500m to 1,800m above the sea level.

The county is situated at the western escarpments of the Great Rift-Valley within the Eastern end of Lake Victoria basin. Its terrain depicts depressions to mountainous ranges, V-U shaped river valleys, flat flood plains and plateaus. Mountains are characterized by steep slopes of predominantly over 30% slope while hills and minor scarps have slopes ranging from 16% to 30%. Plateaus, flood plains and others have slopes of less than 16%. Wetlands exist where rivers meet lowlands and are inhabited by reeds and bamboo plantations.

4.2. Hydrology

The undulating topography and slopes define two drainage basins: Nyando and Sondu river basins. The South Western Mau, Western Mau, Londiani and Tinderet Forest give rise to major rivers in county which include: Chemosit, Itare, Kipsonoi, Timbilil, Nyando and Kipchorian which drains to Lake Victoria through two major river basins. *Map 4* shows the hydrological aspects of the county.

4.3. Climatic Conditions

Kericho county receives an annual rainfall average ranging between 1000mm - 2200 mm. It has two rain seasons annually: a long rain season from April to June and a short rain season from October to December. The variations in rainfall are mainly determined by the altitude. Rainfall is relatively well distributed throughout the year except for the short dry season in January and February. High rainfall is experienced in tea growing and forested areas which fall within Ainamoi, Belgut and Bureti sub-counties. Soin and its environs is relatively drier due to being on the shadow of the Kericho highlands with annual average rainfall below 1200 mm as shown in *Map 5*.

The county experiences moderate average temperatures of 17°C and low evapotranspiration rates. The temperature ranges between 10°C on the minimum and 24°C on the maximum as indicated in *Figure 3*.

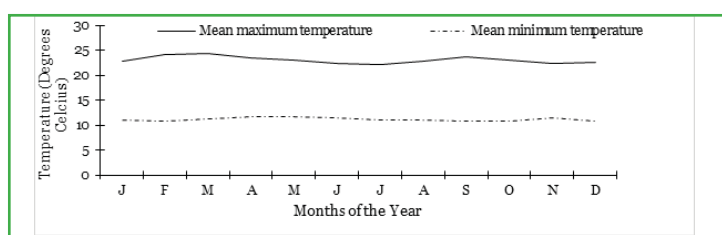
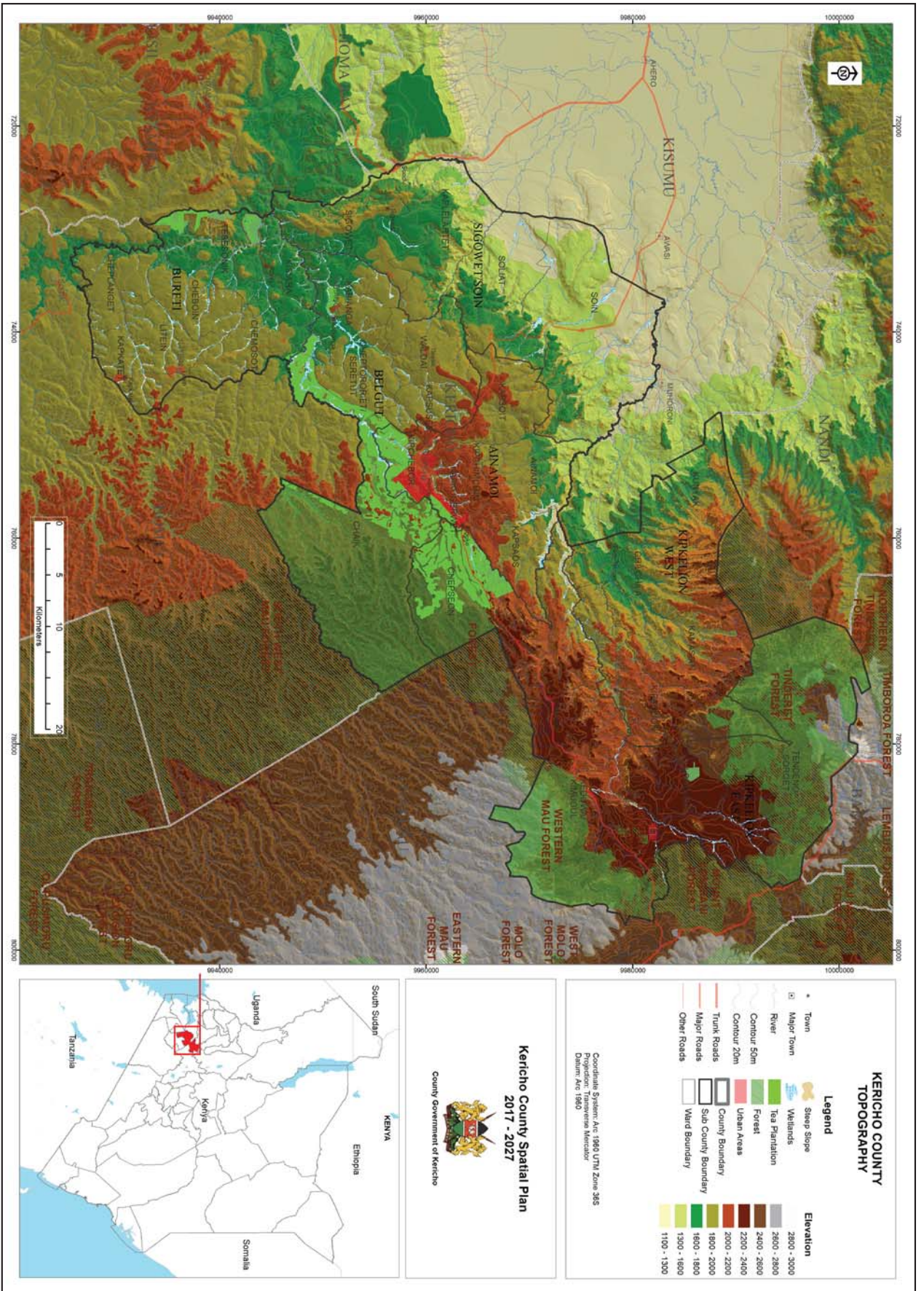
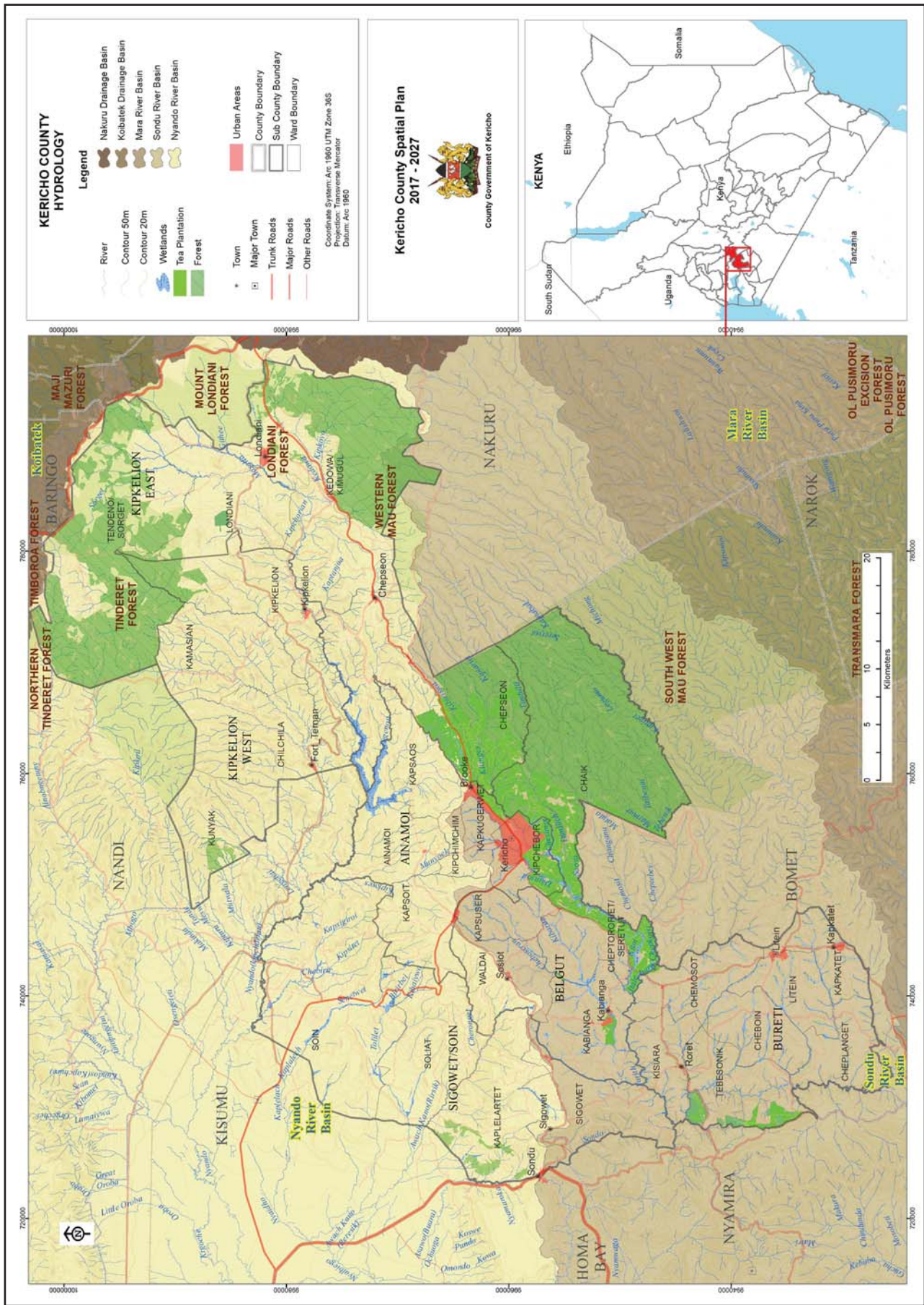


Figure 3: Annual Average Monthly Temperature.

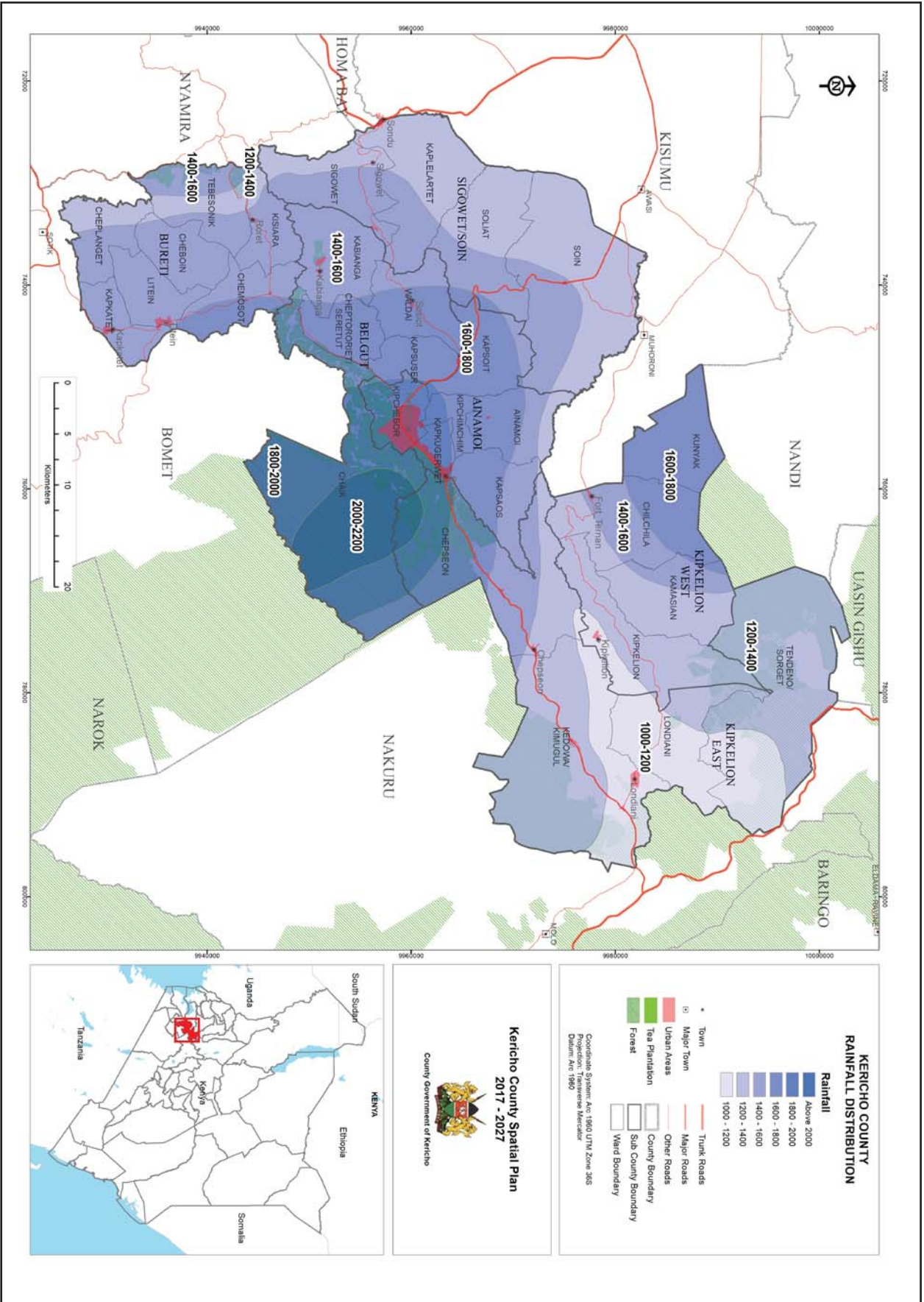


Map 3: Topography of Kericho County



Map 4: Hydrological Map of Kericho County

Map 5: Rainfall Distribution in Kericho County



Humidity is dependent on precipitation, temperature and cloud cover ranges from 1012mb to 1017mb. High humidity occurs from mid-April to mid-September, coinciding with the high rainfall period. The average wind speed of 16km/hour is experienced throughout the year. The county experiences an easterly aspect since it is located near the equator and receives sunlight for 11 to 12 hours per day throughout the year.

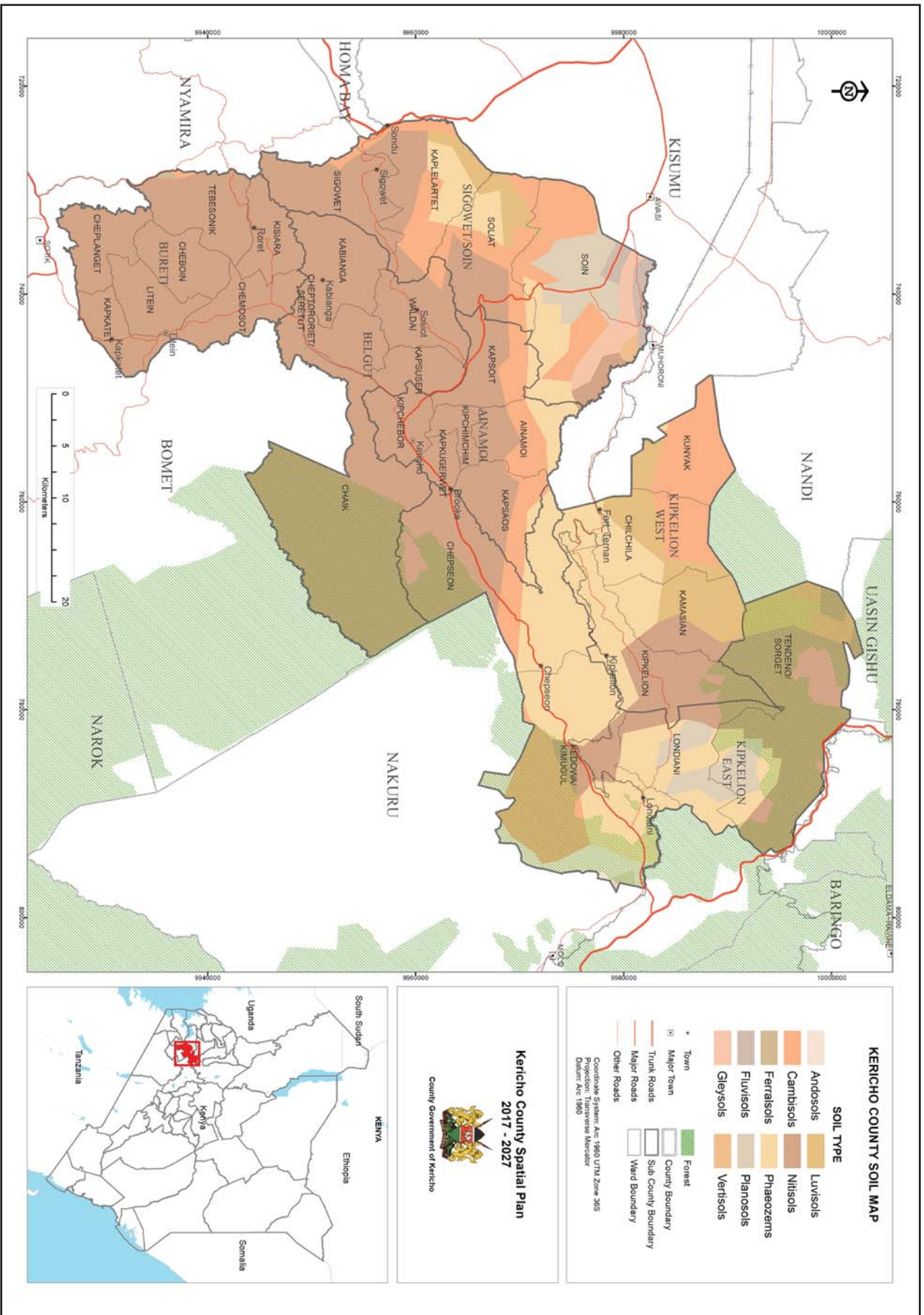
4.4. Soils and Geology

4.4.1. Soils

The County lies in the Lake Victoria Basin. Its geology is characterized by faulting and volcanic activities which influences the soil pH that ranges from 4.5 to 7.5. These soils are fertile and support a range of crops that put the county among the top agricultural counties in the country. Kericho is endowed with well-drained soils along the tea growing zones characterized by deep soils with varied soil texture as described in *Table 1* and *Map 6*.

Table 1: Soil Types and Characteristics

| Soil Type | Soil Characteristic | Area Located |
|-----------|--|--|
| Andosols | Black moderately deep to deep (>50 – 150cm) soils of volcanic landscapes. Are slow-drained and very deep clayey soils with pH of 5.3 to 6.1 | Parts of Kedowa, Londiani. |
| Cambisols | Brownish shallow (25 – 50 cm) soils. Ranges from well to extremely slow-drained clayey soils with pH of about 5 – 6. | Parts of Kipkelion east & west and Sigowet/Soin sub-counties areas of Gilimori, Kenegut, Iraa. |
| Ferrasols | Red to yellow deep (100 – 150cm) tropical soils. Well-drained loam soils with pH of about 5.2. | Not dominant in the county and traces are found far west of Kibugat. |
| Fluvisols | Associated with alluvial deposits with clay texture. Are slow-drained with pH of about 7 – 7.5. They are good for planting food crops like sweet potatoes but more suitable as grazing fields. | Found in Sigowet/Soin areas of Thessalia. |
| Gleysols | Wetland soils that are extremely slow-drained clay soils. Are reddish/yellowish moderately deep (50-100cm) soils with pH of about 5.8-6. | Found in parts of Sigowet/Soin sub-county areas of Soin. |
| Luvissols | Found on flat to gentle sloping terrains. Deep (100 – 150cm) clay soils that are slow drained with pH of about 6.5 – 7. | Parts of Sigowet/Soin and Kipkelion West Sub-Counties areas of Kapsorok, Cherara, Kajeliba, Mtaragon. |
| Nitisols | These are red tropical deep to very deep (100 – 150cm) loam soils. Well-drained soils with pH of about 4.5 to 5. Have high fertility and are suitable for a variety of crops. | Most dominant soils in the County covering the whole of Bureti and Belgut Sub-Counties. Parts of Kipkelion East around Kalyet and Lemotit. |
| Phaezoems | These dark red moderately deep (50 – 100cm), clay soils that are moderately to slowly drained with pH of about 5.3. Fertile soils suitable for cereals, vegetables and fodder. | Parts of Kipkelion West Sub-County areas of Kipkelion, Maili-Nne. |
| Planosols | Light-coloured deep (100cm) clay soils. Are well to slow-drained with pH of about 6 – 6.5. Have low fertility and are suitable for fodder crops and cereals. | Kipkelion east areas of Kamwingi and Kapcheplanga. |
| Vertisols | Heavy clay soils that are deep to very deep (100-150cm). They are extremely slow-drained soils with pH about 6.5 – 7. Are fertile soils but with difficult tillage due to heavy clay texture. | They are not dominant in the County with traces only found around Thessalia. |



4.4.2. Geology

The Kericho plateau forms the central part of the county sloping gently from 2500m to about 1800m. The county has a solid geology consisting of tertiary lavas extruded in a westerly and south-westerly direction from the Rift Valley faults in early Miocene times. They are noted for the number and thickness of their beds, their freedom from inter-bedded pyroclastic material and their low angle of dip (Ekirapa A.E., 1996). These phonolite lavas are remarkably uniform in composition and are reported to be free from fissures due to the lack of subsequent tilting. They weather into deep stone-free soils, heavily leached and uniform in physical structure to a depth of 6m. It is predominantly underlain by tertiary lavas and intermediate igneous rocks. A small part of the county is dominated by undifferentiated basement system rock, volcanic ash mixture and other prolific rocks. The hilly nature in some parts of the county predispose such places to soil erosion but minimized by the presence of a dense vegetation cover, except in areas like Sigowet, Chilchila, Kuniyak and Koitabuot where vegetation cover has been largely cleared. *Map 7* shows various geological formations in the county.

4.5. Agro-Ecological Zones

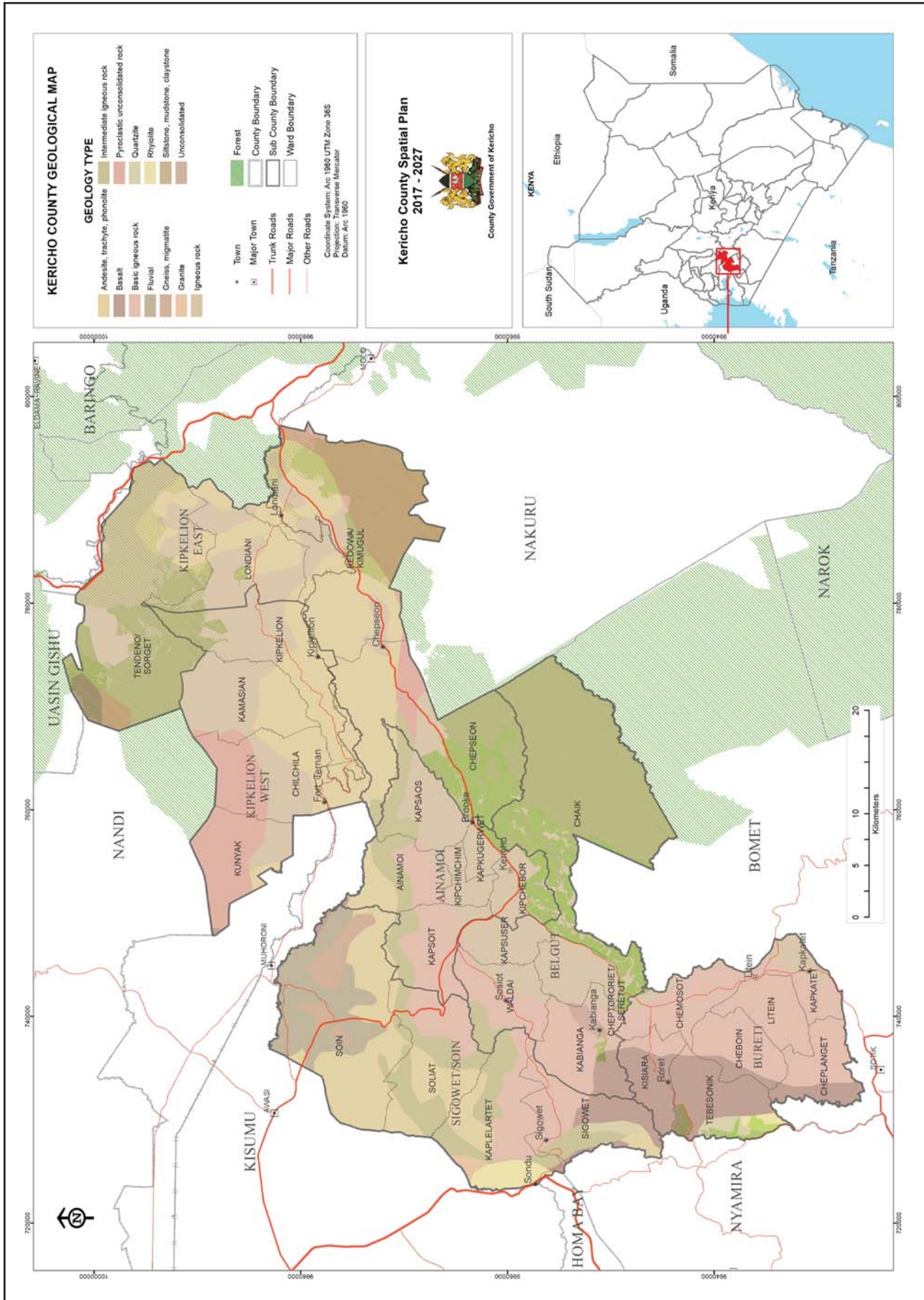
The county is broadly divided into four major agro-ecological zones. These are Forests & slightly drier zones, tea zone with high rainfall, Maize zone in the lower highlands and Coffee zone to the west of the county. Detailed agro-ecological zones are as shown in *Map 8*.

4.6. Land Cover

Land cover is the physical material covering the earth's surface. Analysis was done to determine land cover class extents using high resolution satellite image and field validation methods. The land cover maps provided information for clear understanding of the prevailing landscape and how best to incorporate development strategies in these areas. Land cover classes are as provided in *Table 2* and *Map 9*.

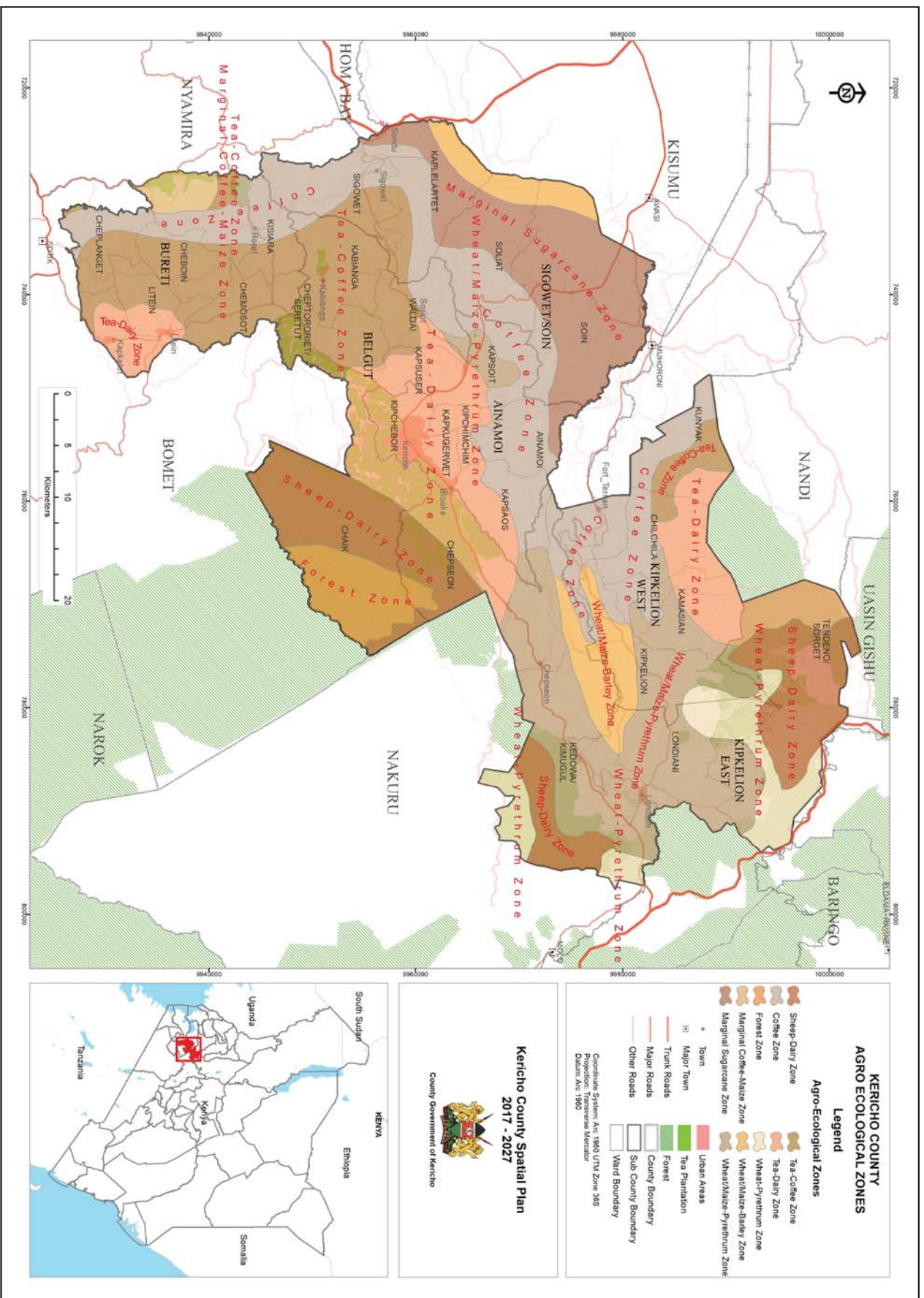
Table 2: Land cover classes

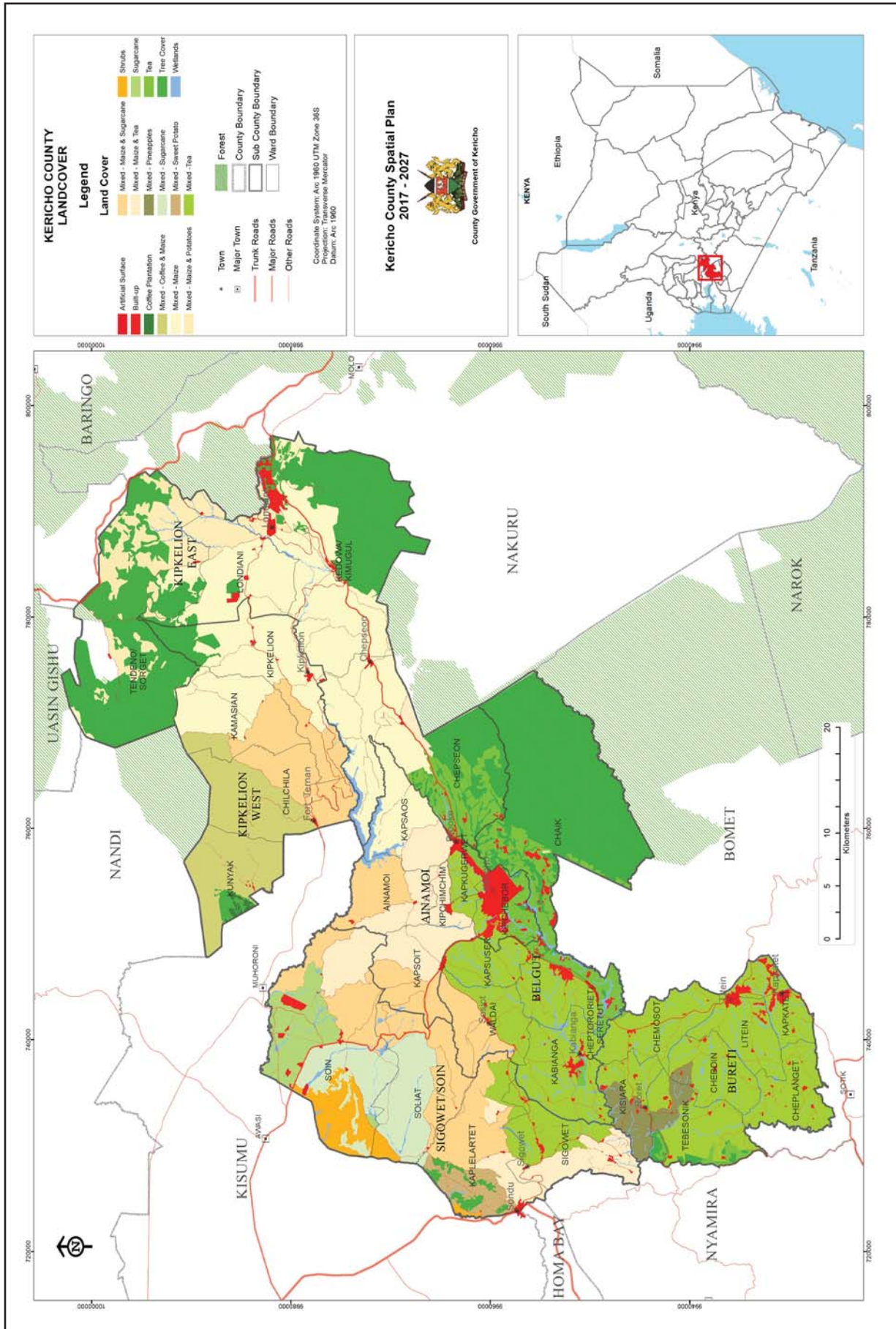
| Land Cover | Brief Description | Area in Hectares | Percentage | |
|--|---|--|----------------|--------|
| Artificial Surface | Road surfaces, air strips and rail line. | 2,861.30 | 1.11% | |
| Built-up areas | Predominantly under urban use, residential, education facilities, factories, commercial, industrial, institutional, green houses etc. | 6,016.24 | 2.34% | |
| Tea Plantation | Tea is the dominant cash crop planted in large scale farms. | 10,070.46 | 3.92% | |
| Shrubs | These are scattered, short tree bushes in lowly inhabited Western parts of the county | 3,634.22 | 1.41% | |
| Sugarcane Plantations | One of the main cash crops grown in extensive farms on the north western parts of the county | 4,500.45 | 1.75% | |
| Coffee Plantation | These are areas predominantly covered by coffee bushes e.g. Norman Brookes' farm in north western part | 234.00 | 0.09% | |
| Mixed Agriculture cover | Predominantly maize | Agriculture is the main activity in the county and therefore majority of the county is covered by mixed agricultural farms owned by the small and medium scale farmers. A variety of crops are grown on these farms. This land cover class has been further classified based on predominant crops. | 41,348.83 | 16.10% |
| | Predominantly maize and coffee | | 12,897.91 | 5.02% |
| | Predominantly tea | | 46,176.50 | 17.97% |
| | Predominantly tea and maize | | 16,693.35 | 6.50% |
| | Predominantly maize and potatoes | | 9,042.45 | 3.52% |
| | Predominantly maize and sugarcane | | 29,946.10 | 11.66% |
| | Predominantly pineapples | | 2,994.03 | 1.17% |
| | Predominantly sugarcane | | 2,135.44 | 0.83% |
| | Predominantly sweet potatoes | | 2,135.44 | 0.83% |
| Tree Cover | These are forested (natural and planted) and conservation areas which include Western-Mau, Londiani and Tindiret. Tree cover within the farm lands are considered part of Mixed agriculture and/or riparian reserve conservation. | 60347.09 | 23.5% | |
| Water, wetlands and Riparian vegetation | These are the major water bodies such as rivers and dams. Swamps and marshy areas of the county fall under this cover. It also includes vegetation along the riparian areas. | 5,866.19 | 2.28% | |
| Total | | 256,900.00 | 100.00% | |



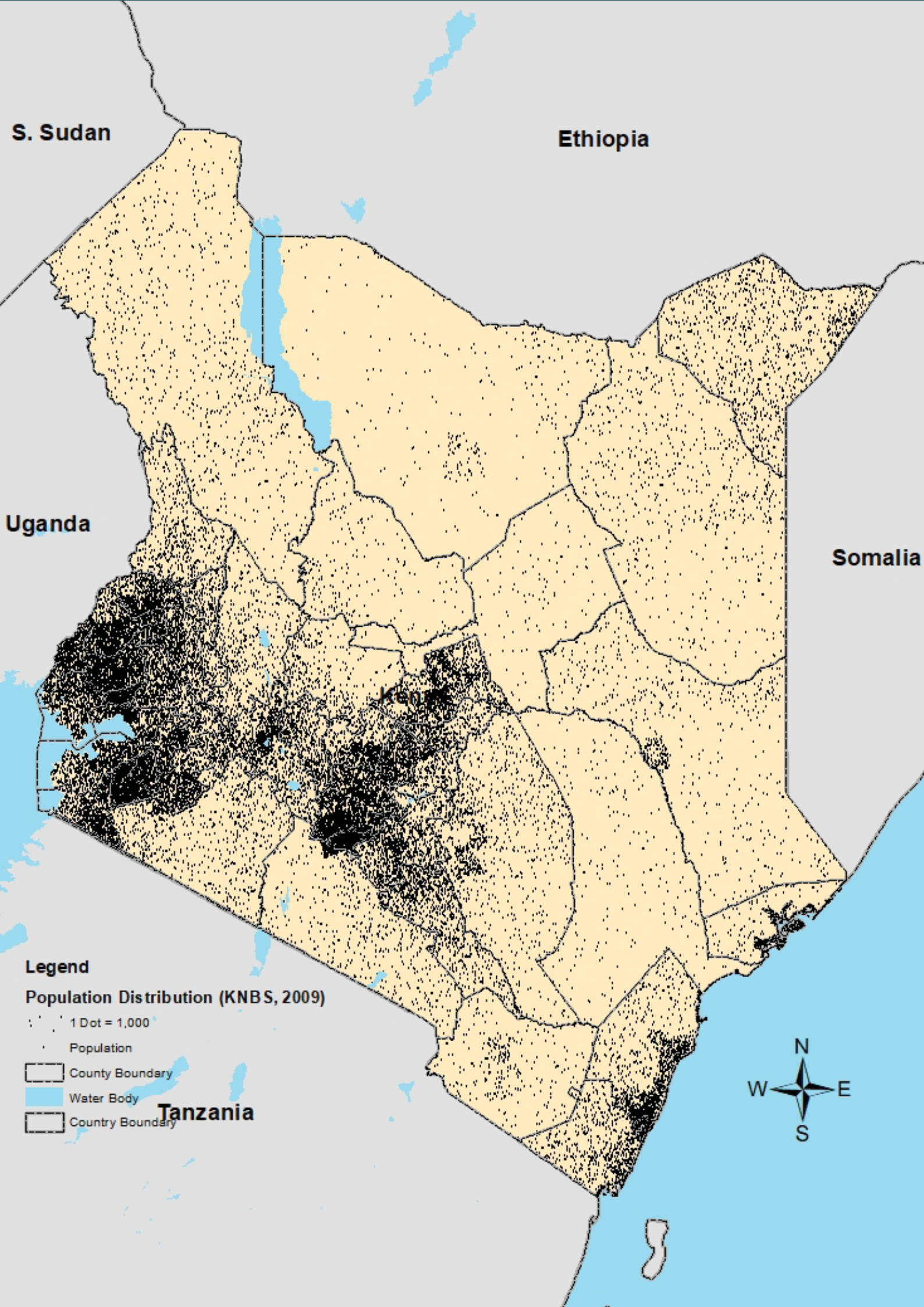
Map 7: Geological Map of Kericho County

Map 8 : Agro-Ecological Zones in Kericho County





Map 9: Kericho County Land Cover



Population And Demography



5.1. Overview

According to the 2009 Population and Housing Census, Kericho county had a total population of 739,429 persons with 371,033 males and 368,396 females as seen in *Table 3*. The county's population accounts for 2.1% of the total population of Kenya occupying 0.42% of Kenya's physical space. The projected population in 2017 was 910,676 persons. The county has a rich child population (below 14 years of age) which takes up 44% of the entire population. The major urban areas are Kericho town, Kipkelion, Londiani and Litein with approximately 10% of the population concentrated in these four towns. The county has a population density of 302 persons/km² which is 4.5 times higher than the country's average of 71 persons/km².

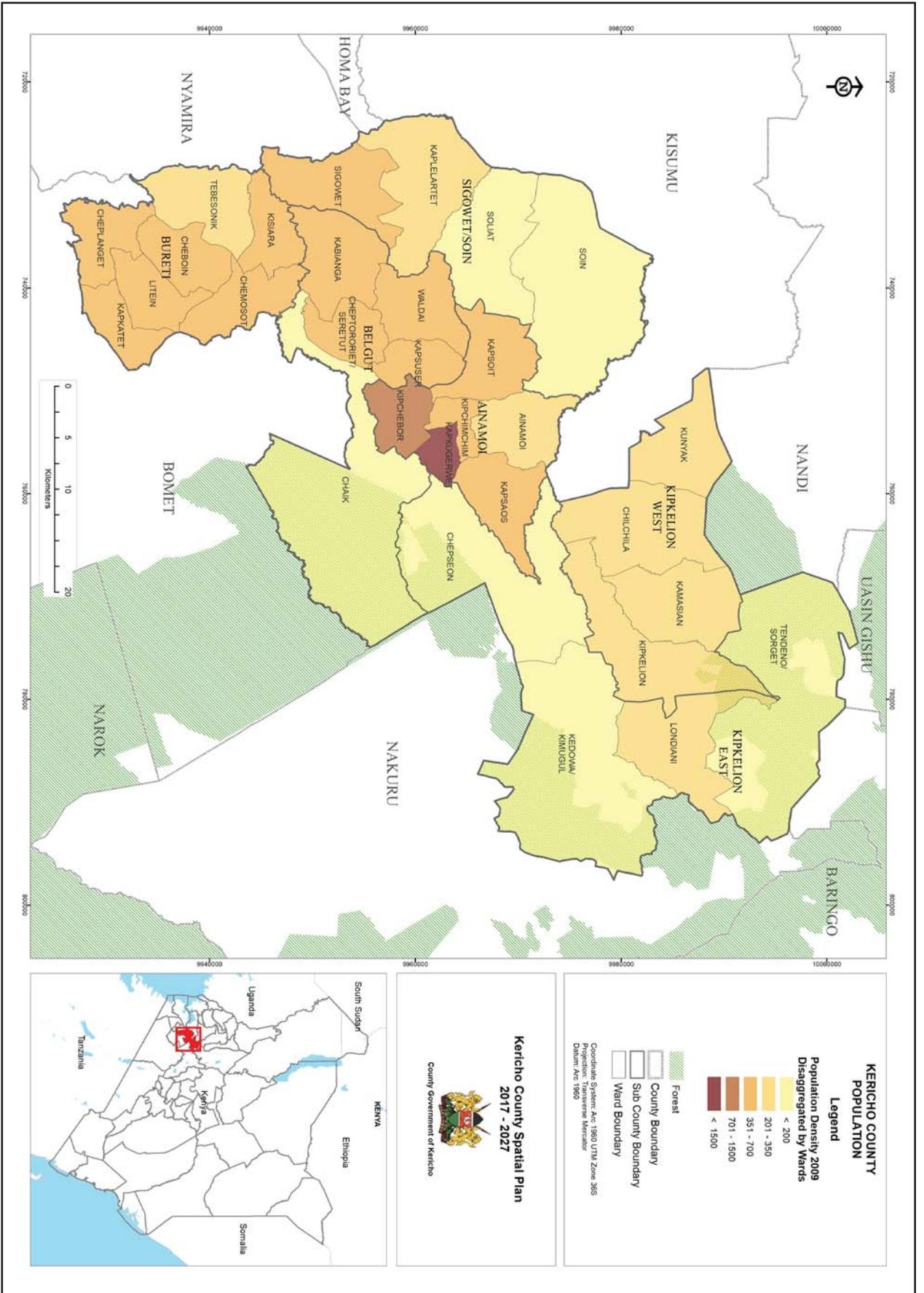
Kericho county is an agriculturally based economy cutting across all the geographic spheres of the county. This has led to an even population distribution. Nevertheless, tea growing areas are more populated than any other area.

Table 3: County's demographic statistics

| Item description | Fact and figures |
|----------------------------|------------------------------|
| Population (2009 census) | 739,429 |
| Male to Female ratio | 1.00833 |
| Population growth rate | 2.4% |
| Population Density | 302 persons/ km ² |
| Predominant Household Size | 4-6 members |
| Life expectancy | 56.5 years |
| Gini Coefficient | 0.378 |

5.2. Population Density and Distribution

Kericho town is the headquarters of the county and the largest urban area, therefore has the highest population concentration among the other major urban centres in the county while Kipkelion town has the least population concentration. Due to the presence of Kericho town, Ainamoi sub-county has the highest population density of 576 persons per square kilometre as per the 2009 National Housing and Population Census. Bureti sub-county has the second highest population density within the county of 516 persons per square kilometre. Kipkelion East constituency has the least population density of 144 persons per square kilometre which is majorly attributed to the presence of forest covers of South-western Mau and Londiani. Generally, the south-eastern part of the county has a higher population density compared to the northern part of the county. *Map 10* shows population density across the wards.



Map 10: Kericho County Population Density

5.2.1. Population Structure

Kericho County comprise of a young population, where 0 to14 year-olds constitute 44% of the total population. This is due to high fertility rates among women with average household size of 4-6 members (KNBS, 2009). The County’s age structure is categorised into various age brackets shown in the *Figure 4* below;

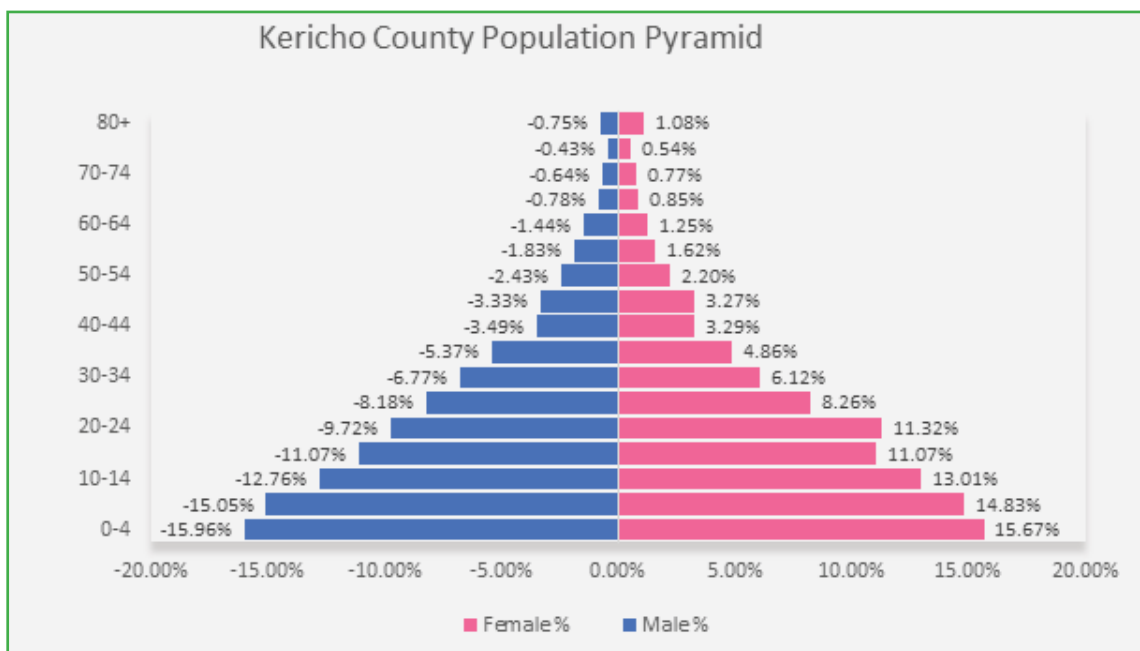


Figure 4: Population pyramid

5.2.2. Population Projection

It is projected that by the year 2027, the population density of Ainamoi will rise to 944 persons per square kilometres while Kipkelion East constituency population density will rise to 225 persons per square kilometres as depicted in *Table 4*.

Table 4: Population Projection

| Constituency | Area (sq. km) | 2009 (Census) | | 2017 (Current) | | 2027 (Projection) | |
|----------------|---------------|----------------|------------|----------------|------------|-------------------|------------|
| | | Population | Density | Population | Density | Population | Density |
| Belgut | 440 | 127,387 | 386 | 155,591 | 524 | 199,783 | 673 |
| Sigowet/Soin | 469 | 104,066 | 196 | 127,106 | 271 | 163,208 | 348 |
| Kipkelion west | 358 | 98,054 | 242 | 119,763 | 335 | 153,779 | 430 |
| Kipkelion East | 744 | 106,872 | 129 | 130,534 | 176 | 167,608 | 225 |
| Ainamoi | 240 | 138,143 | 576 | 176,264 | 735 | 226,328 | 944 |
| Bureti | 320 | 164,907 | 461 | 201,418 | 630 | 258,625 | 809 |
| Total | 2,569 | 739,429 | 287 | 910,676 | 354 | 1,169,331 | 455 |

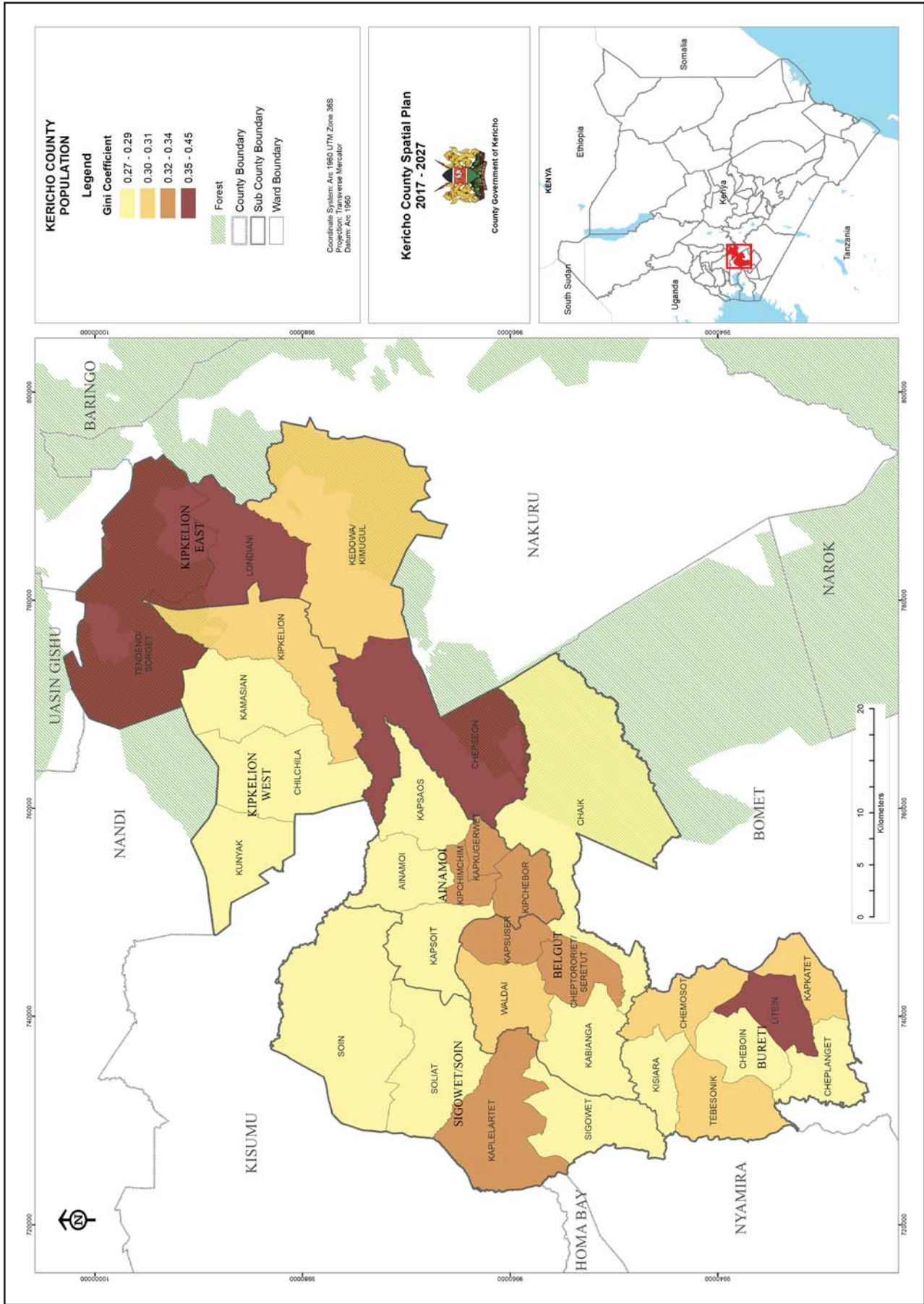
Note: Growth rate of 2.4 per cent, base data KNBS,2009 Population Census.

5.3. Household Characteristics

The county has a life expectancy of 56.5 years compared to a national life expectancy of 60 years. Its infant mortality rate is at 56 per 1,000 births while the national rate is at 54. Households have an average of 4-6 members. This is comparable to 7 persons average of rural households in Kenya.

The total dependency ratio is estimated at 0.883 which is better than the national average for rural households at 1.007. Within the administrative divisions in the county, the Gini coefficient varies from 0.27 in Soin ward to 0.45 in Chepseon ward. Wealth distribution within Kericho county is illustrated by Gini coefficient in *Map 11*.

Firewood and charcoal are the main sources of fuel. Lighting is mainly through electricity, solar and paraffin. Use of paraffin and solar is predominant in rural areas while electricity is popular in urban areas. Household water is sourced mainly from streams and rivers which accounts for 46.1% of water supply within the county and 14.9% of the water piped. Other water supply sources are such as boreholes etc. Out of this, about 60% is classified as unimproved water while 40% of the water sources are from improved sources. Most household dispose human waste through pit latrines. Sewer system exists within Kericho municipality connecting an estimated 5,000 households. (GeoMaestro, 2017)



Map 11: Kericho County Gini Coefficient



Land, Human Settlements and Urbanization



6.1. Overview

Land is an important limited factor of production. Its management has been evolving since pre-colonial times. The county is largely privately owned through freehold or leasehold tenure systems. This limited resource is subjected to competing uses. One of the competing land uses is settlements.

6.2. History of Land and Settlements

Land tenure and ownership in Kericho can be traced to pre-colonial era. The Kipsigis who are the majority indigenous inhabitants, migrated from Sudan following the River Nile and initially settled around Mount Elgon around 700BC (Kipkorir & Welbourne, 1973). They later spread and settled in parts of Rift valley around 1600AD (Chelimo & Chelelgo, 2016; Kipkorir & Welbourne, 1973). The Kipsigis and other migrant communities suffered enormous appropriation of land during the colonial era (Omwoyo, 2000). This culminated in the colonial resistance which was widespread throughout Kenya. The Kipsigis were semi-nomadic pastoralists just like the larger highland and plain Nilotes though they depended on crop production to a limited extent. As land was alienated for white settler farming activities, the indigenous communal land tenure systems were gradually changed to private tenure (Omwoyo, 2000). The privatization of land parcels has continued in Kericho with nearly all land being registered.

6.3. Land Tenure System and Ownership

Land tenure refers to the manner in which individuals or groups of people enjoy rights of access to land including conditions under which such land is enjoyed. The land ownership in Kenya is categorized as private, public or communal. These categories of land are governed under two types of tenures i.e. freehold and leasehold. Freehold is the main tenure system in the county. Up to 96% of the households have land under freehold while 4% are leasehold and less than 1% occupied by squatters as shown in *Figure 5*. Leasehold tenure system is found in the urban centres and the multi-national tea estates.

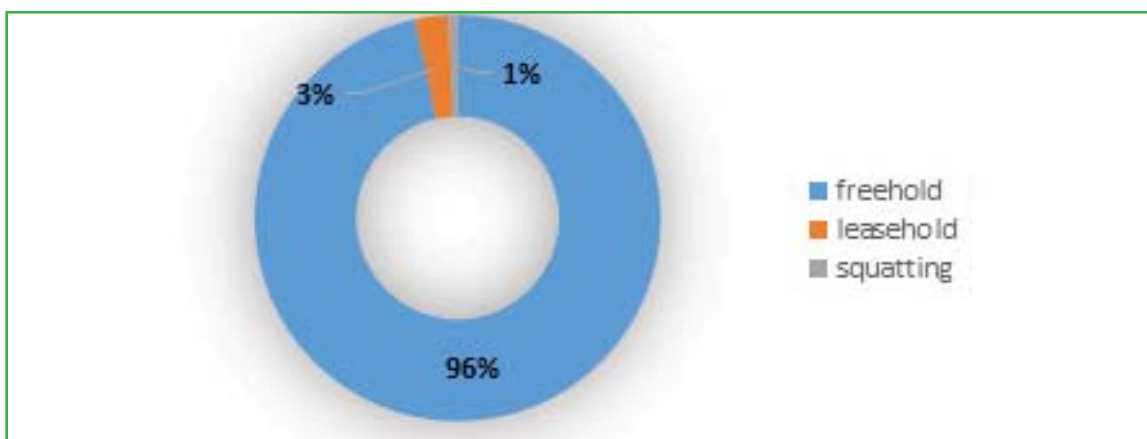


Figure 5: Land Tenure systems in the County

i) **Freehold Tenure**

This tenure confers the greatest interest in land called absolute right of ownership or possession of land for an indefinite period of time, or in perpetuity. Freehold land is governed by the Land Registration Act 2012. The Act provides that the registration of a person as the proprietor of the land and vests in that person the absolute ownership of that land together with all rights, privileges relating thereto. All land within Kericho county by 1970 had been fully adjudicated which allowed for subdivision.

ii) **Leasehold Tenure**

Leasehold is an interest in land for a definite term of years and may be granted by a freeholder usually subject to the payment of a fee or rent and is subject also to certain conditions which must be observed relating to developments and usage.

Leases are granted by the national government for public land, the county governments for communal land and by individuals or organizations owning freehold land. The maximum term of government leases granted in Kenya is 999 years for agricultural land and 99 years for urban plots. There are few cases of 33 years leases granted by government in respect of urban communal lands. The local authorities grant leases for 50 and 30 years as appropriate (GOK 1996).

Most of the county land is registered with those possessing title deeds at 87% while those with agreements between buyer and seller at 6%. Further, residents with allotment letters account for 3% while those without any ownership document stand at 4%. *Figure 6* shows the status of ownership, fragmentation and the extent of land registration in the county respectively.

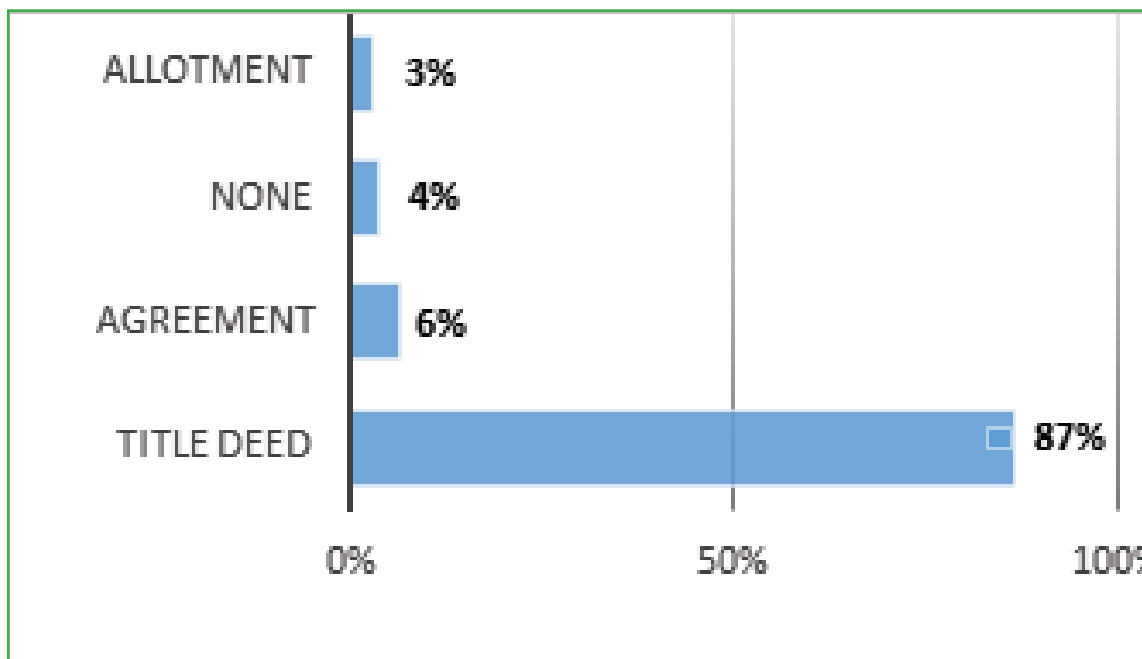


Figure 6: Possession of Land ownership documents

6.4. Land Values

High population in urban areas and inheritance practices in rural areas has led to land fragmentation threatening sustainable land use. Land values are highest in the urban centres due to high demand of land, Kericho municipality leading followed closely by Litein and Sondu. High land demand in urban areas is attributed to perception of more socio-economic opportunities compared to rural areas.

Rural land demand has gone up in the recent years as a result of rapid population increase that has resulted in increased land sub-division. Infrastructure development e.g. proposed SGR, roads and industrial developments e.g. in Kipsitet neighbourhood, has led to land speculation and consequently land ownership conflicts. Rampant land sub-division is adversely affecting agriculture as it is reducing land under agriculture into un-economical parcels.

6.5. Land Management

The National Land Commission, in consultation and cooperation with the national and county governments, established the county land management board for purposes of managing private and public land. This entails subjecting the land to the land-use planning and survey requirements, process applications for allocation of land, change and extension of user, subdivision of public land and renewal of leases.

6.6. Land Use

Land use analysis determines how people in the county utilize land for different purposes such as agricultural use, urban land use and conservation. Land use pattern in the county is greatly shaped by its physiographic characteristics, predominant agricultural activities, trunk infrastructure and the county's historical background dating back to the colonial era. *Map 12* shows Kericho County Land use. We categorized land use into urban and rural domains which are expounded below.

6.6.1. Urban Land Use

Urban centres depict varied land uses due to diverse human activities that are concentrated within urban centres and high population density. The county entails various levels of urban centres the main ones being Kericho, Litein, Sondu, Londiani, Kabianga, Kipkelion, and Kapkatet. These urban centres depict various land uses including commercial, residential, industrial, educational, public purpose and recreational. *Table 5* represents the most common land uses across the urban profile. Land uses in the urban areas directly serve the immediate urban populace i.e. the working population who require residential establishments near their work places.

Table 5: Common Urban Land Uses

| Land use | Description |
|--------------------|--|
| Residential | This land use is dominant in every urban centre. Most urban centres have designated land for residential development delineated in their respective development plans but due to lack of development control even undesignated land has been converted to residential use. Kericho town being the main urban centre has more land designated for residential use compared to other urban centres. |
| Commercial | Most centres within the county be it urban, market or even local are predominantly commercial hubs serving as retail and market centres. Within the established urban centres that have been planned like Kericho town, Litein and Sondu; the urban core is normally under commercial land use. Commercial activities influence the growth of towns like the case of Chepseon market centre where robust commercial activities have seen the town extent expand. |
| Industrial | Processing and manufacturing activities in the county dominate major urban centres with Kericho town leading in land allocated for this use. The county has seen the rise of industrial activities with Kipsitet centre already having established industries and projected to have more than 30 other companies that have acquired land there that will lead to the area being an industrial park. Tea processing industries are wide-spread in the tea growing areas of Belgut, Ainamoi and Bureti sub-counties. |

6.6.2. Rural Land Use

The dominant land use in the rural areas within the county is agricultural. However, in some parts, quarrying/dressing of building stones is carried out and hence supports the rural economy. The other dominant land use is conservation owing to the vast gazetted forests such as the Mau forests.

i) Agriculture

These are areas of predominant agriculture where people practice either large scale, medium scale or small-scale agriculture. Agriculture is the main economic activity in the county with most of the people practicing crop production and livestock rearing. The average land under agriculture in the county is approximately 2 acres according to the field survey conducted with major crops grown being tea, maize, pineapples, beans and vegetables such as kales and cabbages. This land use is therefore the major rural land use in the county represented by the distribution of the rural population which is about 75% of the total population of the county.

ii) Conservation

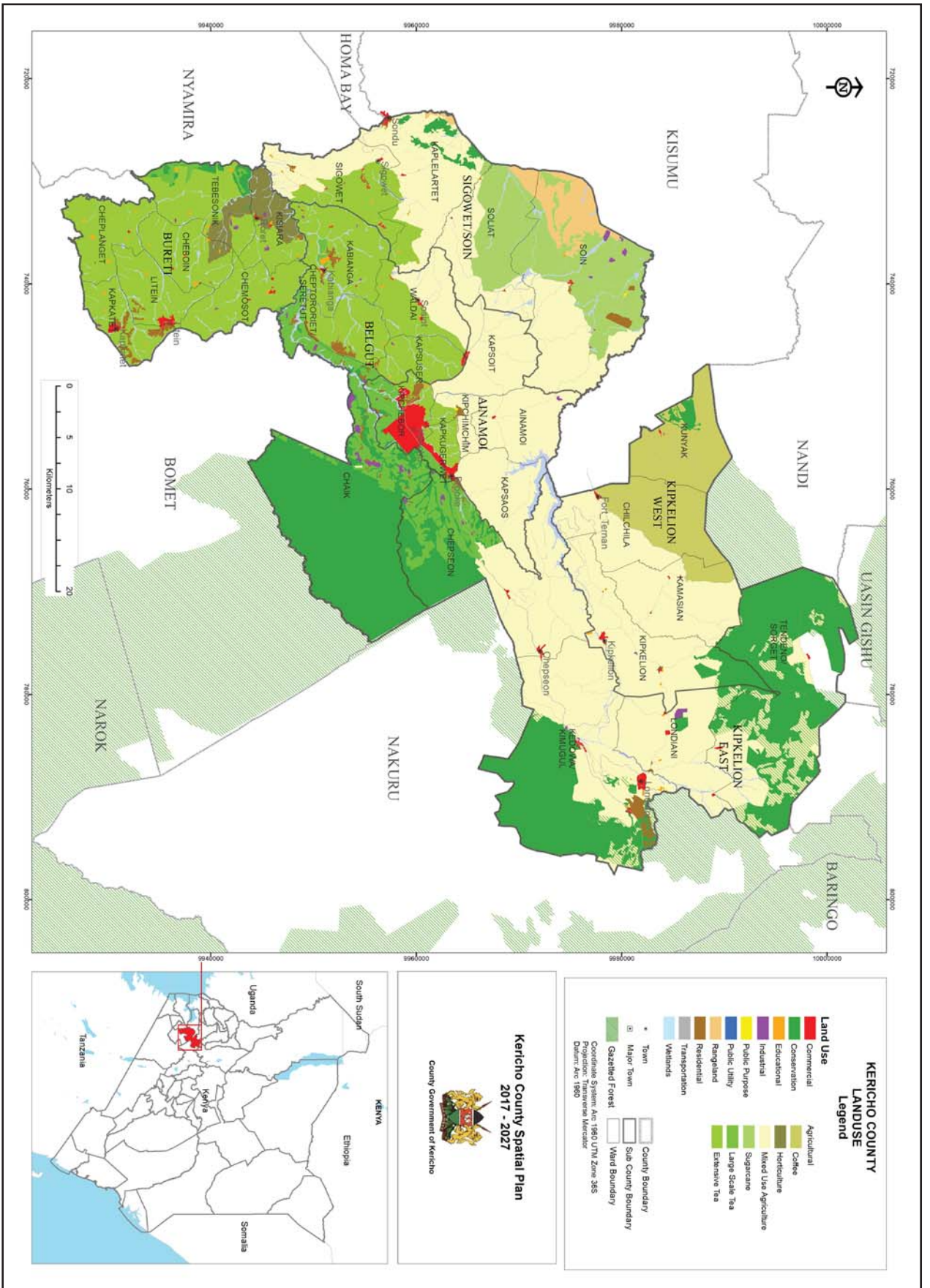
This is land that has been preserved for the purpose of protecting the environmentally sensitive areas such as the indigenous forests, steep hills, wetlands, water catchment and the riparian areas. In most cases, the National government gazette these areas so that they are not encroached for other land uses like agriculture.

6.6.3. Land Use Trends

Land use changes over time and is influenced by several factors - both human and natural. In the county, several factors are shaping land uses. Some of the current trends on land use change are:

- High demand for land to harbour more settlements due to population increase, has led to rapid land sub-division rendering them uneconomical. This eventually poses a threat to agricultural land uses, and forest areas which not only support a large socio-economic population but also enhances sustainable development.
- Agricultural land being converted to residential use. This is mainly occurring in urban centres that are currently facing an influx of people and consequent urban sprawl. A good example of such is Kericho Municipality which has seen increased housing and utility demand in the areas of Majengo and Nyagacho. These areas have evolved into informal settlements over the years. Further, Kabianga market centre has seen demand for housing rise due to presence of Kabianga University.
- Agricultural land being converted to industrial use. This is currently being experienced in Kipsitet area along Kericho-Kisumu highway where a couple of industries have already setup and several others proposed that will see the area become an industrial park in the near future.
- Commercial activities have seen the extent of urban centres like Chepseon, Londiani, Kedowa change use of land from agriculture to commercial use especially due to the influence of improved road transport. Activities witnessed include vegetable vending along the major highways and establishment of hotelier industry in the hinterland.

Map 12: Kericho County Land Use

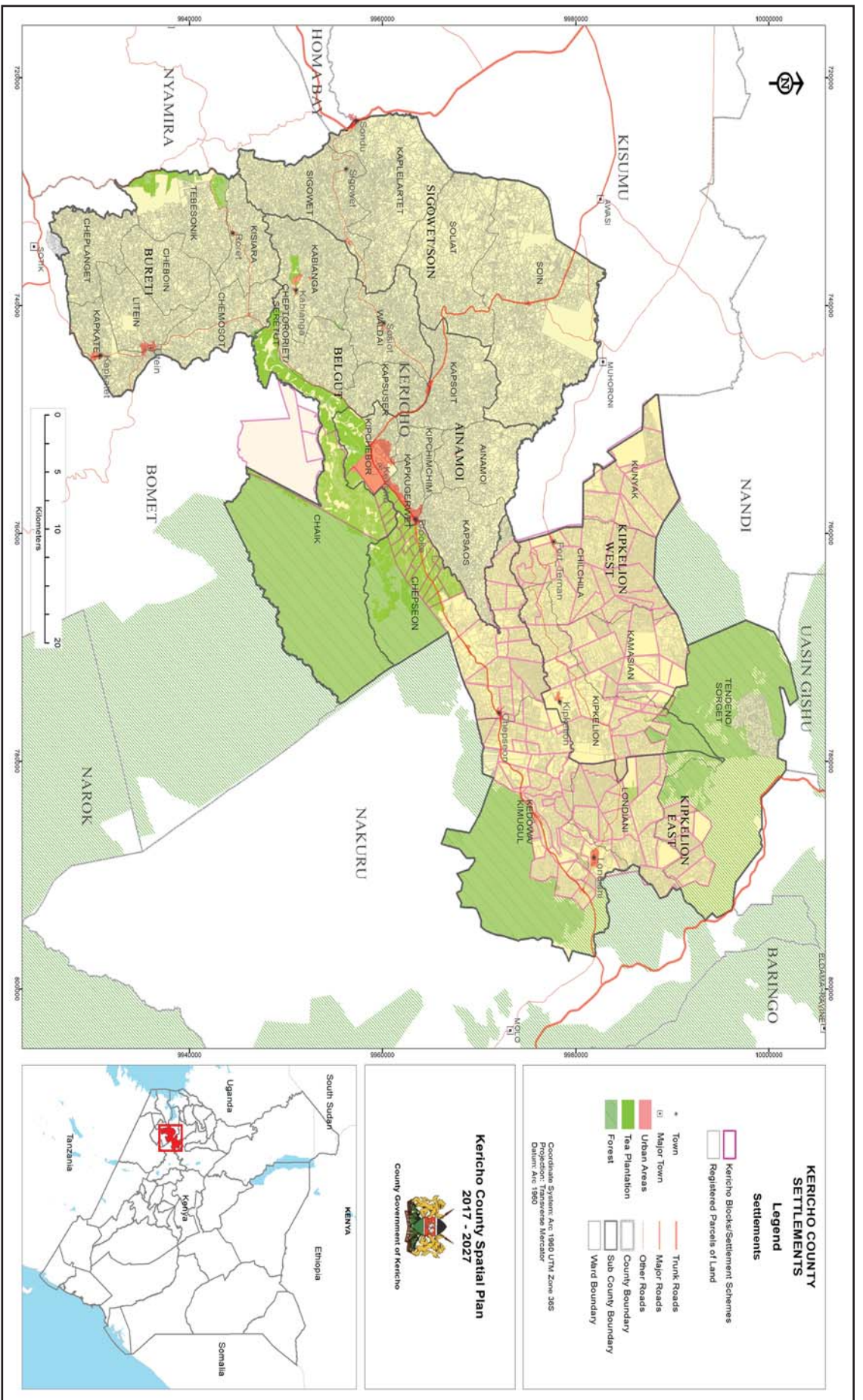


6.7. Land Registration Status

Table 6 and Map 13 display the status of land registration in Kericho county. The southern part of the county comprising Ainamoi, Bureti, Belgut and Sigowet-Soin sub-counties is the Kipsigis native land which has transitioned from communal to private tenure as a result of land registration over the years. The northern part of the county comprising Kipkelion west and Kipkelion east were lands alienated for white settlers which transitioned from white settlers to private tenure through land purchase settlements schemes after Kenya gaining independence in 1963.

Table 6: Summary of Land Registration

| Sub County | Registered Land (Free Hold) | | Forest Reserve | Alienated Land | | | Townships | Roads, Riparian etc. | Average Land Size | Total |
|-----------------------|-----------------------------|--------------------|----------------|----------------|--------------|------------|--------------|----------------------|-------------------|----------------|
| | Kipsigis Native Land | Settlement Schemes | | Tea | Sugar-cane | Coffee | | | | |
| Ainamoi | 20,818.00 | - | - | 1,374 | - | - | 1,006 | Public land | 1.80 | 23,198 |
| Belgut | 17,381 | - | 19,335 | 4,554 | - | - | 19 | | 1.70 | 41,289 |
| Bureti | 28,081 | - | 552 | 563 | - | - | 41 | | 2.40 | 29,237 |
| Kipkelion East | - | 30,785 | 36,693 | 3,476 | - | - | 1,356 | | 2.50 | 72,310 |
| Kipkelion West | - | 28,769 | - | - | - | 802 | 641 | | 2.60 | 30,212 |
| Sigowet/Soin | 43,943 | - | - | - | 2,064 | - | 17 | | 3.40 | 46,024 |
| TOTAL | 110,224 | 59,554 | 60,347 | 10,070 | 4,500 | 802 | 3,081 | 8,322 | | 256,900 |



Map 13: Land Registration/Settlement Map of Kericho County

6.8. Human Settlement

According to the 2009 National Census, Kericho county is currently inhabited by a population of 739,429 persons who reside in urban or rural contexts. Settlement typology is determined by socio-economic development within a locale including dispersed and nucleated settlements in rural areas and towns respectively. Further, natural resources and physical infrastructure like transit corridors and nodes affect the pattern of settlements including linear settlement. Across the board, the county encompasses a diverse settlement character as described in this chapter.

6.8.1. Urban Development

The urban areas serve centrality purposes, whereby other peripheral regions rely on them as critical market areas. They serve unique administrative and commercial functions that the production peripheral areas require in order to ensure a well circuited economy. The population census conducted in 2009 shows that the Kenya urban population accounted for 31.3% of Kenya's population. According to (Knoema, 2009), the urban population of Kericho county constitutes about 285,789 persons which is 40% of its populace.

Urban and rural areas experience ties of mutual benefits within the value chain from production, processing to marketing, distribution and consumption functions. Urban areas provide employment opportunities in the off-farm sectors to a large rural population which significantly reduces the over-dependence on agriculture-based income generating activities. According to the Urban Areas and Cities Act No. 13 of 2011, an urban area refers to a municipality or a town. Kericho municipality is the major urban area in Kericho county. Its municipality status is due to the legal requirement where all county headquarters are conferred the same status. Further, it provides high level of services and constitutes an estimated population of about 108,000 residents. Kericho towns is connected to other urban areas through road networks.

i) Urban Housing

Urban housing is a fundamental pillar of sustainable urban development; an important sector in county development. Housing in the urban centres is a challenge escalated by influx of population within the urban centres due to pull-factors such as pursuit of employment. Therefore, planning for housing demand is fundamental in line with National Housing Policy, which includes: establishing housing schemes, development control, land banking and enforcement of zoning regulations.



Figure 7: Land for urban housing belonging to NHC in Kipkelion town

Kericho town is experiencing growth of informal settlements particularly in Nyagacho area. Due to its proximity to the central business district and low rents, low income urban dwellers prefer to settle in this area. However, there is a steady influx in the number of urban dwellers in search of employment. This has led to population and housing pressure in the area that has consequently resulted in chains of illegal housing structures mainly of iron sheet typology. Urban infrastructure has consequently been strained including the biggest challenge being water supply.

ii) Urbanization Trends

Urban areas are evolving due to infrastructure and service provision. The towns that have experienced a boom in their economy have continued to expand thus affecting the land use systems. The peri-urban land uses are threatened by urban developments. Land fragmentation is rampant in a bid to accommodate more urban development. Commercial, educational and service establishments are on the rise, writing off the previous agricultural land uses.

Urban sprawl - and the consequent informal settlements - is gradually becoming an emerging issue especially in Kericho town, where development has sprawled to Brooke, Kipchimchim and Kapsoit. Examples include informal settlements in the residential areas of Nyagacho and Chepkolon areas.

However, each urban centre continues to thrive due to unique and dominant features. A good example would be Kabianga town which thrives as an educational centre hence all other activities revolve around that primary role. Kapkatet is also a town that has continued to grow but within the recent past has seen more prominence due to the Kapkatet stadium which has hosted political rallies as well as numerous tournaments.

iii) Urban Land Demand and Supply

From analysis of urban centres, urban growth occurs due to development of new towns as well as through urban sprawl of existing urban centres. Urban land demand is important in order to enhance development control. This is fundamental for purposes of protecting the much resourceful peripheral land where rural development activities take place.

Most of the towns in Kericho county have local physical development plans (PDP) to guide development. However, looking at the trend analysis, some towns have outgrown the planned urban extents and hence need reviews conducted as illustrated in *Figure 8* for the case of Chepseon.

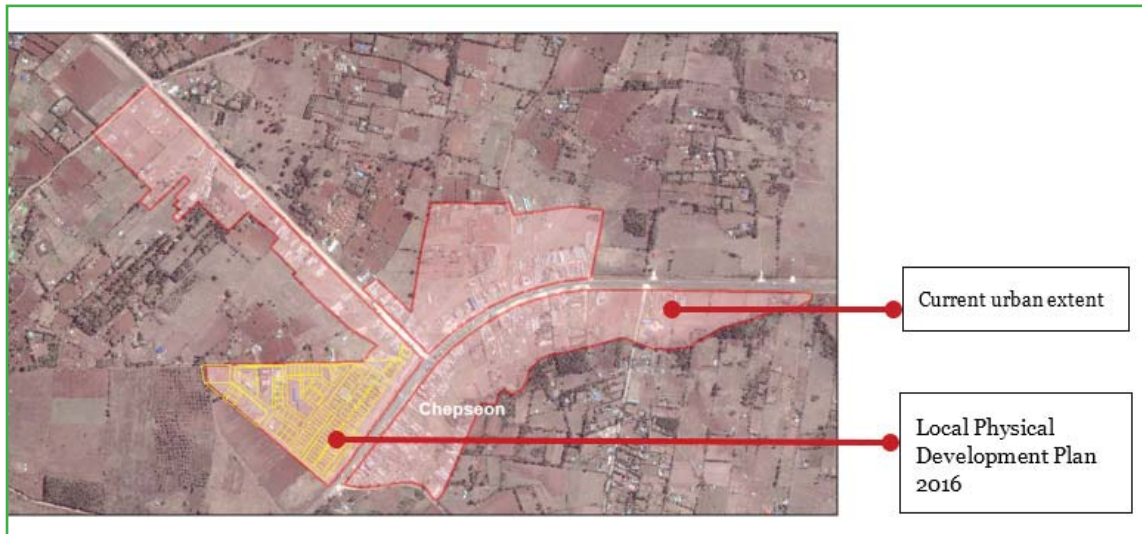


Figure 8: Extensive Urban growth in Chepseon town

This is a key challenge that necessitates streamlining in order to achieve an objective review of the existing PDPs. Ultimately, the PDPs will be instrumental in controlling urban growth and informing the relevant infrastructure to expand or establish in tandem with needs.

Undertaking urban land assessment would provide objectivity to such a review with regards to seeking ways to optimize land use. Land demand assessment is based on urban population which is estimated at 31% of ward population based on urban-rural population ratio in the county. The commercial area may also be densified or compacted, to concentrate commercial activities as per the patterns of development adopted by most towns. Land for utilities and urban infrastructure can be acquired at strategic areas as well as those for educational and public purpose. Scenarios for urban development and growth for various towns differ due to different factors affecting the same. However, the main key factors below are generally considered for computing urban land demand as illustrated in the case of Kericho municipality in Figure 9.

- i) Overall typical pattern of development
- ii) The increase in urban populations (population density per hectare, current and projected)
- iii) Assessment of lands that could be made available for urban uses without jeopardizing the integrity of key land uses considered essential such as agricultural productive and environmental sensitive areas.

Table 7: Major Urban areas Land Demand projections

| Urban Area | Urban Population (Urban & Peri-Urban) | | | Current Land Supply (Ha) | Projected Land Demand (Ha) |
|------------------|---------------------------------------|-----------------|-----------------|--------------------------|----------------------------|
| | 2009 | 2017 | 2027 | | |
| Kericho | 101,808 | 150,700 | 223,072 | 1,961 | 2,262 |
| Litein | 78,622 | 116,379 | 172,269 | 114 | 131.5 |
| Kipkelion | 46,760 | 69,216 | 102,456 | 50 | 50 |
| Londiani | 43,152 | 68,875 | 101,951 | 126 | 126 |
| Chepseon | 11,106 | 16,439 | 24,334 | 13 | 15 |
| TOTAL | 281,448 | 421, 609 | 624, 082 | 2,264 | 2,585.5 |

Generally, the spatial assessment of urban land uses informs the scenarios for proposed supply of land. The proposed uses have to not only conform to existing uses but also complement them. A case example is Kericho town. The current dynamics of urban areas in Kericho county and in this context, Kericho town, reveal that urban development occurs on a linear basis along major transit corridors and radially around transit junctions. A critical aspect in the case of Kericho town is the sensitive land use at the multinational tea estates which restricts structural development. Due to population pressure, densification of housing and commercial structures is key to ensure existing land is optimally utilized

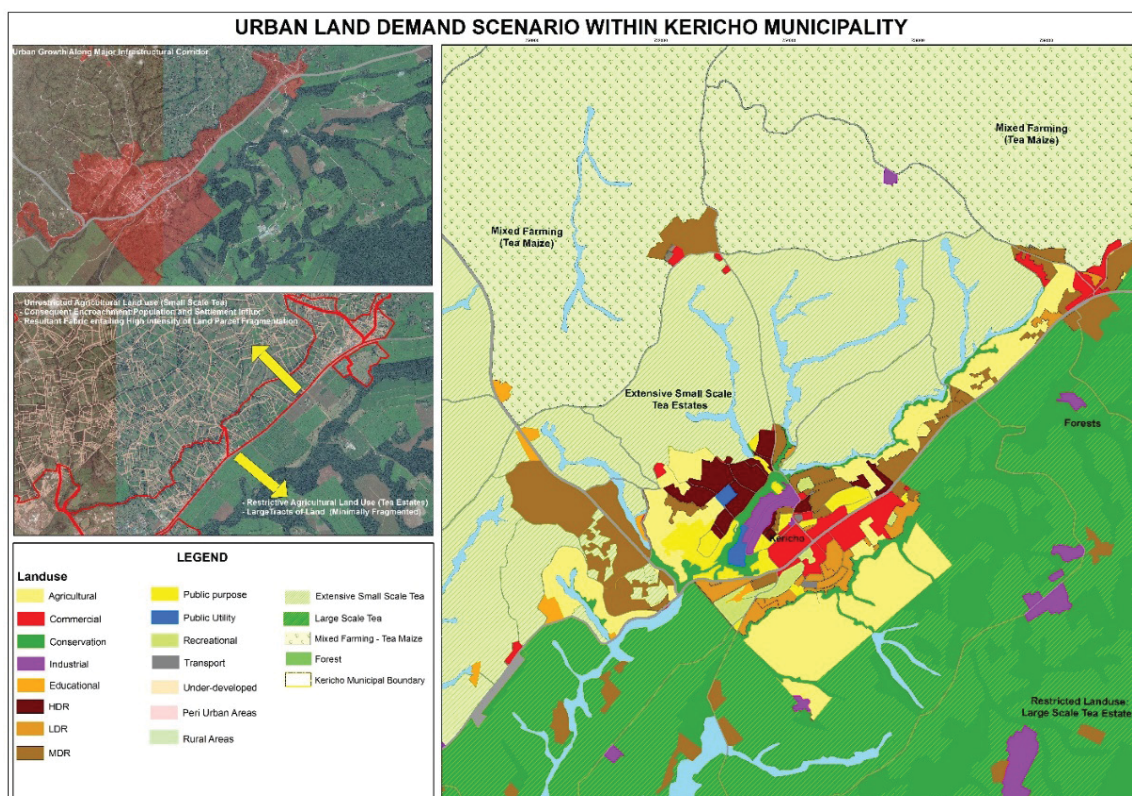


Figure 9: Urban Land Demand Scenario in Kericho Municipality

iv) Development of Growth and Service Centres

Due to the rapid growth and explosion of urban functions over the years, some unanticipated areas have metamorphosed into urban areas. The key factors in the county

that have spurred urban development are infrastructure and resource potential. The key urban centres have developed in the following urban metamorphoses:

a) **Intermediate/Connective Growth Conurbation**

- i) Kericho – Brooke – Kipchimchim – Ainamoi – Kapsoit – Kapsuser: This urban conurbation encompasses the aforementioned service centres with Kericho being the central and most influential with regards to service delivery and spatial threshold. Currently, the town boundary encompasses only Kericho and Brooke. However, a new municipal boundary has been delineated to encompass the six centres.
- ii) Londiani Junction - Londiani: Londiani junction town has rapidly emerged as a key urban growth area due to its strategic role in transit activities. However, the upcoming Londiani junction centre is reliant on Londiani town for basic services including health and education hence the two centers are likely to conglomerate into one spatial fabric gradually over time.
- iii) Litein – Koiwa - Mogogosiek: Litein has greatly impacted the lower parts of Kericho and Bomet counties as a commercial node. The neighboring centres are located along the same axial road (C24, Litein-Bomet) which joins Kericho-Kisii road at Litein. This multiplier effect has caused urban growth in these neighbouring centres and the trend may lead to a connective growth amongst the three as part of Litein municipality.

b) **Urban Growth**

- i) Chepseon: This service centre has grown from a market centre to a town due to the agricultural market which is strategically located along a high traffic route, the B1 highway. Consequently, its urban extent has sprawled due to development of complimentary urban services and population influx.
- ii) Kapkatet: This is another town which has grown from a market centre in a few years. The level 4, Kapkatet hospital has generated a lot of traffic towards Kapkatet in the recent past as well as major educational facilities including KMTC & Kabianga University Medical School. Further, the stadium has created a continuous buzz in the town as national games and events are hosted on the grounds.

c) **Special Economic Zone**

Kipsitet: The area around Kipsitet towards Kisumu currently harbours heavy industries especially cement manufacturers. The area has been proposed for development of an extensive Industrial Park. Currently the town is a dormitory and transit point for the industrial zone as it houses most of the workers in the industries. It has important infrastructure including a sub-station, truck lay-bys and social amenities.

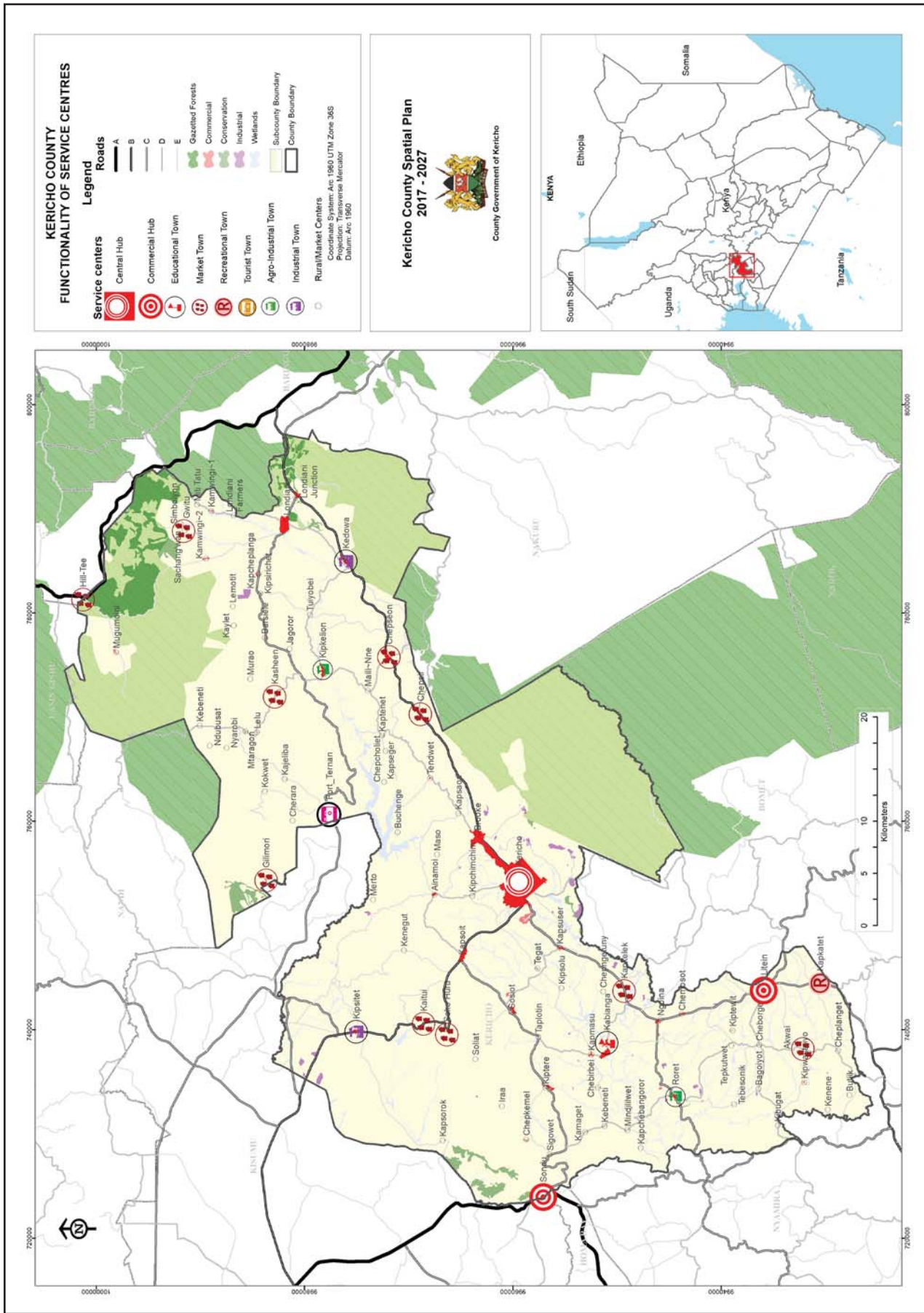
Despite the potential, the service centres have challenges including urban sprawl and encroachment of urban developments on road and riparian reserves.

v) **Functions of Service Centres**

Across the board, all service centres act as central places in relation to the surrounding spatial extents. They therefore exhibit homogeneity in some characteristics including:

- i) Commercial activities: shopping centres, markets, and basic financial institutions are concentrated within all the service centres in Kericho County.
- ii) Educational facilities are available in most centres especially primary schools
- iii) Religious facilities are also available in most service centres.

However, the various service centres range in sizes from rural to urban centres and play different roles. Kericho town is the administrative and commercial capital of the county. Litein on the other hand is an upcoming commercial hub serving parts of Kericho and Bomet county. Spatially, the economic threshold of this town extends to centres of Koiwa, Kapkatet, and Mogogosiek hence the need for Litein to be conferred to municipal status. Fort Ternan houses an archaeological site which has not been capitalized as a tourist hub. Ngoino, Londiani Junction and Kipsitet are major transit towns that have seen economic boost and growth due to strategic location for transit purposes. Kedowa remains a light industrial centre owing to the extensive quarries and cereals storage at NCPB stores. Kapkatet is a major market and service centre as it houses two markets, hospitals, key educational facilities and a cultural museum. Chepseon and Sondu town remain major market towns. These service centres play a key role in diversifying the economy of Kericho County hence enriching the G.D.P. of the latter. The functionality of various towns is shown in *Map 14*.



6.8.2. Planning for Settlements: Hierarchy

The Urban Areas and Cities Amendment Bill 2017, necessitates ranking of towns and conferment of status to various levels. The level of service for various towns is determined by the services it offers against the standards. *Table 8* displays the level of each service centre for a total of 25 centres in 1973. The total number of service centres have since grown to a total of about 83 by 2017. This shows an upside trend in sprouting and growth of new towns.

Table 8: History of Service Centres (GoK, 1973)

| District | Urban Centres | Rural Centres | Market Centres | Local Centres |
|----------|---------------|---------------|----------------|---------------|
| Kericho | Kericho | Londiani | Kapkatet | Kapsuser |
| | | Litein | Sosiot | Kipsitet |
| | | Londiani | Roret | Fort Ternan |
| | | Kipkelion | Kedowa | Kapsoit |
| | | | Kaitui | Kapkugerwet |
| | | | Kapsaos | Chepsir |
| | | | | Cheborge |
| | | | | Chemosit |
| | | | | Kebeneti |
| | | | | Kiptere |
| | | | | Kabianga |
| | | | | Ainamoi |
| | | | | Kapsorok |

Population projection estimates as stipulated in the Urban Areas and Cities Amendment Bill 2017 have been used as a major factor to analyse level of service centres by 2027. Currently there are charters conferring Kericho and Litein municipal status. Further, they meet the population standards as depicted in *Table 9*.

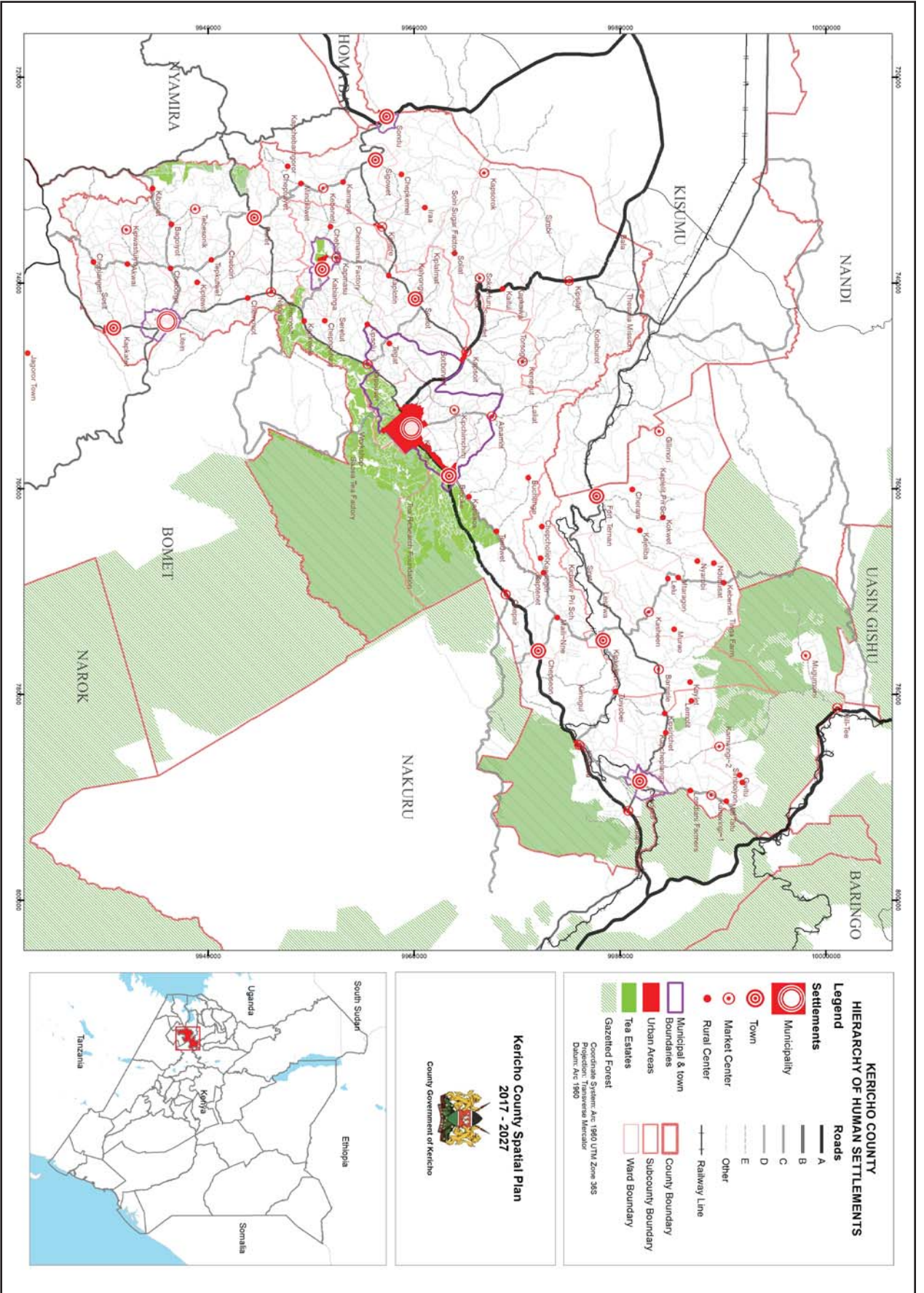
Table 9: Population Analysis for Kericho and Litein Urban areas

| Service Centre | Enumerated and Projected Urban Population | | |
|----------------|---|---------|---------|
| | 2009 | 2017 | 2027 |
| Kericho | 101,808 | 150,700 | 223,072 |
| Litein | 78,622 | 116,379 | 172,269 |

It is worth noting that service provision in all centres remain below standard especially basic infrastructure including water and sewerage reticulation and utilities. *Table 10* and *Map 15* depicts the current level of service for each urban or rural centre in tandem with the services provided, population estimates and the threshold of the central place.

Table 10: Current Service Centres (GeoMaestro, 2017)

| County | Municipality | Towns | Market Centres | Rural Centres | |
|--------------|-------------------|------------------|---------------------|---------------|----------------|
| Kericho | Kericho Litein | Sondu | Barsiele | Tegat | Kipsirichet |
| | | Kipkelion | Kipchimchim | Cheborge | Kokwet |
| | | Kabianga | Ainamoi | Torsogek | Chebirbei |
| | | Sosiot | Kedowa | Simbi | Chepkemel |
| | | Sigowet | Kapmasu | Iraa | Kiplalmat |
| | | Chepseon | Kiptere | Kalyongwet | Lelu |
| | | Londiani | Roret | Soliat | Mtaragon |
| | | Kapkatet | Gilimori | Maili~Nne | Kebeneti |
| | | Brooke | Hill-Tee | Tuiyobei | Seretut |
| | | Fort-Tenan | Kamwingi~1 | Cheptuiyet | Sosit |
| | | | Kamwingi~2 | Mindililwet | Chemoiwa |
| | | | Kebeneti | Kapsaos | Cheboin |
| | | | Chepsir | Tendwet | Cheplanget |
| | | | Soko-Huru | Buchenge | Kipsolu |
| | | | Kapsorok | Kapseger | Kimugul |
| | | | Kenegut | Kaptenet | Tepkutwet |
| | | | Kasheen | Jagoror | Kaylet |
| | | | Mugumoini | Akwai | Kajeliba |
| | | | Tebesonik | Kapcheplanga | Cherara |
| | | | Chemosit | Lemotit | Kapkelek |
| | | | Ngoina | Gwitu | Chepngetuny |
| | | | Kipsitet | Sachang'wan | Taplotin |
| | | | Londiani - junction | Simboiyon | Kapchebangoror |
| | | | Kipwastuiyo | Miti Tatu | Kaitui |
| | | Londiani-Farmers | Kamaget | | |
| | | Chepcholiet | Murao | | |
| | | Kiptewit | Ndubusat | | |
| | | Bagoiyot | Nyarobi | | |
| | | Kibugat | | | |
| Total | 2 | 10 | 24 | 57 | |



Map 15: Hierarchy of Urban Settlements in Kericho County



Chapter 7

Economic Analysis



7.1. Overview

The main economic activities carried out within the county are agriculture and commerce but agriculture is the most dominant. Commercial endeavours are carried out on business establishments which are located in urban areas like Kericho town and other market centres within the precincts of the county. Agro-based processing industries is a major feature of the county's economy. However, there is an emergence of other non-agro-based industries in Kipsitet area of Soin/ Sigowet sub-county.

7.2. Agriculture

Kericho's economy is agriculture-based with tea being the main cash crop. Tea originated from India and was introduced to Kenya in 1903, and since then, it has been commercially cultivated in large scale making Kenya a world tea producer. It has an annual production of about 300,000,000 kg and is rated the fourth largest tea producer and the second biggest exporter in the world. The acreage under tea production in Kericho county is estimated at 35,720 hectares (approximately 20% of the available area in the county), with an average annual production of 80,000,000 kg (CIDP, 2013) accounting for approximately 27% of Kenya's produce.

Outside the tea zones, maize is the dominant cash and food crop. Beyond the dominant crops, the majority of farmers are considering diversification options to mitigate against fluctuating incomes from major crops. The county government engaged farmers at ward level to identify a crop that could be championed by the county government.

It is noted, however, that the performance of crop sub-sector is still below the actual potential by approximately 50 – 75% for various crops. For instance, the average tea production levels in Kericho county is 1.5 kgs/bush which is below the optimum of 4kgs/ bush. Current coffee production is 5 - 15 kgs/tree compared to a potential of 20 kgs/tree under good management (CIDP, 2013). The county also engages in horticulture and dairy farming.

Dairy cattle characterise livestock farming for milk production with an estimated herd of 162,000 cattle compared to 50,000 for beef cattle (Jaetzold, 2011). The estimated milk production per day is approximately 4,000 litres. The current milk production per cow per day is estimated at 7 litres compared with the potential of 28 litres per day.

i) Size of land under agriculture

Majority of agricultural practices are carried out on land occupying more than one hectare. This phenomenon has continued to ensure that most of the land is preserved for agriculture within the county. Small land pieces of land (below 1 ha.) contribute 28% of the total land under agriculture as shown in *Figure 12*. Mechanization of agriculture on the remaining 82% can be achieved in a move towards boosting productivity.

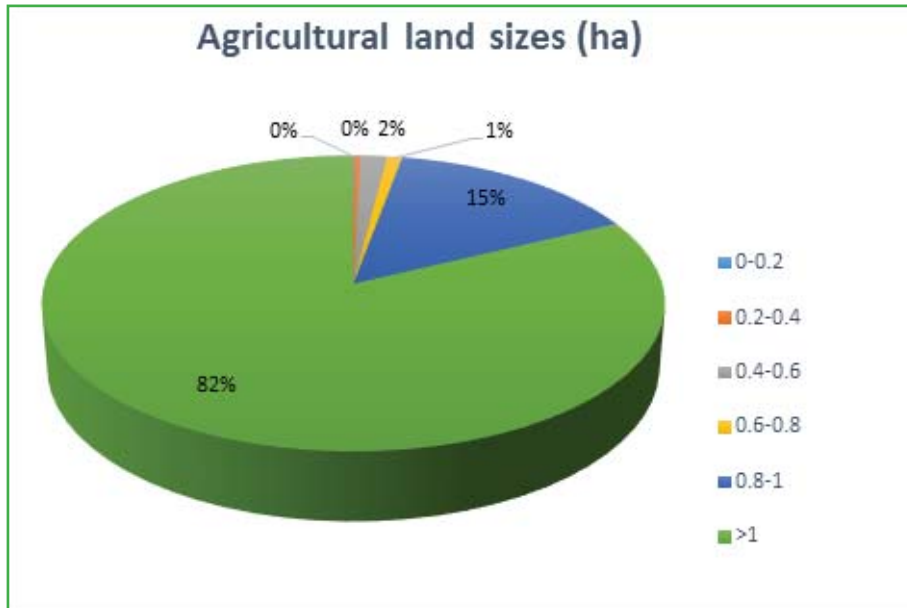


Figure 12: Land size under Agriculture; Source: GeoMaestro 2017

ii) Type of farming

With the county's agricultural prospects being both commercial and subsistence, commercial agriculture covers 40% of the total activity while subsistence use stands at 60%. Figure 13 shows that the majority of the population carries out agriculture for own consumption.

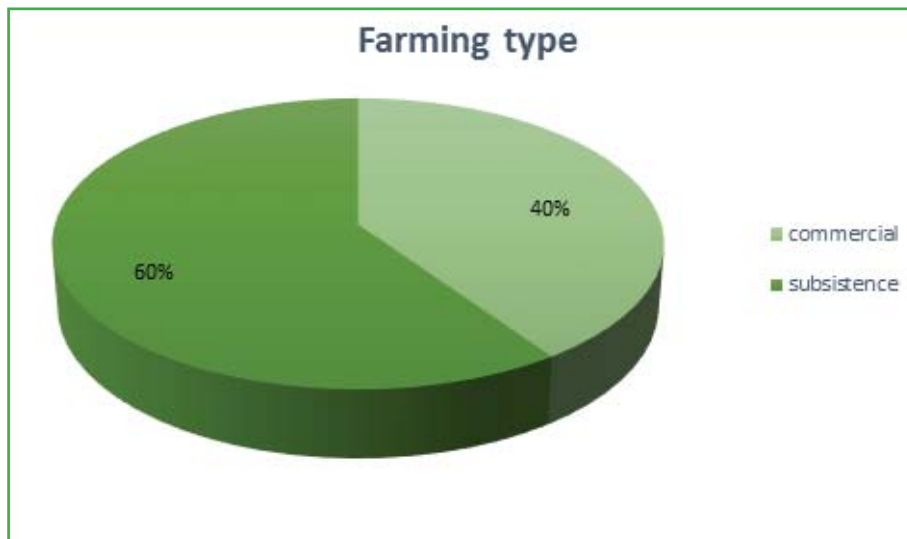


Figure 13: Type of farming

iii) Type of Agriculture

Agricultural practices in Kericho include crop farming, horticulture, livestock and mixed farming. Mixed farming is widely practised at 64% while horticulture and livestock farming are least practised occupying 2% of the total agricultural activity. Crop farming is a significant practice, coming second at 34%. Figure 14 describes the percentage distribution of the various agricultural practices within the County.

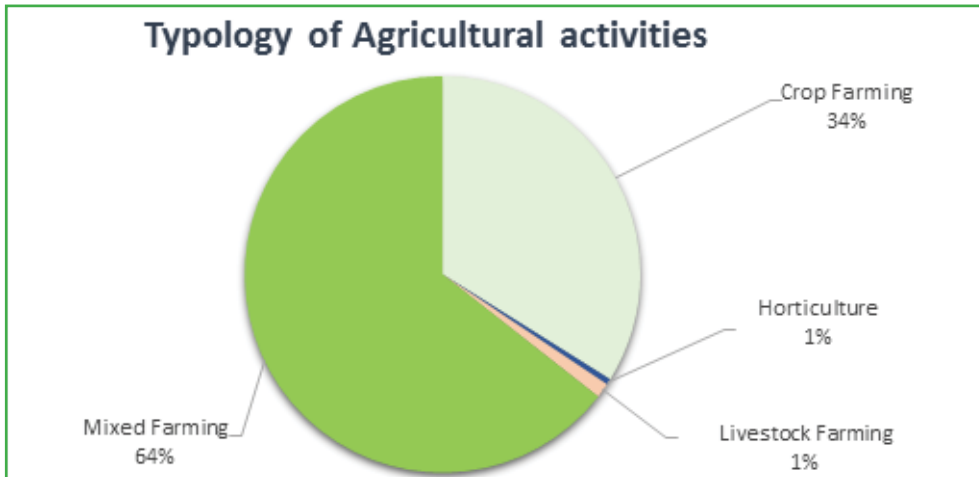


Figure 14: Agricultural activities

iv) Channels of distribution

Distribution of agricultural products (Figure 15) within the county is through various channels. These include co-operatives, individuals, middle persons and others like the government. The most commonly used mode of distribution involves individual persons (at 63%) who have to create their direct links with the consumer market.

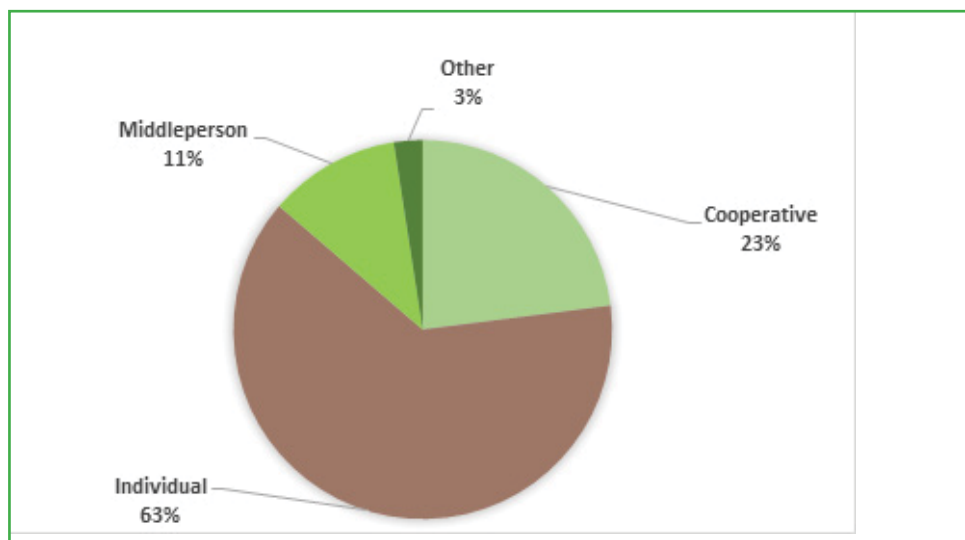


Figure 15: Distribution channels for agricultural produce

7.3. Trade, Commerce and Financial Services

i) Formal Commercial Activities

The formal sector is mainly anchored in Kericho town which acts as both the county headquarters and the main commercial hub. With the benefits of agglomeration, Kericho town edges out the other towns within the county to place itself in competition with other regional towns such as Kisii, Narok and Kakamega.

Kericho town is dominated by banking and financial businesses, retail shops, distributors, shopping malls, entertainment spots, restaurants and light industrial activities.

The wholesale and retail trade, mainly dealing on household goods and farm input, dominates major towns in the county. Regarding banking industry, Kericho hosts the highest number of banks with Litein, Londiani and Sondu having at least one bank each as shown in *Table 11*.

Table 11: Financial institutions

| Town | Banks | Microfinance |
|-----------------|--|--|
| Kericho | <ul style="list-style-type: none"> Kenya Commercial Bank (KCB) National Bank Equity Bank Cooperative Bank of Kenya | <ul style="list-style-type: none"> Highland Sacco Kipsigis Sacco Simba Chai Sacco Ndege Chai KWFT Imarisha Sacco Tengecha Sacco |
| Litein | <ul style="list-style-type: none"> Kenya Commercial Bank (KCB) Equity Bank Cooperative Bank of Kenya | <ul style="list-style-type: none"> Patnas Sacco KWFT LITCO Bureti Sacco |
| Sondu | <ul style="list-style-type: none"> Kenya Commercial Bank (KCB) Equity Bank | <ul style="list-style-type: none"> KWFT |
| Londiani | <ul style="list-style-type: none"> KCB | <ul style="list-style-type: none"> Londiani dairy farmers' cooperative society KWFT Tulwap Investments |

a) Markets

The county government manages and collects revenue from most formal markets in urban areas. These markets are vibrant trading grounds in the urban areas, dealing with agricultural goods, electronics, clothes and others.

b) Co-operative Societies

The cooperative societies within the county are majorly agriculture based and are located in the extensive agricultural centres within the county. They facilitate credit access and resource pooling mostly for agriculturally based enterprises. There are approximately 265 cooperative societies of which, 174 are active while 91 are dormant. The share capital as at 2012 stood at approximately Ksh 807,405,548 with a membership of 225,859. The main SACCOs include: Imarisha SACCO, Ndege Chai, Mau Tea Multipurpose, Kericho Highland Multipurpose, Temiik, Simba SACCOs, Bureti SACCO, LITCO SACCO, Tengecha schools SACCO among others. Apart from the Imarisha Teachers, LITCO, and Tengecha schools SACCO, the rest are agriculture based. (CIDP, 2013)

c) Automobile and Motor Industry

Automobile companies are located mainly in Kericho town which serves the entire county and the neighbouring counties of Bomet, Nyamira and Kisii. The main dealers are Toyota Kenya, TATA and assorted individually owned enterprise. Aside from motor vehicle selling, the spare part industry is well established within the other urban areas including Kericho, Londiani, Litein, Sondu.

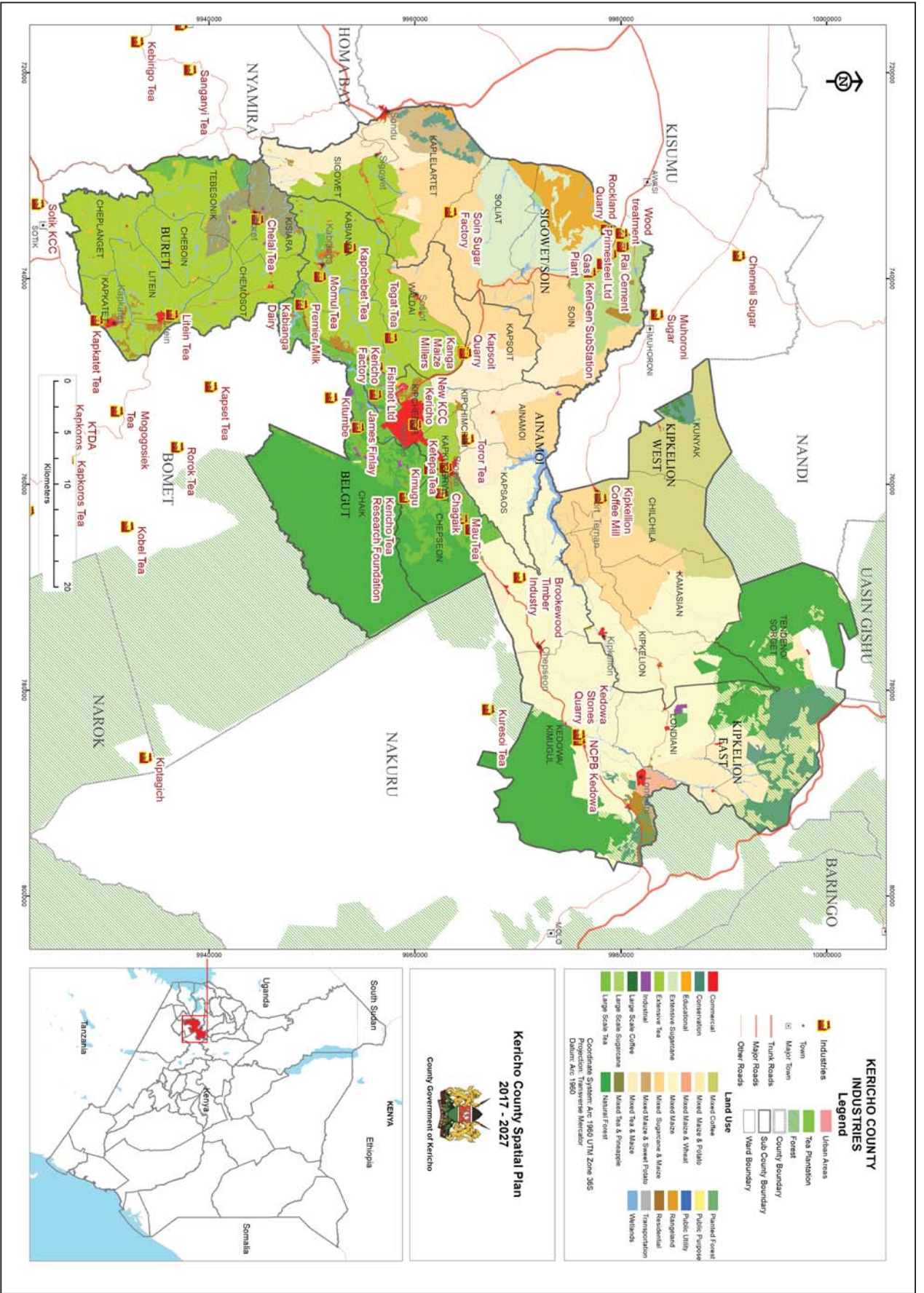
ii) Informal Commercial Enterprises

Informal commercial enterprises such as juakali industry, informal markets, timber industry, garages, vending etc. contribute to the economy of the county in a broad way. These enterprises are well established in the urban areas and the market centres and are demand driven. Proper measure need be put in place by the county government to register, regulate and tax them.

iii) Industries

Agriculture and Livestock based industries are the most thriving primary industries in the county. They are mainly production and processing of agricultural commodities such as tea, sugar cane, pineapples, floriculture and coffee. Multinational companies mostly own large-scale tea and floriculture industries whereas individual farmers own sugar cane, coffee, small-scale tea farms and pineapple farms. Manufacturing industries in the county are mostly agro-based. These industries are tea processing industries, sugarcane processing industries, milk processing industries, baking industry and pineapple processing industry; which is still under construction in Roret.

The major extractive industry in the county is quarrying dealing in dressing of building stones and sand harvesting. Quarrying and dressing of natural/building stones is mainly carried out in Kipkelion east and Kipkelion west sub-counties. There also exists extraction of murrum which is used in road construction and maintenance in the whole county. Borrow pits are located along Mau Summit-Kisumu highway and Sotik-Roret roads, which were established during the construction of the roads and remain active. The potential of bauxite mineral in Ainamoi location, a mineral used in the manufacturing of cement if exploited will significantly boost the extractive industry (CIDP, 2013). There exists a small percentage of timber production industry which sources their raw materials from both private farms and gazetted forests. There is also a steel industry situated in Soin/Sigowet sub-county. *Map 16* shows various industrial establishments in Kericho county.



Map 16: Industries in Kericho County

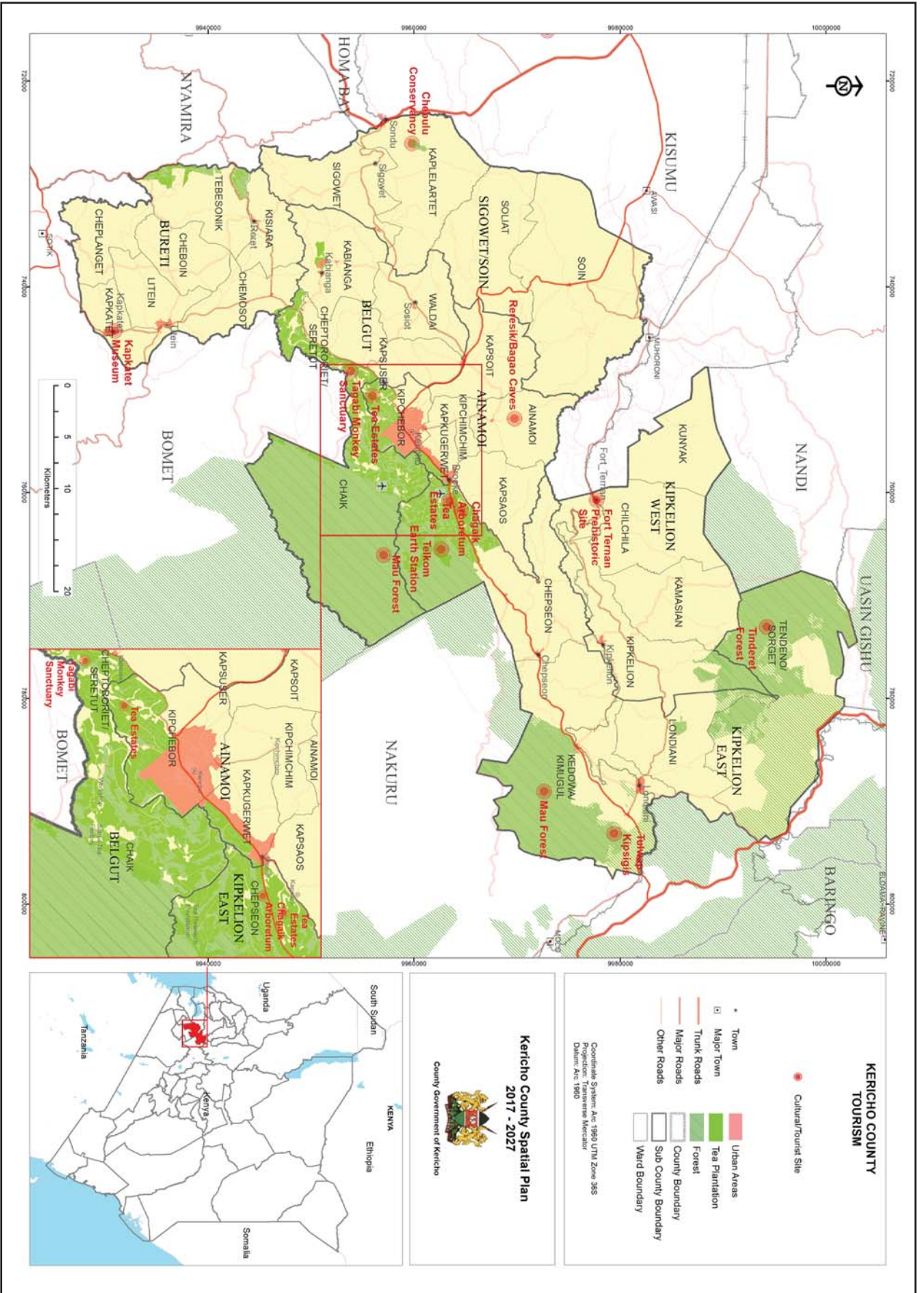
7.4. Tourism

Tourism in Kenya is the second-largest source of foreign exchange revenue following agriculture. The main tourist attractions are safaris to the 40 national parks and game reserves and the tea plantations in Kericho which are considered to be one of the great sceneries Kenya has to offer.

Tourism sector has not been fully been exploited but the county is working on reviving activities and rehabilitating around 10 tourist attraction sites including Fort Ternan Museum, Tagabi Monkey Sanctuary, Chebulu Conservancy, Tulwap Kipsigis, Chagaik Arboretum, and Kapkatet Museum as shown in *Table 12* and *Map 17*. Agro-tourism is a potential for the county as it prides itself as an agricultural county with tea plantations being the ideal attraction.

Table 12: Tourist sites Assessment

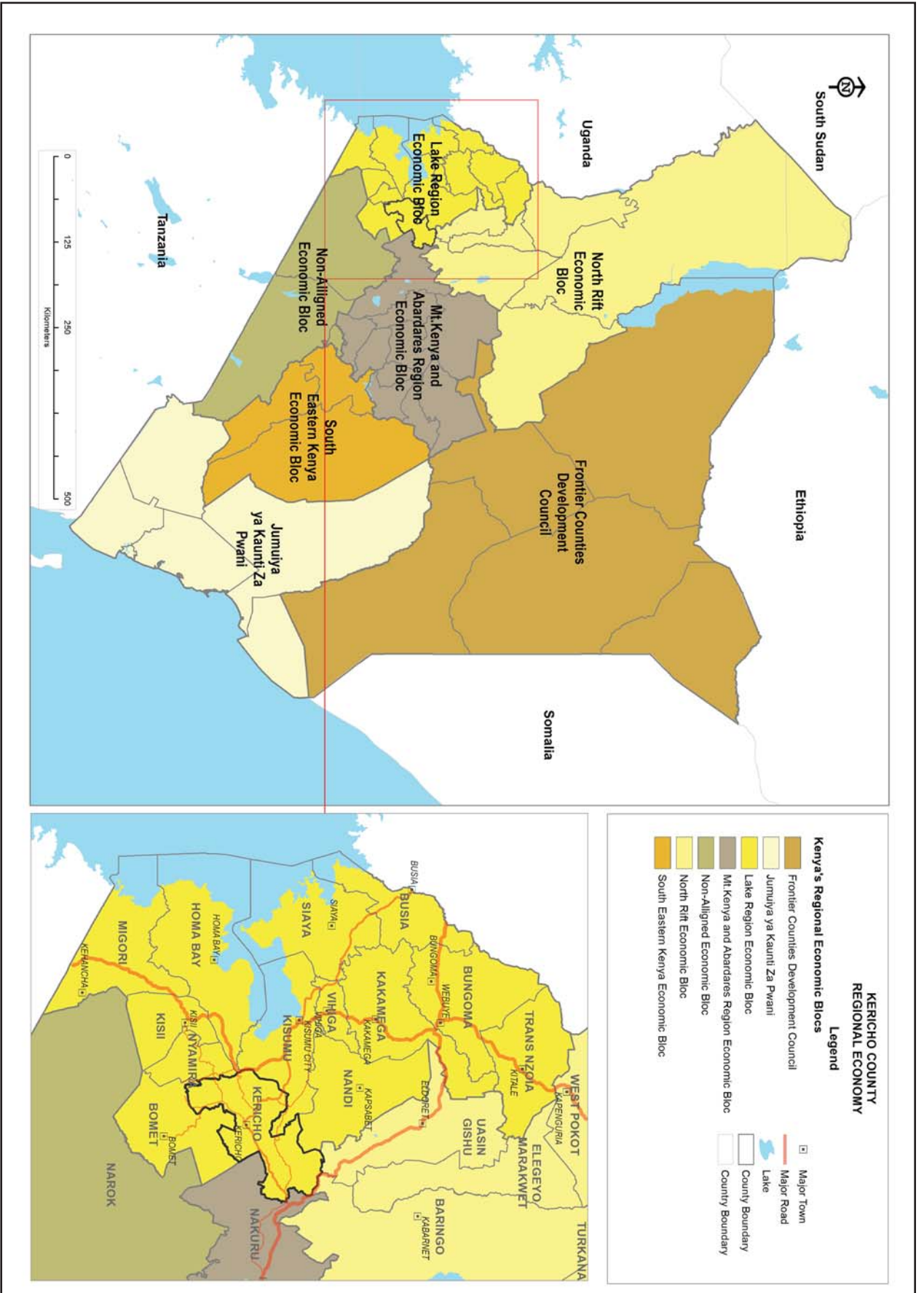
| Tourist Sites | Remarks |
|---|---|
| 1. Fort-Ternan Pre-historic site | This site has been neglected until recently, fossils were moved to Kisumu, and there is no signage to show location of the site from the main road. |
| 2. Chebulu Conservancy | Identified but not yet developed |
| 3. Tulwap Kipsigis Cultural Site | Identified but not yet developed |
| 4. Chagaik Arboretum and Tagabi Sanctuary | Already developed, requires maintenance and marketing |
| 5. Mau Forest | Huge potential not yet developed |
| 6. Kapkatet museum | Functional, but located in a squeezed space which is difficult to trace |
| 7. Reresik/Bagao Caves | Identified, yet to be developed |
| 8. View Points: Samutet and Chepcholiet | Not yet identified but have potential |
| 9. Tea Estates/Agro-tourism | Identified but yet to be developed |
| Supporting Infrastructure | Remarks |
| i) Access roads to the sites | There is access to all the sites but the road condition is poor. |
| ii) Transport | Lack of reliable transport to the sites |
| iii) Signage | Lack of signage to the sites for directions |
| iv) Marketing | Lack of information and marketing of the sites |
| v) Air transport | The only public airstrip is non-functional |
| vi) Hotels and Accommodation | Tea Hotel is at the verge of collapse. However, there are other upcoming hotels like Sunshine, Hills County and Taidys. |



7.5. Regional Economic Development

The Kenya Vision 2030 includes equity as a recurrent principle in economic, social and political programs. The Constitution of Kenya (2010) also provides for the devolved system of governance which ensure participation of communities and equitable national resource distribution to address socio-economic disparities. These strategies set out the foundations for enhancing development within those regions. In the enhancement of development, counties with historical, political and economic similarities have formed six economic blocs as shown in *Map 18*.

These blocs are intended to spur economic growth within the respective regions through policy harmonization and resource mobilization. Kericho county is located in Lake Region Economic Bloc (LREB) with 13 other counties (GoK, 2018) aimed at actualising economic growth for the over 14 million people. Among the initiatives to be implemented by the bloc include upgrade of airstrips in all the counties, establishment of a fruit processing plant and construction of a ring road to connect the counties. Further the NSP clusters counties based on economic potentials. Kericho is considered to have potential in urbanization, tourism, fishing, rain fed and irrigated agriculture (MoL&PP, 2015). The county is strategically located on the South-Western part of Kenya. Its produce can penetrate into neighbouring economic blocs and as far as Nairobi due to good connectivity. Tourism has potential with revival of local tourism-circuit to be connected to the western Kenya circuit. Circulation of goods and services has potential to drive growth plans and speed up economic development.



Map 18: Regional Economic Blocs



Transport and Infrastructure



8.1. Overview

Transportation is the movement of goods and people from one point to another. Roads, railroads, air, water, pipeline etc., give the means of transportation. Roads forms the major means of transport in Kericho county and supports several modes expressed as modal split.

Transport and infrastructure are fundamental components that steer growth and development of any economy as it links production, processing and consumption of goods and services within a spatial context. In Kenya, the Ministry of Transportation and Infrastructure oversees functionality of the transit and infrastructural systems managed by various bodies and organizations.

8.2. Road Transport

8.2.1. Road Networks and Linkages

i) Road Network

The county has a total of about 3,453 kilometres of road length for its entire road network as seen in *Map 19*. Out of this, 2,406 km of roads are unclassified while the other 1,053 km consists of classified roads under KENHA, KURA, & KeRRA. Further, about 450 km of the roads are paved and of bitumen standard while the rest are unpaved, entailing gravel and earth roads as shown in *Figure 16*.

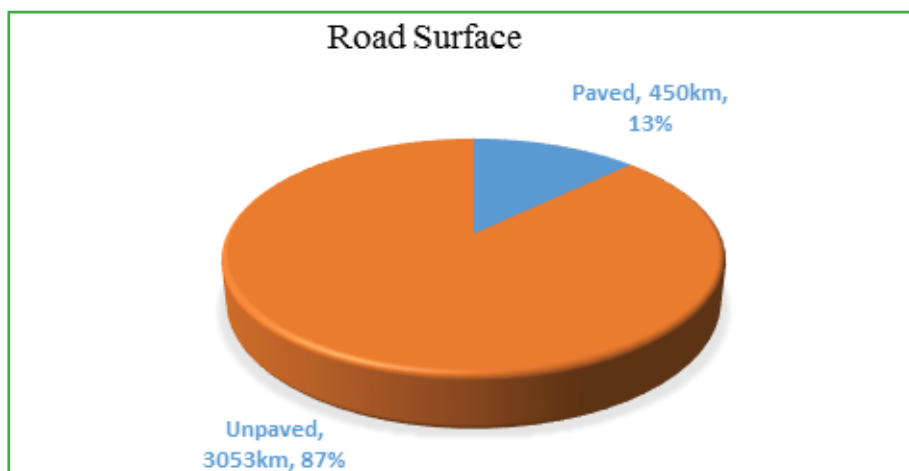
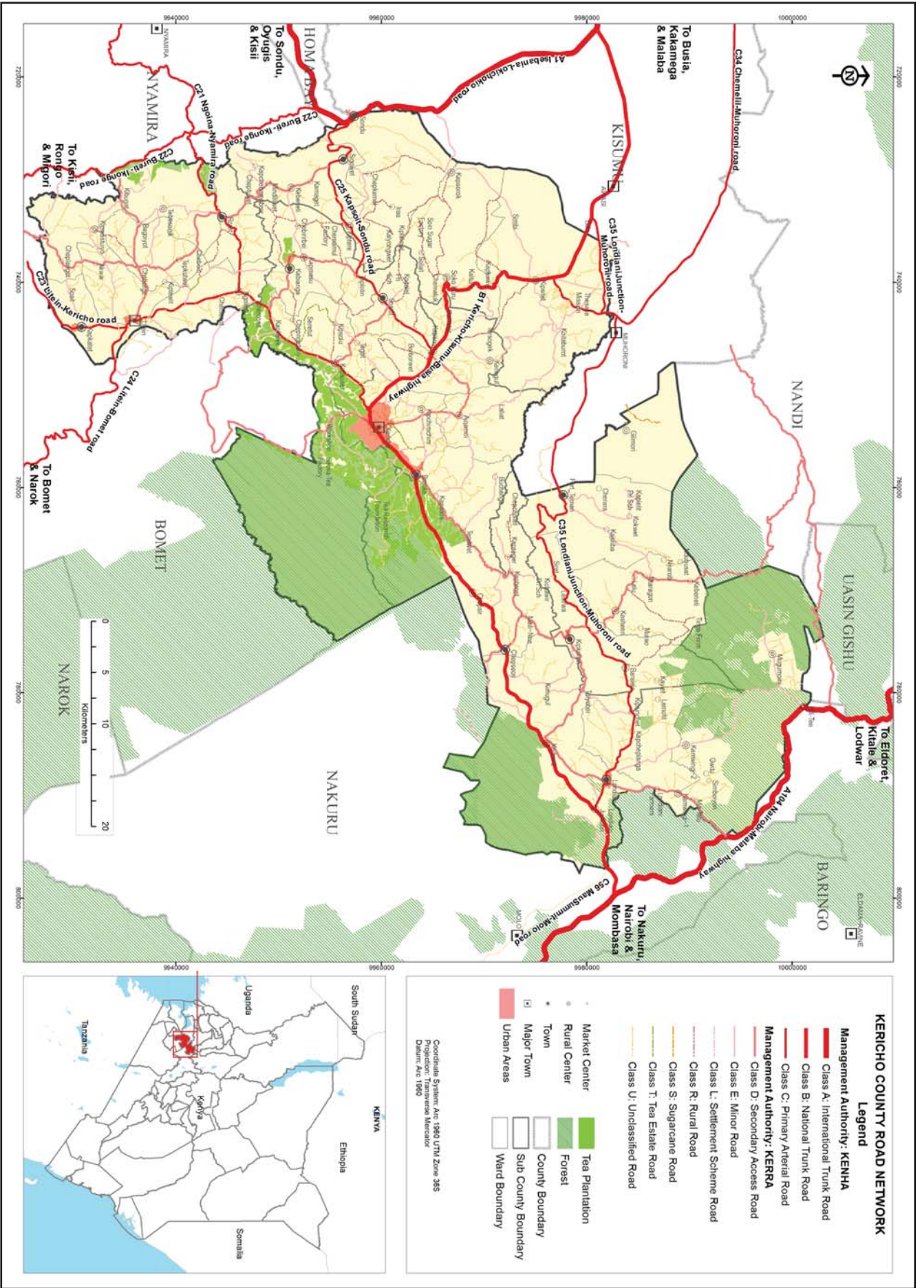


Figure 16: Road Surface Condition in Kericho County.

The entire road network entails four major road surface types: earth, gravel and bitumen road surfaces. The unpaved roads entail the earth and gravel roads while the paved roads entail bitumen standard surface type as shown in *Table 13*.



Map 19: Road Network in Kericho County

Table 13: Road Networks, Surface type and Condition

| Road Network Type | Road Classification | Surface Type | Condition of roads | Length (km) |
|---------------------|---------------------|----------------|--------------------|--------------|
| International Trunk | A | Bitumen | Good | 4.7 |
| National Trunk | B | Bitumen | Good | 89.4 |
| Primary Arterial | C | Bitumen | Fair | 151 |
| Secondary Arterial | D | Bitumen/Gravel | Fair | 207.9 |
| Minor | E | Gravel/Earth | Fair | 380.3 |
| Special Purpose | L | Bitumen | Good | 9.0 |
| | R | Earth | Poor | 181.7 |
| | S | Gravel | Poor | 7.5 |
| | T | Bitumen | Fair | 15.7 |
| | U | Earth | Poor | 2,369.89 |
| Urban Roads | (Multi-class) | Bitumen/Gravel | Fair | 36.11 |
| TOTAL | | | | 3,453 |

This shows that most roads in Kericho county need revamping of the surface in order to ease transit especially during rainy seasons considering the county experiences high amounts of rainfall most times of the year.

Kericho county is traversed by 3.4 km of International Trunk road, A 104, on its Northern border. The A 104 traverses several counties from Mombasa to Nairobi to Eldoret and into Uganda through Busia. It is also traversed by a small section of A1, by about 1.25 km at Sondu in Kisumu-Kericho border.

The county is also traversed by a National Trunk road B1, this road starts from A104 at the Mau Summit Junction to Busia, Kakamega and Malaba but the section under consideration is 89.4 km stretch within Kericho county.

Kericho county also has a fairly extensive network of Primary Arterial Class C roads linking key towns within the county. These roads include: Kericho-Litein-Sotik, (C 23) which links major and minor towns like Kapsuser, Chemosit, Ngoina and Kapkatet towns, Litein-Bomet road (C 24), Ngoina-Roret road (C 21), and Kapsoit- Sondu (C25) which links these towns and others like Sosiot, Kiptere and Sigowet. The southern part of Kericho is better linked as opposed to the Northern which has Londiani -Muhoroni road (C 35) which extends to Kisumu and a small section of C 34.

ii) Road Linkages Analysis

Transportation plays a key role in linking production, processing areas and markets.

There are several challenges affecting transport as expressed in the aforementioned section especially poor surface condition of key link roads. Further implications of these challenges include the following:

a) **Circulation**

The deeper the penetration of transit networks, the more widespread the socio-economic development. However poor infrastructure inhibits such potential due to inaccessibility. Most of the roads in Kunyak area are disjointed due to poor terrain, and this translates to poor connectivity to other towns stagnating development in the area.

Transportation within the Kericho municipality has proven to be a major challenge in light of connectivity for social and economic purposes. The county government has completed tarmacking of Brooke-Kipchimchim-Ainamoi-Tegat road. This road section is an opportunity to open up a local transit route that can be exploited in a bid to improve public transport through the matatu industry within the municipality. This route will further ease congestion within Kericho town.



Figure 15: Bridge easing circulation due to connectivity

b) **Urbanization**

Transportation influences location and development of urban areas which offer crucial services to the hinterland. Within Soin/Sigowet sub-county, the only dominant urban centres are Sondu and Kipsitet. This renders the area in between the two centres i.e. Chebulu-Kapsorok-Simbi marginalized in terms of socio-economic development.

c) **Economy**

Kericho county plays a key economic role within the national and regional context. The current upgrading of Chepseon - Kipkelion road has opened up Kericho to economic prospects in relation to Nandi and Uasin Gishu counties. The upgrading can be continued to link Kipkelion town to the A 104 highway at Hill Tee. This is road may serve as a key link between Kericho, Eldoret and other towns. Further, the route is shorter compared to Kericho-Londiani-Hill Tee and Kericho-Awasi-Chemilil-Kapsabet routes. Consequently, this development will boost economic growth by opening up markets for agricultural produce.

8.2.2. Terminal Facilities and Capacity Demand

Over 1,519 public transit vehicles traverse the major roads in Kericho on a daily basis to and from regional destinations illustrated in Figure 16.

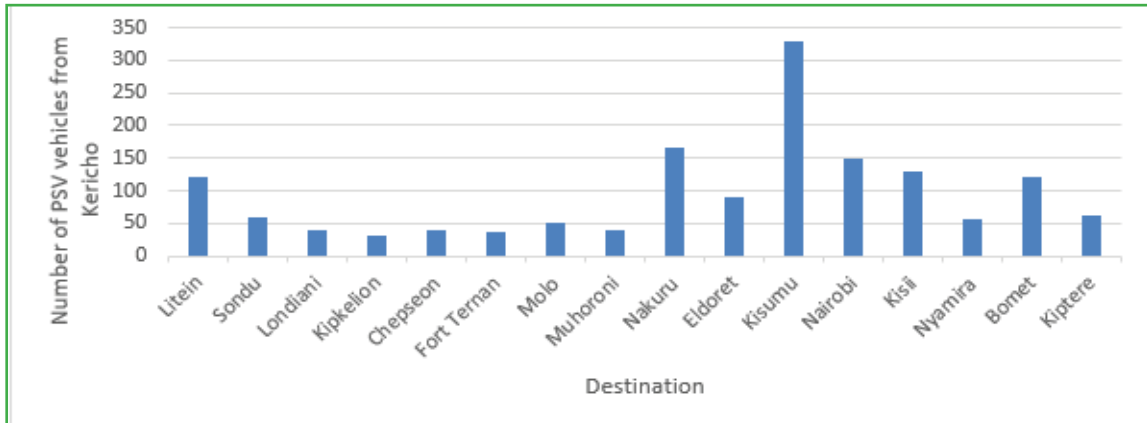


Figure 16: Average Daily Regional Service PSV (GeoMaestro, 2017)

Further, 365 vehicles operate as town service PSVs each covering an average of five trips per day as shown in Figure 17.

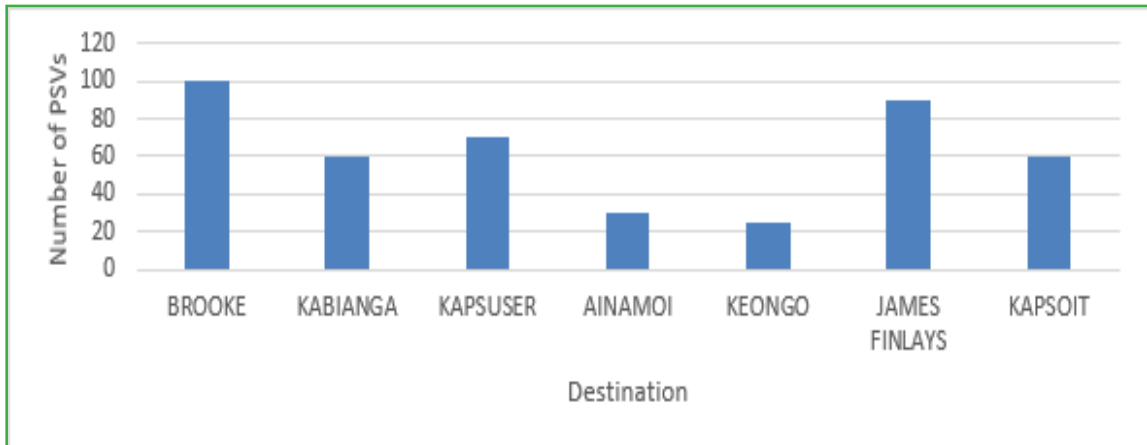


Figure 17: Average Daily Town Service (PSV) (GeoMaestro, 2017)

Kericho’s town service PSVs operates within the municipality to satellite towns including of Ainamoi, Kapsoit, Kapsuser and Brooke using medium buses and matatus. The capacity of the two main termini is overwhelmed by the increased demand of users. (MAK, 2017)

Nyagacho area has smaller bus terminal which operates the route to Kericho town CBD. The stage at Total petrol station along the B1 highway operates regional routes such as Kisumu, Eldoret, Bomet, Nakuru, Molo etc. It encounters high traffic due to general increase in traveller count. These two bus terminuses are however undesignated and unplanned



Figure 18: The Kericho Town Central Bus Terminus

8.2.3. Modal Split and Traffic Assessment

Road transport is cardinal in Kericho’s transportation sector as it caters for over 93% of all freight and passenger traffic. Modal split is obtained typically through traffic surveys and refers to the percentage of travellers using a particular transportation mode. In Kericho county motorized transit accounts for 63% against non-motorized transit at 37% (KRB, 2014; GeoMaestro, 2017). The motorcycle is the most popular transit mode due to its flexibility and access to rugged terrain and remote places. Walking is the second most common mode of transit especially for local trips, i.e., home to school or work. On the other hand, within the share of personal cars, about 30% are Toyota probox, vastly used as public transit vehicles. Figure 19 presents comparisons of modal usages across the county.

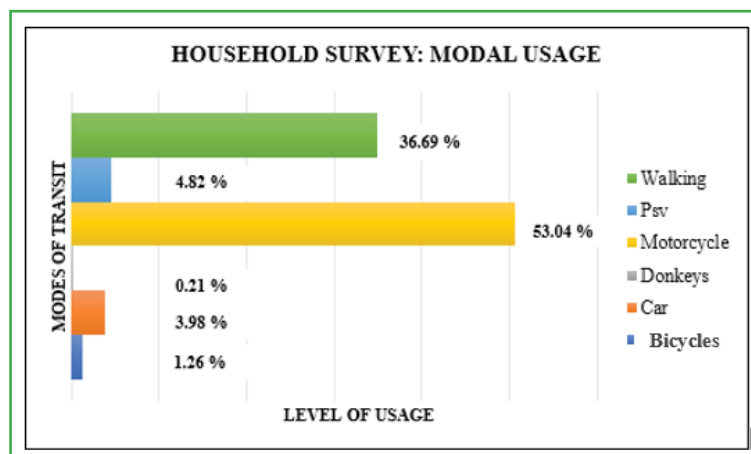


Figure 19: Modal Usage within Kericho county (GeoMaestro, 2017)

8.2.4. Non-motorized Transport

Non-motorized transportation is widely used within Kericho county in major ways including walking, boda-bodas and donkeys. The NMT modes of transit are widely used in relation to the major land uses within the county. There are also areas within the county with good physical road coverage but the routes have not been included for public transportation, forcing users to opt for non-motorized methods of transit.

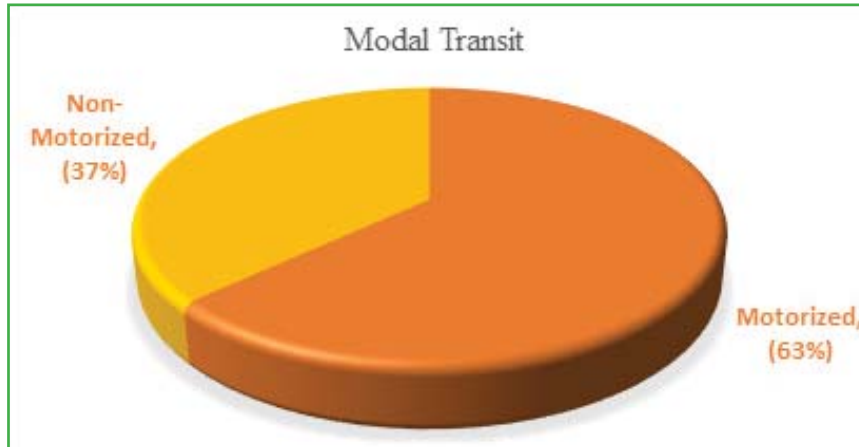


Figure 20: Motorized and Non-Motorized Transit levels (GeoMaestro, 2017)

The most popular non-motorized mode of transit is walking as illustrated in Figure 21. This is often preferred for shorter trips such as walking to school or work. This is occasioned by factors such as inadequate optional modes of transit and the expenses normally incurred in motorized transport.

With the agricultural and other economic activities, public transportation remains a key missing link for most parts of the county.

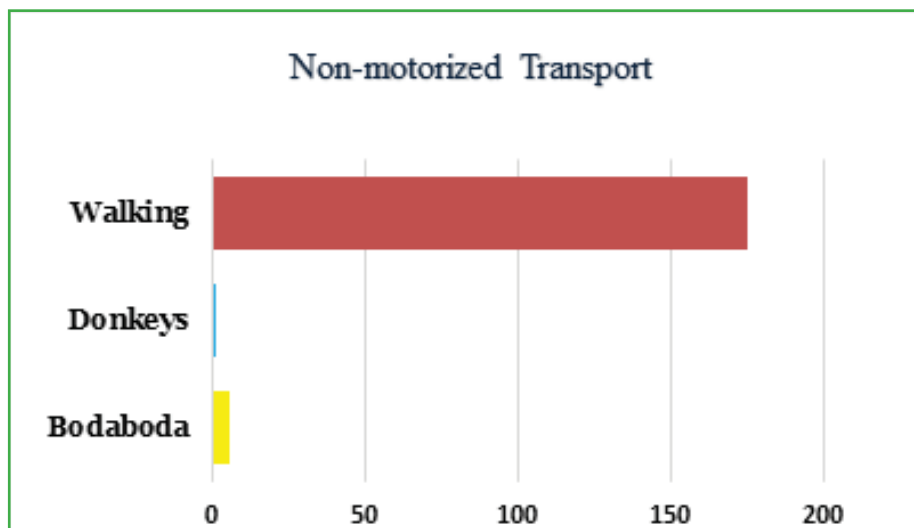
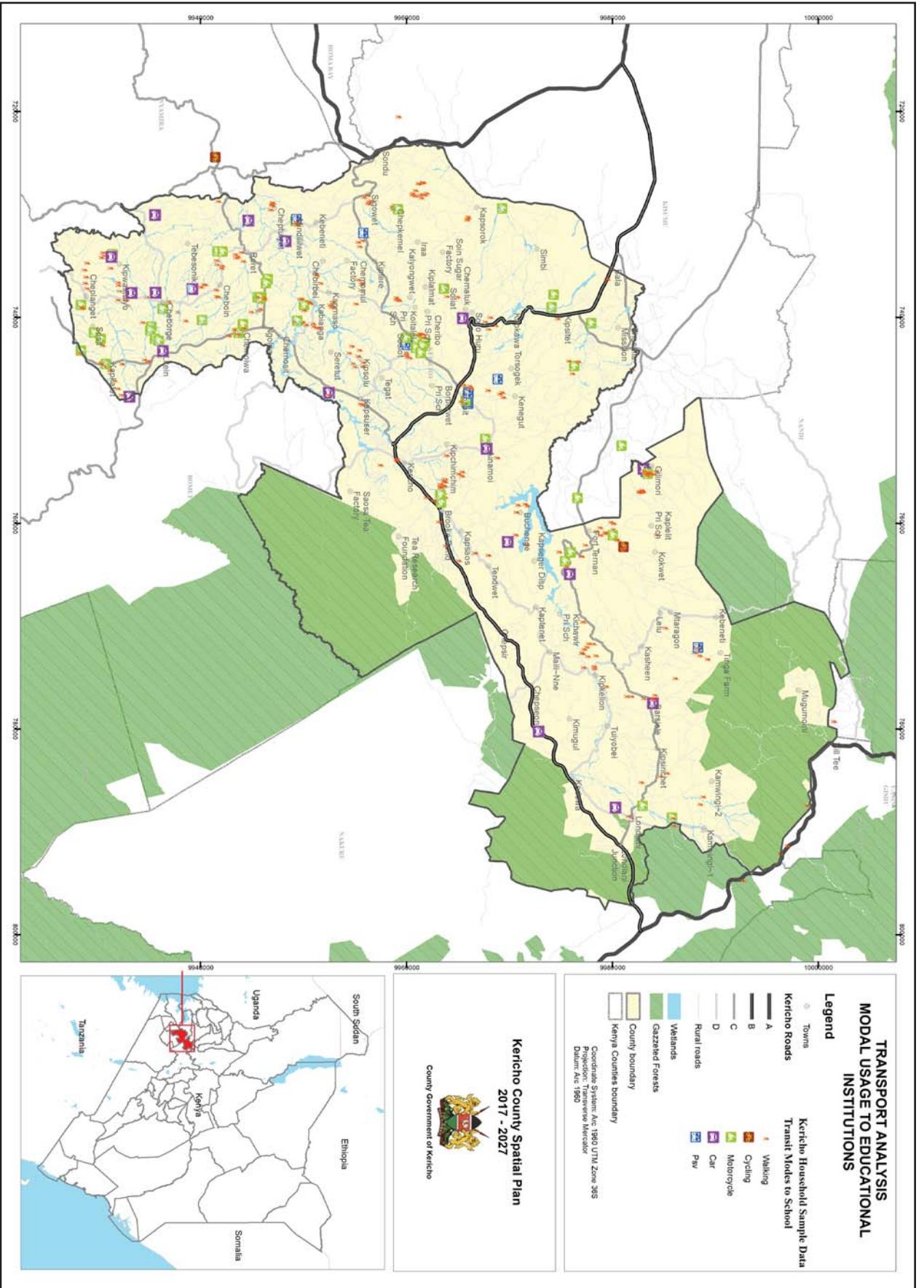


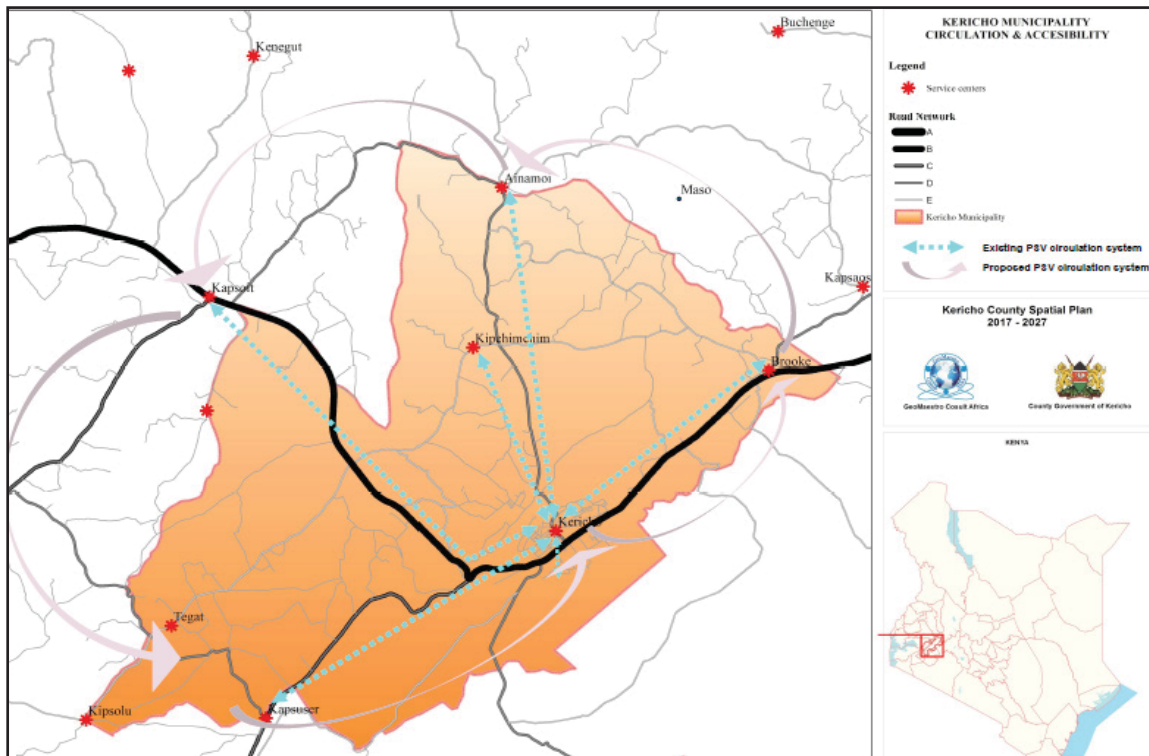
Figure 21: Illustration of usage of Non-motorized modes of transit (GeoMaestro, 2017)

It was noted that there is inadequacy of affordable public transport and minimal traffic separation in high traffic routes.



8.2.5. Local Circulation Model for Kericho Municipality

Urban conurbations attract high traffic levels. This raises the viability for development of transit circulation systems. Kericho municipality comprises of six urban centres, Kericho being central in light of functions, threshold and location. The other central places are continually urbanizing due to backward and forward linkages with Kericho as the central urban centre. Primarily, Kapsoit, Kapsuser, Brooke, Ainamoi, James Finlay and Kipchimchim serve dormitory functions to the central urban centre.



Map 21: Circulation of local town service traffic

Consequently, the roads linking these towns experience significantly heavy traffic. Currently a proposed by-pass is being constructed from Brooke to Kapsoit at the B1 Kisumu-Kericho highway. This will be instrumental in easing traffic congestion in Kericho especially the vehicles plying routes to the western and eastern parts of the country. Tegat-Kipchimchim- Ainamoi-Kapsoit road is currently being upgraded to bitumen standard which is a key incentive for development of a local transit circuit/ring-road which will ease unnecessary traffic in Kericho town.

8.3. Rail Transport

i) Existing Rail

The existing railroad track within Kericho county is currently dilapidated due to the stalling of railway operations. The decline of Railway transit in Kenya has affected railway station operations and consequently a major decline in industrial/warehousing operations in Kipkelion and Fort Ternan. The infrastructure has been vandalized along its course on various sections due to lack of supervision hence any efforts aimed at an attempt to revive operations would require heavy investment. This means that if operations were to be established nationally or regionally, it could bring economic revival to these towns.

Establishing an inter-modal exchange in Kipkelion town would be fundamental in boosting the economy of the town and Northern part of the county with the following efforts:

- i) Optimizing value addition and processing of agricultural produce particularly maize and milk
- ii) Consequent re-establishment of industrial parks for the above activities
- iii) Warehousing industrial zone

These will be made possible by revival of the old railway line and stations within the North, South Rift and Lake Victoria Basin regions. Reviving railway operations would complement road transportation and would reinforce cargo transit especially for the agricultural produce not only from Kipkelion but the entire county.



Figure 22: Potential Inter-Modal Interchange and Industrial zone in Kipkelion

Plans are underway to revive Fort Ternan as an Edu-tourist hub. The Londiani-Muhoroni highway has provided easy access to Fort Ternan. However, it is mainly used for passengers traversing the county from Western Kenya. Inter-regional railway transit would open the town up to local and regional tourism

ii) Proposed SGR Rail

The proposed SGR railroad is likely to traverse Kericho county through Cheplanget-Sondu-Kapsorok area in Bureti and Soin/Sigowet sub-counties

8.4. Air Transport

The only public air transport facility in Kericho county is the Kerenga Aerodrome which is enclosed within a 63.14 Acre (approx. 25 Ha) land parcel and strategically located adjacent to the C23 (Kericho – Litein) highway. This provides efficiency in light of modal interchange. The runway is a stretch of approximately 1.25 km, buffered by tree cover on either side. This significantly enhances noise reduction that may negatively impact neighbouring land uses as well as ensuring clarity within the flight funnel by physically separating the facility from external factors.

The infrastructural facility abuts fairly compatible land uses according to the Physical Planning Handbook (2002). To the east of the facility is agricultural land use which is quite compatible. To the west and straight across the C23 however, the major land uses are commercial and residential which may not be as compatible. This conflict is considerably reduced owing to the buffer zone around the airport, but may still affect these land uses negatively. The impacts may currently not be experienced as much as the airport operations are unstable and the facility is not in much commercial use.

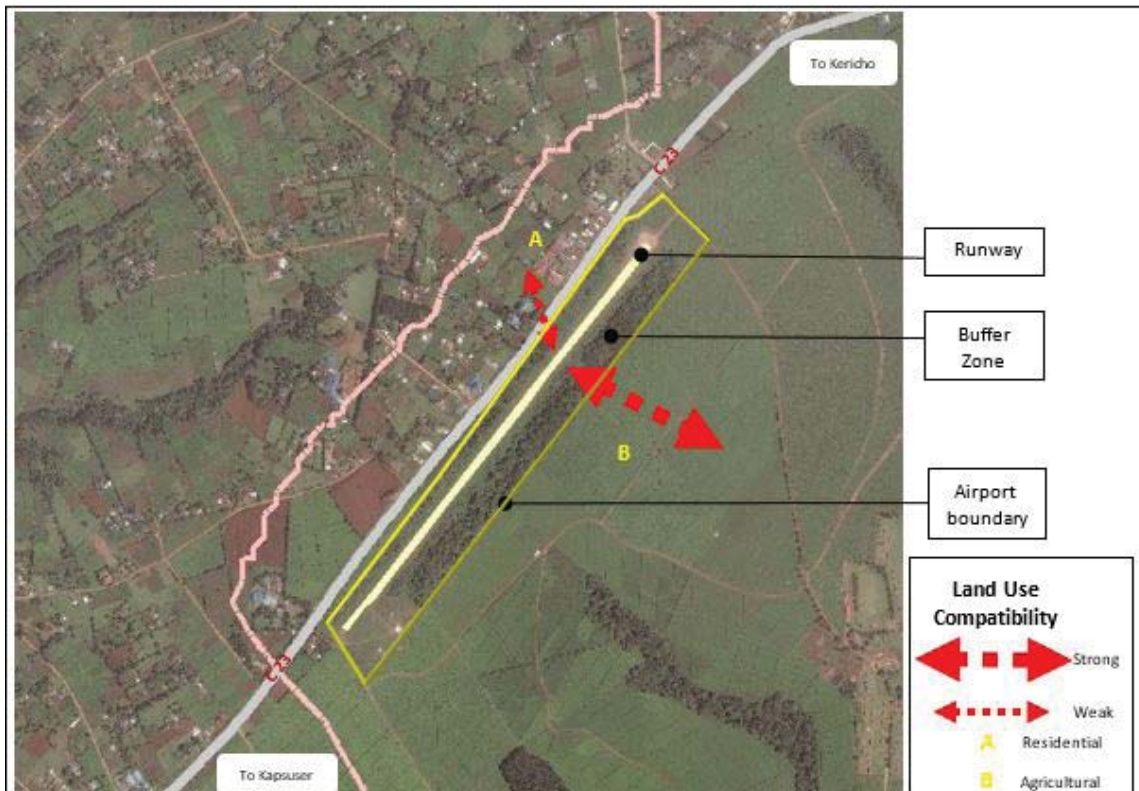


Figure 23: Spatial Analysis on Suitability of the Kerenga Aerodrome

Economically, the airport has not been put to use considering that Kericho county is rich in various produce that are of national and international importance. Kericho county is also a destination for various administrative, commercial and recreational purposes. Re-vamping the airport operations would open therefore up the county to more opportunities hence boost the economy of the county.

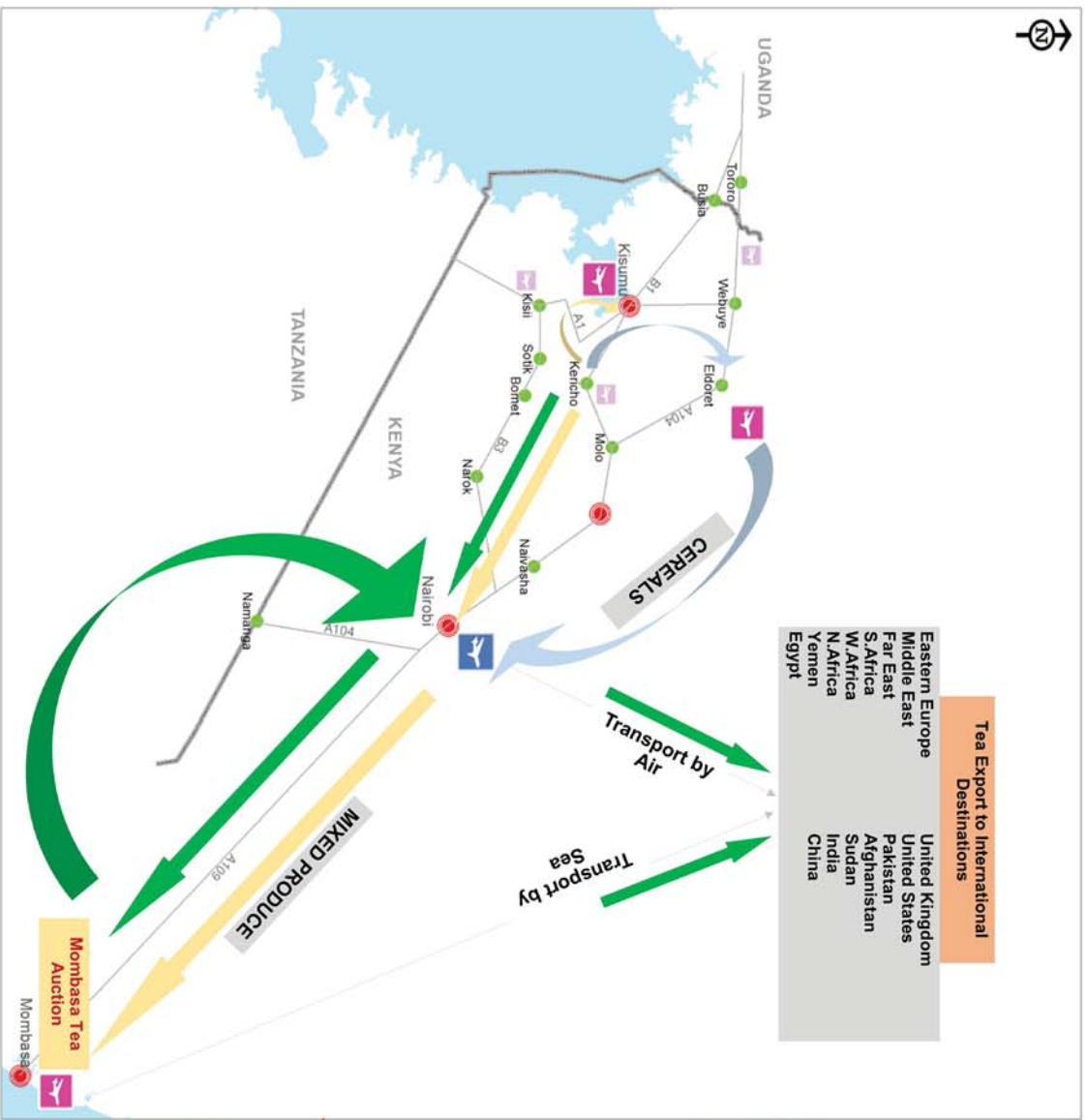


Figure 24: Analysis of Economic Impulses enabled by Inter-Modal Transportation and Linkages

8.5. Pipeline Transit

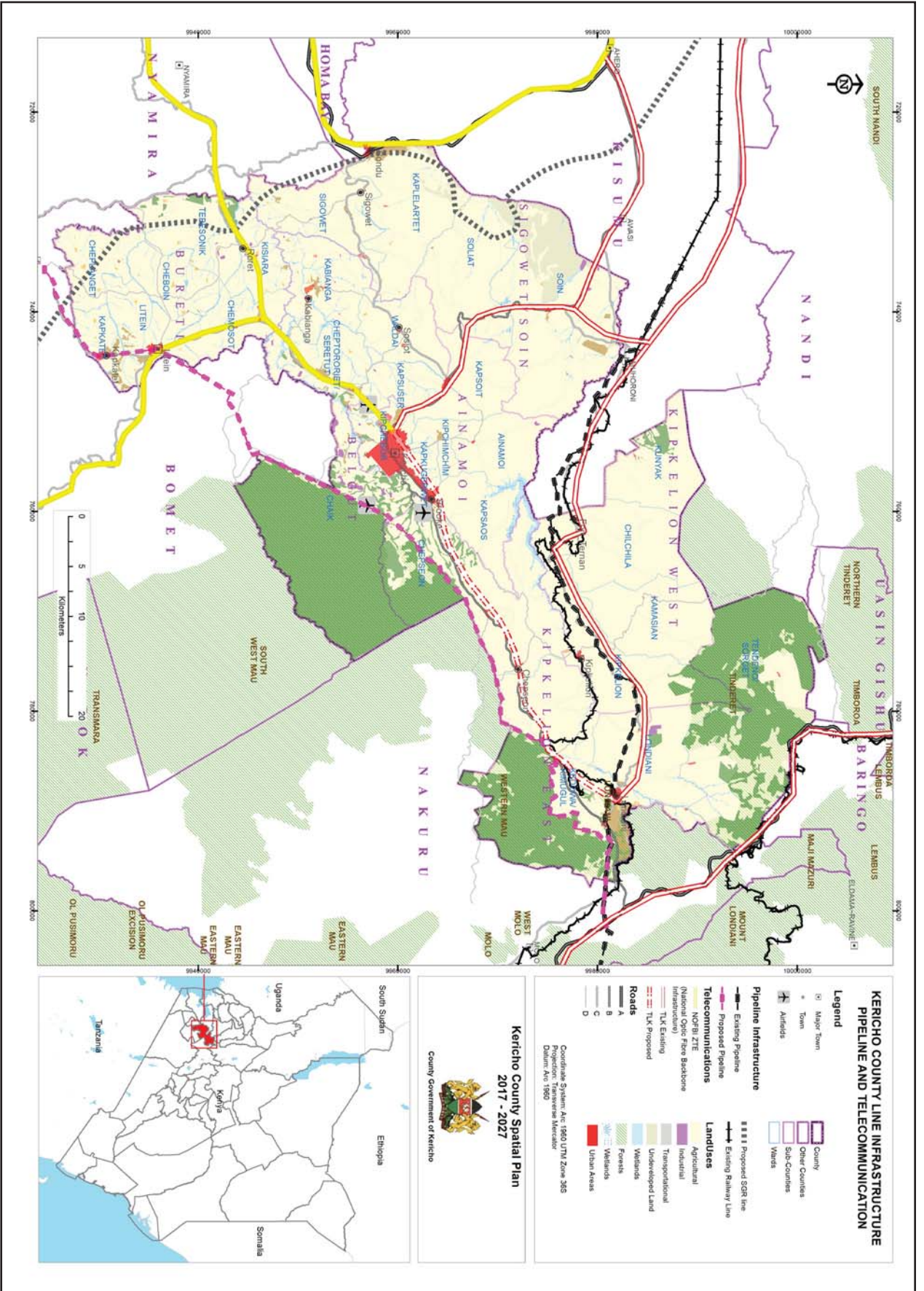
Pipeline transit has over the years been providing efficient, reliable, safe and cost-effective means of transporting petroleum products from Mombasa to the hinterland. In pursuit of this objective, Kenya Pipeline Company (KPC) has over time invested in pipeline, storage and loading facilities for transportation and distribution of petroleum products.

In 2017, a study for devolvement of petroleum pipeline network to the counties was conducted in a bid to improve supply due to increasing demand for petroleum products as well as enhancing market access. Kapkatet township was identified as the proposed depot for the South Rift Region. It is proposed to serve demand spots including towns within Kericho, Narok, Bomet and parts of Kisii county. Regional demand, spatial location in relation to major towns /demand hot spots, availability of fairly flat land and good road network connecting to service area was considered in determining the depot location among other considerations. The proposed pipeline is set to branch at KPC Sinendet Station in Nakuru to Kipkelion Junction then follow the Nyayo Tea Zone road on the boundary of Kericho and Bomet counties, scaling the Western Mau forest, to Litein in Kericho and finally Kapkatet, 80 km from Sinendet.

8.6. ICT and Telecommunications

Connection to the fibre submarine systems provides Kenya with numerous investment opportunities and presents great prospects for spurring economic growth through reliable and affordable high-capacity bandwidth. In addition to the completion and operationalisation of the undersea fibre cables, which have facilitated global interconnection for the country, the completion of National Optic Fibre Backbone Infrastructure (NOFBI) Phase 1 has provided connection within the country. A total of 4,300kms of NOFBI was completed in the year 2009-10. The level of utilisation of the NOFBI cable is, however, low. Increased demand, once Phase 2 of NOFBI is completed, is expected to change the situation. The NOFBI was being used by Telkom Kenya, Safaricom, Jamii Telkom, Bandwidth and Cloud Services (BCS), Kenya Education Network (KENET), and the DEG in different locations in 37 counties. Phase 2 will cover the rest of the counties.

Map 22: ICT and Pipeline Infrastructure





Chapter 9

Water and Sewerage Services



9.1. Overview

Kenya is characterized by low levels of access to water and sanitation, in particular in urban slums and in rural areas, as well as poor service quality in the form of intermittent water supply. Seasonal and regional water scarcity exacerbates the difficulty to improve water supply. Kericho county is no exception to these challenges. This section discusses these challenges in detail.

9.2. Water Sources

The main categories of sources of water for residents in Kericho county are surface water sources and ground water sources.

i) Surface water sources

a) Rivers

A large part of the Mau forest - considered Kenya's largest water catchment area - lies in the county. The forest gives rise to some of the major rivers that flow out of it among them the Ewaso Ng'iro, Sondu, Mara and Njoro Rivers. Some of the major permanent Rivers which flow through the county are Chemosit, Kiptiget, Itare, Kipchorian, Timbilil, Kipsonoi, and Mara Rivers. The main water sources within the county are rainfall, shallow wells, springs and streams for the rural population. KEWASCO draws its water from River Timbilil, River Kimugu and Ngecherok springs.

Shallow wells and springs, which are the main source of water for the rural population, are unsafe though attempts are being made through devolved funds for instance CDF and county government funds to protect the springs and provide convenient watering point and sanitation facilities. Public water sources have been encroached and some vandalised.

A section of the population draws water from the rivers. The water from these rivers is mainly used for domestic and industrial uses while some is used for small scale institutional hydroelectricity generation. Conservation efforts would see the county contribute water resources to other part of the country enhancing the national efforts of making Kenya water-secure.

b) Earth dams and water pans

A negligible number of households depend on water pans mainly for watering cattle. On the lower parts especially Soin/Sigowet and Kipkelion sub-counties the landscape presents a good topography for development of dams and water pans that could be used for multiple uses.

ii) Subsurface and ground water

Table 14 below summarizes the borehole data available and can be useful when making decisions on areas to explore ground water.

Table 14: Ground water sources assessment

| No. | Sub County | Average depth of abstraction (M) | Average Yield (M3/hr) | Quality of water | Remarks |
|-----|----------------|----------------------------------|-----------------------|------------------|---|
| 1 | Ainamoi | 200 | 5 | Good | Lately water levels getting deeper |
| 2 | Belgut | 180 | 6 | Fairly Good | Minor turbidity with increased use |
| 3 | Bureti | 160 | 5.5 | Fairly Good | Minor clays in Ngoina, Cheborge and Litein area |
| 4 | Soin/Sigowet | 210 | 4.5 | Fairly Good | Clays limit borehole recharge |
| 5 | Kipkelion East | 140 | 8 | Good | Rich aquifers |
| 6 | Kipkelion West | 150 | 7 | Good | Rich aquifers on hill ridges |

9.3. Water Supply

9.3.1. Existing Infrastructure

The responsibility for water supply and sewerage in Kericho is shared between an asset holding company, Lake Victoria South Water Service Board (LVSWSB), and the operating companies- the Kericho Water and Sanitation Company (KEWASCO) and the Tililbei Water and Sanitation Company (TILWASCO). KEWASCO and TILWASCO are semi-autonomous companies owned by the county government of Kericho. Kericho Water and Sanitation Company (KEWASCO) supplies water within the former Kericho municipality area and the neighbouring peri-urban areas.

Tililbei Water and Sanitation Company (TILWASCO) on the other hand, is responsible for the supply of water in rural areas across the county. Most rural community water supplies are managed by community management committees. Institutional water supply schemes are managed by respective institutions.

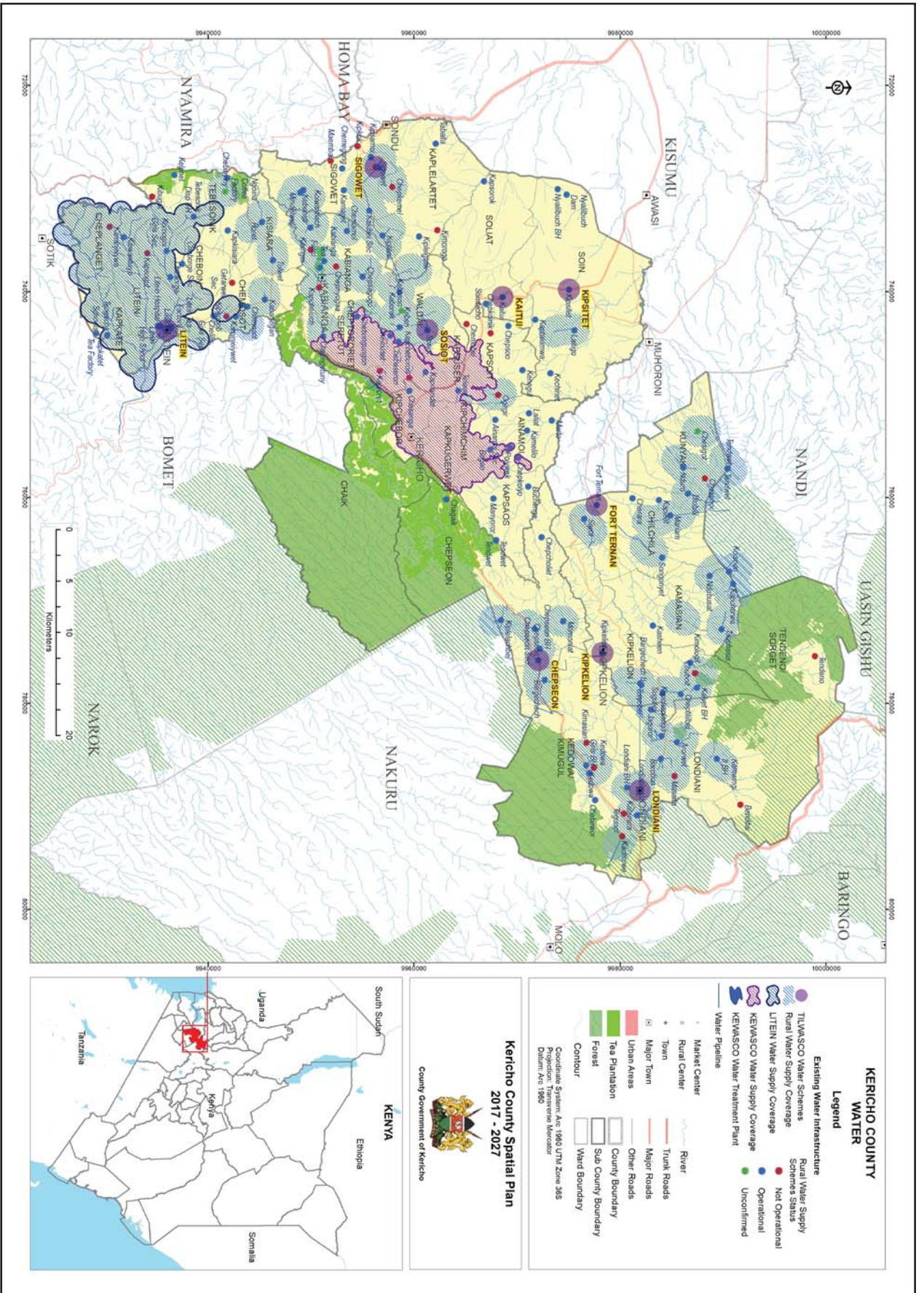
KEWASCO serves 18,000 registered water connections with 12,000 active connections, and 4,000 sewerage connections. It draws 68.2% (8,640m³/day) of its water from Timbilil River, 30.2 % (3,000m³/day) from Kimugu River and 1.6% (1,200m³/day) from Ngecherok springs. During periods of drought, the water level in these rivers and springs reduce due to deforestation of the catchment areas. Though the percentages of unaccounted for water (UFW) dropped from 50% - 46%, its level remain a big concern. These losses are due to leakages, illegal connections, inefficient consumer meters and wasteful use of water by some consumers.

TILWASCO on the hand is charged with the responsibility of management of the water supply schemes as listed in *Table 15*.

Table 15: TILWASCO Water Supply Schemes

| No. | Name of scheme | Target Area |
|-----|-------------------------|---|
| 1 | Litein Water Supply | Litein and Kapkatet urban centres and the Surrounding rural areas |
| 2 | Kipkelion Water Supply | Kipkelion urban centre |
| 3 | Sosiot Water Supply | Sosiot urban centre and the Surrounding rural areas |
| 4 | Londiani Water supply | Londiani urban centre and the Surrounding rural areas |
| 5 | Chepseon Water Supply | Chepseon shopping centre |
| 6 | Fort Tenan Water Supply | Fortenan shopping centre |
| 7 | Kipsitet Water Supply | Kipsitet shopping centre |
| 8 | Kaitui Water Supply | Kaitui shopping centre |
| 9 | Sigowet Water Supply | Sigowet shopping centre |
| | Total | |

There are also several water supply schemes and projects spread across the county. These schemes and projects are funded by various actors and are at various levels of implementation as shown in *Map 23*.



9.3.2. Water Demand Analysis

i) Household Water Demand

KEWASCO's water reticulation network covers an area of approximately 144 km² comprising of Kericho town and adjoining peri-urban areas. The total combined design capacity of the water supply infrastructure for KEWASCO is 12,900 m³/day which is marginally adequate for the entire Kericho Municipality being the main supply area though not fully exploited currently. The water distribution system itself comprises a total of approximately 115 km network of primary, secondary, and tertiary pipelines. The average consumption per household is 200 liters per day. With a projected population of up to 200,000 residents within the supply area by 2027, this translates to a projected water demand of up to 10,000 m³/d. However, KEWASCO intends to expand its supply capacity to 19,521 m³/d by 2030.

KEWASCO has 12,500 active connections out of 18,000 registered connections as of 2017. Currently the population of Kericho Municipality is estimated at 150,700 while the average household size is 5.4 hence 28, 000 households against the 12,500 households receiving water supply services. The reticulation infrastructure needs expansion to accommodate the growing consumer demand. Considering the entire county, it is a requirement for towns and municipalities to have a well-functioning water supply and reticulation systems along with the relevant services.

The rest of the towns have schemes from TILWASCO as shown *Table 16*. Apart from these providers, the county has managed to establish a number of community schemes and there are also a number of individual schemes that have gone a long way to beef up water supply even in rural areas.

Table 16: Water Schemes within TILWASCO

| No. | Name of scheme | Target Area | Current Active Connections |
|--------------|-------------------------|--|----------------------------|
| 1 | Litein Water Supply | Litein, Kapkatet towns and the surrounding areas | 6,714 |
| 2 | Kipkelion Water Supply | Kipkelion town | 215 |
| 3 | Sosiot Water Supply | Sosiot and its environs | 532 |
| 4 | Londiani Water supply | Londiani town and its environs | 477 |
| 5 | Chepseon Water Supply | Chepseon town | 352 |
| 6 | Fort Tenan Water Supply | Fort-Tenan town | 319 |
| 7 | Kipsitet Water Supply | Kipsitet | 297 |
| 8 | Kaitui Water Supply | Kaitui town | 166 |
| 9 | Sigowet | Sigowet town | 96 |
| Total | | | 7,179 |

Table 17 shows the current population served by existing water schemes.

Table 17: Reach-out level of Water Supply in the county, 2018

| Sub-Counties | Average households currently Served (all projects) | Average Persons per household | Average population currently Served (all projects) |
|----------------|--|-------------------------------|--|
| Soin | 2,762 | 5.4 | 14,915 |
| Ainamoi | 20,010 | 5.4 | 108,054 |
| Bureti | 8,399 | 5.4 | 45,355 |
| Belgut | 1,354 | 5.4 | 7,312 |
| Kipkelion West | 4,784 | 5.4 | 25,834 |
| Kipkelion East | 3264 | 5.4 | 17,626 |
| Total | 40573 | | 219,096 |



Figure 25: Water access proportions

Community groups and private actors have been keen in enhancing construction and operation of water points in rural areas to supplement efforts by the government. However, there is still a critical demand as only 24% of the residents receives piped or tanked water (GeoMaestro, 2017).

Table 18 and Table 19 show active water schemes and water demand respectively.

Table 18: Existing water schemes, reticulation and capacities, 2017

| Water Scheme Service Providers | Est. No. of Supplied connections (households) | Total Design capacity m ³ /day | Total Operational/ Supply Capacity m ³ / day |
|--------------------------------|---|---|---|
| KEWASCO | 18,260 | 12,900 | 2,400 |
| TILWASCO | 8,942 | | |
| Community Schemes | 10,246 | | |
| County Government Schemes | 590 | | |
| Institutional | 820 | | |
| Others | 4,960 | | |
| TOTALS | 43,818 | | |

Table 19: 2027 Water Demand and Deficit (Standard of 200 litres/ household/ day)

| Water Demand | Total Av. No Households | Projected Population Served by Schemes | Capacity m ³ /day |
|---------------------------|-------------------------|--|------------------------------|
| Total Current Supply 2017 | 43,818 | 219,096 | ----- |
| Total Demand 2027 | 338,750 | 1,355,000 | ----- |
| Total Deficit | 299,892 | 1,135,906 | 59,978.4 |

i) **Water demand Analysis for the county**

Demographic data for the county was gathered and analysed to give the current and total projected water demand. Consideration was given to human and animal population, commercial water uses and a 5% margin for kitchen gardening. Below is the analysis for the demand.

a) **Projection Horizon and projection Growth Rates**

The initial year has been taken as 2017, future demand in the year 2027 and the ultimate as 2037. Planning period is 20 years. Base year is 2009.

The prediction of future population is essential in connection with the planning of water supply systems. Complete studies of vital statistics such as gender, age and so forth are obtainable from several agencies that include the local government offices and Kenya National Bureau of Statistics (KNBS). The population growth rate of the county is 3.3% for urban areas and 2.4% for rural areas. The national growth rate of 2.6% (CIDP, 2014).

b) **Demand calculations**

The projected future and ultimate water demand calculations are based on the guidelines in the Ministry of Water Design Manual for Water Supply in Kenya (August, 1986), the Ministry of Water and Irrigation Practice Manual for Water Supply Services in Kenya (October, 2005) the World Health Organisation Sectorial Study and National Programming for Community and Rural Water Supply, Sewerage and Water Pollution control: Selection and Design Criteria for Water Supply Projects (1973). Water consumption rates have been derived from the design manual.

Table 20: Rates adopted for estimating water demand (Source: GoK (2005)).

| No. | Aspect of water use | Rates |
|-----|------------------------------------|-----------------------------|
| 1 | Rural Individual connects (I.C) | 60L/H/Day |
| 2 | Urban Individual connects (I.C) | 150 L/H/Day |
| 3 | Schools without water closets | 5L/H/Day |
| 4 | Schools with water closets | 25L/H/Day |
| 5 | 1 Livestock Unit | 50L/Unit/Day |
| 6 | Business/commercial centres | 1.5% of the domestic supply |
| 7 | Dispensaries & Health Centres | 5000 L/day |
| 8 | Sub county hospitals | 400L/Bed/Day |
| 9 | Administrative offices | 25L/H/day |
| 10 | Agricultural use (Kitchen gardens) | 5% of domestic supply |

The following assumptions were made:

- That there will be 10% loss of water in the system also known as Unaccounted For Water (UFW).
 - The number of livestock will grow by 30% over the next 10 years to at optimal count.
 - 5% of water will be used for kitchen gardening (mini-irrigation systems)
- i) **Domestic Water Demand:** The calculation of the domestic water demand was divided into rural and urban. The water demand for rural areas calculated at 60 litres per person per day while urban areas calculated at 150 litres per person per day. The design criteria envisaged 100% individual water connections to all the households by the year 2030. A further 5% of the total demand calculated was added to allow for small scale irrigation in the homesteads such as kitchen gardening.
- ii) **Water demand for institutions:** Demand for water in hospitals, health facilities, dispensaries, ECDs, primary, secondary and tertiary institutions was analysed.
- For health centres and dispensaries, 5000 litres of water per day, and 400 litres per bed per day for sub county referral hospitals
 - 5 litres per person per day was assumed for day schools and 10 litres per person per day for boarding schools and tertiary institutions. The design figures are informed by use of non-flush toilets, but the figure is set to increase to 25 litres per person per day in the future demand. It is envisaged that the county will have improved water allocation and sanitation facilities to flush systems.
- iii) **Water for livestock:** Water requirements for the current population of livestock was factored in the demand analysis. Cows, sheep and goats were considered with an increase of 30% in the future demand.

iii) Summary water demand the county

Table 21: County Water Demand

| Cumulated water demand | Current Water Demand (M3/day)-2017 | Future Water Demand (M3/day)-2027 | Ultimate Water Demand (M3/day)-2037 |
|-----------------------------|------------------------------------|-----------------------------------|-------------------------------------|
| Urban domestic water demand | 52,567.40 | 69,286.29 | 96,375.00 |
| Rural domestic water demand | 34,307.14 | 44,493.96 | 57,705.54 |
| Livestock | 9,870 | 14,568 | 21,500 |
| Institutional water demand | 4,430 | 8,313 | 14,131 |
| Total Demand | 101,175 | 136,660 | 189,712 |

The current (2017) total water demand for the county is calculated at 101,175 M³/day, future (2027) demand of 136,660 M³/day, and ultimate (2037) demand of 189,712 M³/day.

The projection factors are that each household should be connected to clean water to be used for domestic and livestock production. The estimate will also cover the 5% water demand for agribusiness to cover kitchen gardens.

The current water supply systems provides 3,896 M³/day out of the total design capacity of 14,336 M³/day representing an operation efficiency of 27%. These losses are caused by functional efficiency and other losses included non-accounted for water due to illegal connections.

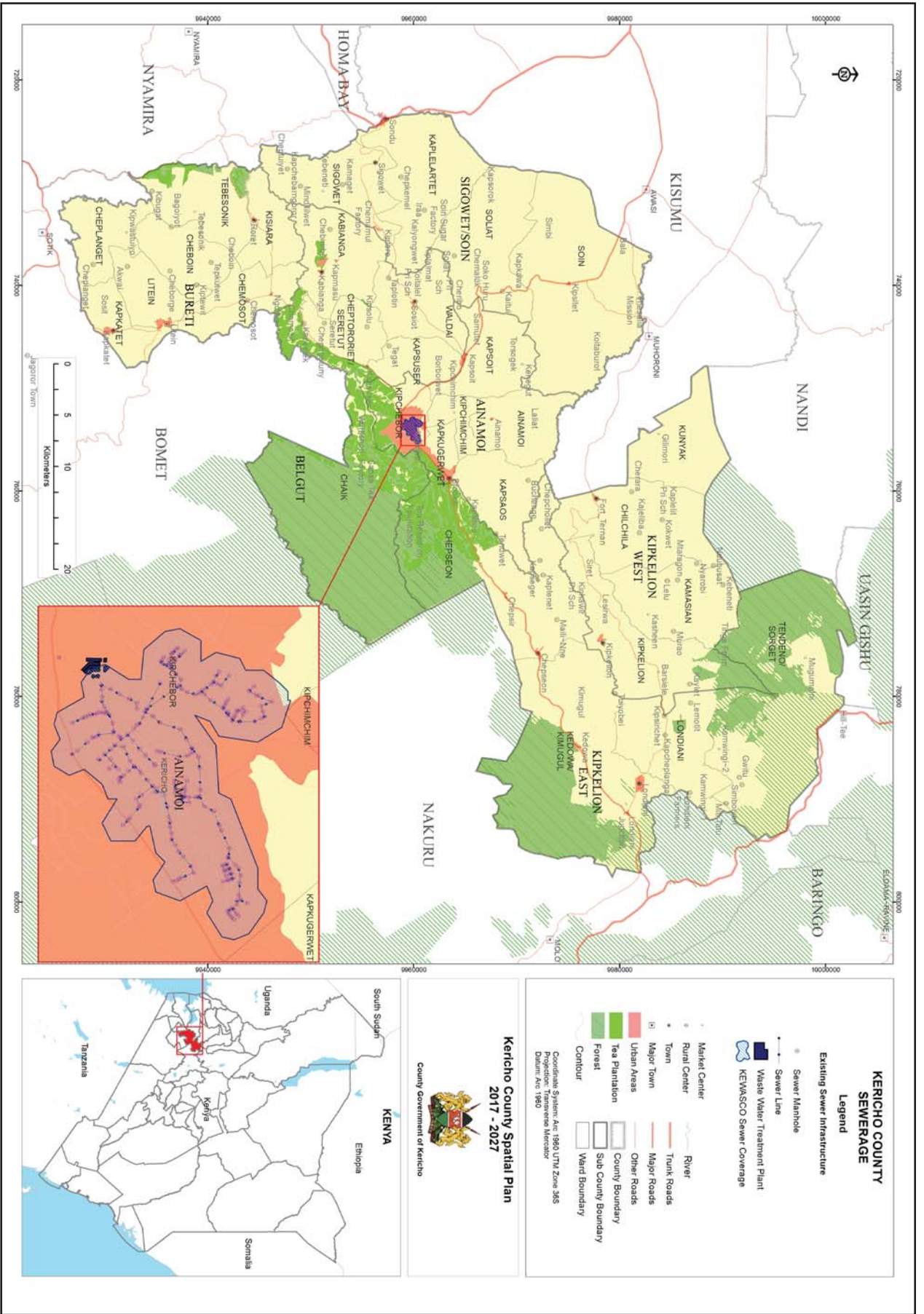
9.3.3. Wastewater Management

Wastewater disposal is still a major challenge within the county. Approximately 2.5km² of the former Kericho municipality is served by a water-borne sewerage system comprising of sewer lines and a combined treatment plant. The sewer network comprises of approximately 12km of sewer lines of diameter varying in size from OD 315mm to OD 160mm. The sewerage system covers only the CBD and a few residential estates. Some health facilities, tea factories and multinational companies are also served with sewer lines and septic tanks whereas majority of the populace uses pit latrines. The urban centres within the county use pit latrines which poses a major hazard. Both KEWASCO and TILWASCO offer exhauster services to customers who have on-site sewerage facilities.

Kericho Town Sewer comprises a piped reticulation network and a centralized Waste Water Treatment Plant (WWTP) located within Kericho town. Approximately 5,000 connections are served by the network which has a design capacity of 990m³ per day, but the current average inflow is approximately 450m³/d. This alludes that the system is currently underutilized in the areas already served. This is the only existing system in the county with all other towns lacking a sewerage management system. *Map 24* shows the extent of the sewerage system in the county.

The county should consider expansion for the system in Kericho and utilizing the existing extra capacity by connecting more homes. New systems for major towns need to be planned as well to meet the current and future demands.

Rehabilitation works of the sewerage treatment plant and sewer network extensions for Kericho town are ongoing under the LVWATSAN-II LTI Project. Further, detailed sewerage design documents for Londiani town have been developed under LVEMP II Project.





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Social Services and Amenities



10.1. Overview

Social services and amenities are an interdependent mix of facilities, geographic location, programs and networks that maintain and improve the standard of living in a community. They include health, education, sports, recreation, culture, security and other government services.

10.2. Health

There are 218 health facilities in Kericho, 154 are operational while the others are not. Of the 154 operational facilities 124 are public owned whereas 30 are managed and operated by private entities. The private entities include faith-based organizations, academic institutions, NGOs, private practitioners and multi-national companies.

The operational facilities provide services as Level IV, Level III and Level II facilities. There are 14 Level IV facilities with 7 a-piece for both private and public. There are 11 public and 5 private Level III facilities while there are 106 and 18 Level II facilities for public and private respectively.

However, the level of access in terms of geographic distribution and level of care, for all these facilities is not well understood and as such, the spatial analysis provides a measure of the geographic proximity of existing facilities in relation to population distribution and chooses the optimal facilities to be upgraded and the locations of new health facilities to bridge the deficit.

This assessment addresses the proximity of the health facility to the people based on the standards by Ministry of Health and WHO. The standards recommend physical presence of the health services in not more than 5 km and services need to be available, functional and ready for use (MoH, 2013).

This analysis provides a spatial (geographic) dimension by taking into consideration the following:

- i) Population centres (sub-locations and wards)
- ii) Road network configuration of the county
- iii) Location of existing and functional health facilities
- iv) Number of required facilities by 2027

The output of this analysis is a map showing the best locations of new facilities to maximize geographic coverage as well as meeting the required number of facilities by the population. *Table 22* gives target populations, and overall number of physical infrastructure by level of care.

Table 22: Summary of Health facility operational standards (MoH, 2013)

| Basic Facility standard | Primary Care Units | | | | |
|--|---------------------------------------|-----------------------------|------------------------------------|--------------------------------|-----------------|
| | Secondary (Level V) referral hospital | Primary (Level IV) hospital | Health Centre (Level III) services | Dispensary (Level II) services | Community Units |
| Catchment Population | 1,000,000 | 100,000 | 30,000 | 10,000 | 5,000 |
| Medical Officers and Specialists | 38 | 13 | 0 | 0 | 0 |
| Clinical officers | 95 | 70 | 12 | 2 | 1 |
| Nurses and Specialists | 842 | 251 | 35 | 8 | 2 |
| Pharmacy Staff | 21 | 14 | 5 | 1 | 0 |
| Plaster staff | 6 | 4 | 2 | - | - |
| Rehabilitative and clinical psychologist | 37 | 23 | 7 | 4 | 2 |
| Dental staff | 30 | 16 | 7 | 2 | 1 |
| Diagnostics and imaging | 23 | 8 | 2 | 0 | 0 |
| Health promotion and Social work | 14 | 10 | 6 | 3 | 3 |
| Administrative staff | 41 | 24 | 6 | 2 | 0 |
| ICT | 16 | 10 | 5 | 1 | 0 |
| Medical Engineering and Laboratory | 66 | 47 | 12 | 2 | 0 |
| Nutrition | 38 | 24 | 8 | 3 | 2 |
| Environment and Community Health | 4 | 4 | 4 | 3 | 21 |
| Support staff | 121 | 78 | 22 | 6 | 0 |

A more in-depth look into the categories of health facilities in the county are discussed in the following sections.

10.2.1. Primary Hospitals (Level IV)

Primary hospitals with adequate facilities and resources for staff provided in *Table 23* should have a catchment population of 100,000. Level IV is envisioned to at least handle one complicated delivery per day – a workload fair on the system and staff. *Table 23* shows population projections and required Level IV facilities for the planning period 2017-2027.

Table 23: Gap analysis (2017-2027) for Primary hospitals

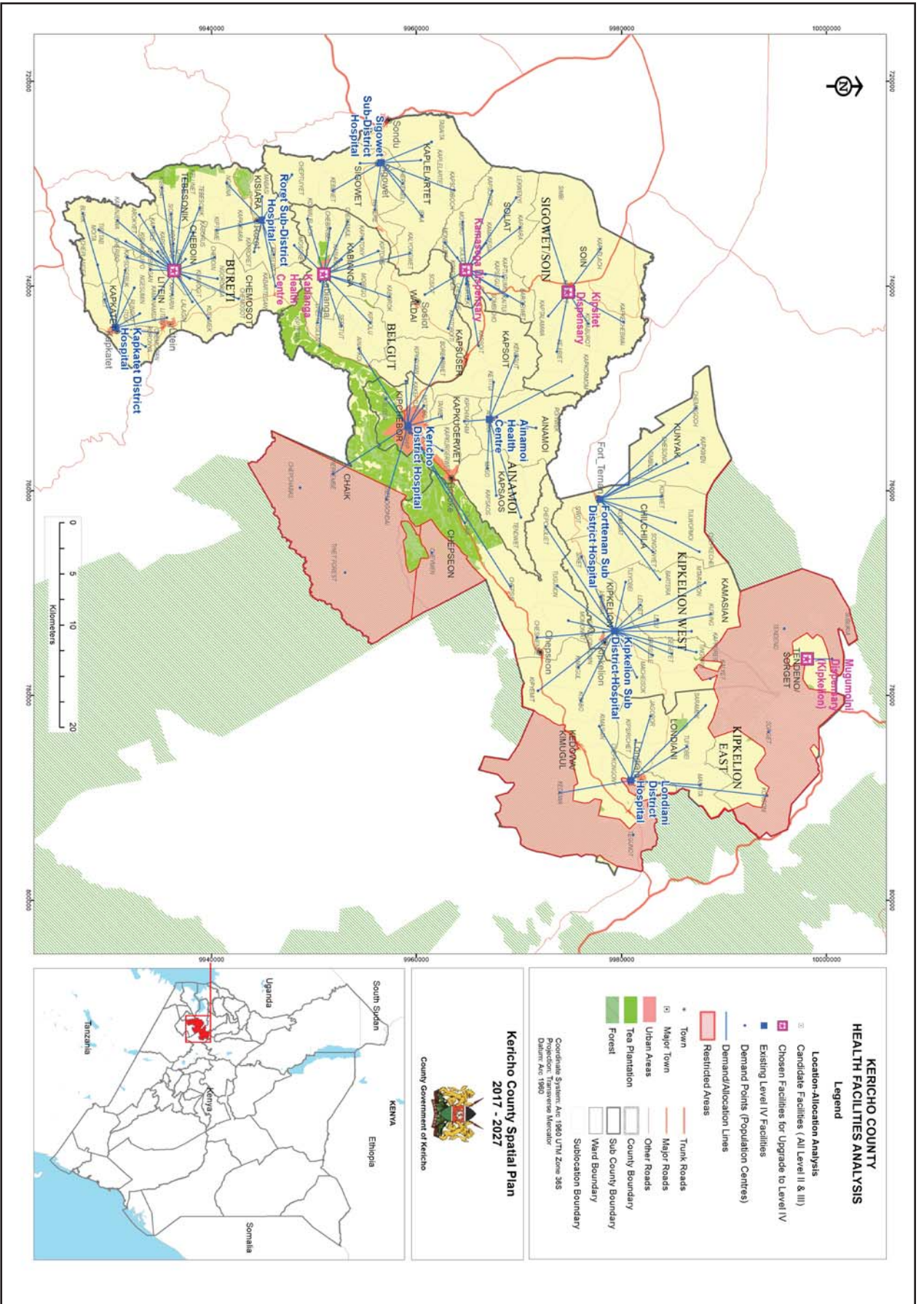
| Name | Population Trend | | | Existing Facilities (2017) | Current Demand (2017) | Required Facilities (2027) | Current Deficit (2017) | Deficit (2027-2017) |
|-----------------------|------------------|----------------|------------------|----------------------------|-----------------------|----------------------------|------------------------|---------------------|
| | 2009 | 2017 | 2027 | | | | | |
| Kipkelion East | 106,872 | 133,293 | 175,687 | 1 | 1 | 2 | 0 | 1 |
| Kipkelion West | 98,054 | 122,295 | 161,191 | 2 | 1 | 2 | -1 | 0 |
| Ainamoi | 138,143 | 172,295 | 227,094 | 2 | 2 | 2 | 0 | 0 |
| Bureti | 164,907 | 205,676 | 271,091 | 2 | 2 | 3 | 0 | 1 |
| Belgut | 127,387 | 158,880 | 209,412 | 0 | 1 | 2 | 1 | 2 |
| Soin/Sigowet | 104,066 | 129,794 | 171,074 | 1 | 1 | 2 | 0 | 1 |
| Kericho County | 739,429 | 922,235 | 1,215,549 | 8 | 8 | 13 | 0 | 5 |

Note: Negative values on the table imply oversupply

Spatial analysis based on demographic patterns and existing infrastructure identified candidate facilities for upgrading as visualized in Table 24 and Map 25.

Table 24: Candidate Level II and Level III facilities for upgrade to Level IV

| No | Facility Name | Ward |
|----|------------------------|----------------|
| 1 | Kipsitet Dispensary | Soin |
| 2 | Mugumoni Dispensary | Tendeno/Sorget |
| 3 | Kamasega Dispensary | Soliat |
| 4 | Kabianga Health Centre | Kabianga |
| 5 | Cheborge Health Centre | Cheboin |



Map 25: Candidate facilities for upgrading to Level IV (2017 – 2027)

10.2.2. Health Centres (Level III)

A Level III facility should exist for every 30,000 persons, allowing for at least 4 deliveries per day – a workload that is fair on the system and staff. *Table 25* tabulates existing facilities in the various administrative units and deficit for the planning period 2017-2027.

Table 25: Population Projection and gap analysis for health centres (2017-2027)

| Name | Population Trend | | | Existing Facilities (2017) | Current Demand (2017) | Required Facilities (2027) | Current Deficit (2017) | Deficit (2027-2017) |
|-----------------------|------------------|----------------|----------------|----------------------------|-----------------------|----------------------------|------------------------|---------------------|
| | 2009 | 2017 | 2027 | | | | | |
| Londiani | 24,327 | 30,341 | 39,991 | 0 | 1 | 1 | 1 | 1 |
| Kedowa / Kimugul | 35,833 | 44,692 | 58,906 | 1 | 1 | 2 | 0 | 1 |
| Chepseon | 35,826 | 44,683 | 58,894 | 1 | 1 | 2 | 0 | 1 |
| Tendeno / Sorget | 10,886 | 13,577 | 17,896 | 0 | 0 | 1 | 0 | 1 |
| Kipkelion East | 106,872 | 133,293 | 175,687 | 2 | 3 | 6 | 1 | 4 |
| Kunyak | 21,665 | 27,021 | 35,615 | 0 | 1 | 1 | 1 | 1 |
| Kamasian | 19,979 | 24,918 | 32,844 | 1 | 1 | 1 | 0 | 0 |
| Kipkelion | 25,346 | 31,612 | 41,666 | 0 | 1 | 1 | 1 | 1 |
| Chilchila | 31,064 | 38,744 | 51,066 | 0 | 1 | 2 | 1 | 2 |
| Kipkelion West | 98,054 | 122,295 | 161,191 | 1 | 4 | 5 | 3 | 4 |
| Kapsoit | 27,544 | 34,354 | 45,280 | 0 | 1 | 1 | 1 | 1 |
| Ainamoi | 17,371 | 21,666 | 28,556 | 0 | 1 | 1 | 1 | 1 |
| Kapkuger-wet | 25,878 | 32,276 | 42,541 | 1 | 1 | 1 | 0 | 0 |
| Kipchebor | 26,639 | 33,225 | 43,792 | 0 | 1 | 1 | 1 | 1 |
| Kipchimchim | 11,670 | 14,555 | 19,184 | 0 | 0 | 0 | 0 | 0 |
| Kapsaos | 29,041 | 36,221 | 47,741 | 0 | 1 | 1 | 1 | 1 |
| Ainamoi | 138,143 | 172,295 | 227,094 | 1 | 5 | 5 | 4 | 4 |
| Kisiara | 21,232 | 26,481 | 34,903 | 0 | 1 | 1 | 1 | 1 |
| Tebesunik | 20,804 | 25,947 | 34,200 | 1 | 1 | 1 | 0 | 0 |
| Cheboin | 22,671 | 28,276 | 37,269 | 1 | 1 | 1 | 0 | 0 |
| Chemosot | 26,310 | 32,814 | 43,251 | 1 | 1 | 1 | 0 | 0 |
| Litein | 25,510 | 31,817 | 41,936 | 0 | 1 | 1 | 1 | 1 |
| Cheplanget | 26,802 | 33,428 | 44,060 | 0 | 1 | 1 | 1 | 1 |
| Kapkatet | 21,578 | 26,913 | 35,472 | 0 | 1 | 1 | 1 | 1 |
| Bureti | 164,907 | 205,676 | 271,091 | 3 | 7 | 7 | 4 | 4 |
| Waldai | 32,816 | 40,929 | 53,946 | 1 | 1 | 2 | 0 | 1 |
| Kabianga | 34,784 | 43,383 | 57,182 | 1 | 1 | 2 | 0 | 1 |
| Cheptorriet/Seretut | 20,622 | 25,720 | 33,901 | 0 | 1 | 1 | 1 | 1 |
| Chaik | 19,897 | 24,816 | 32,709 | 0 | 1 | 1 | 1 | 1 |

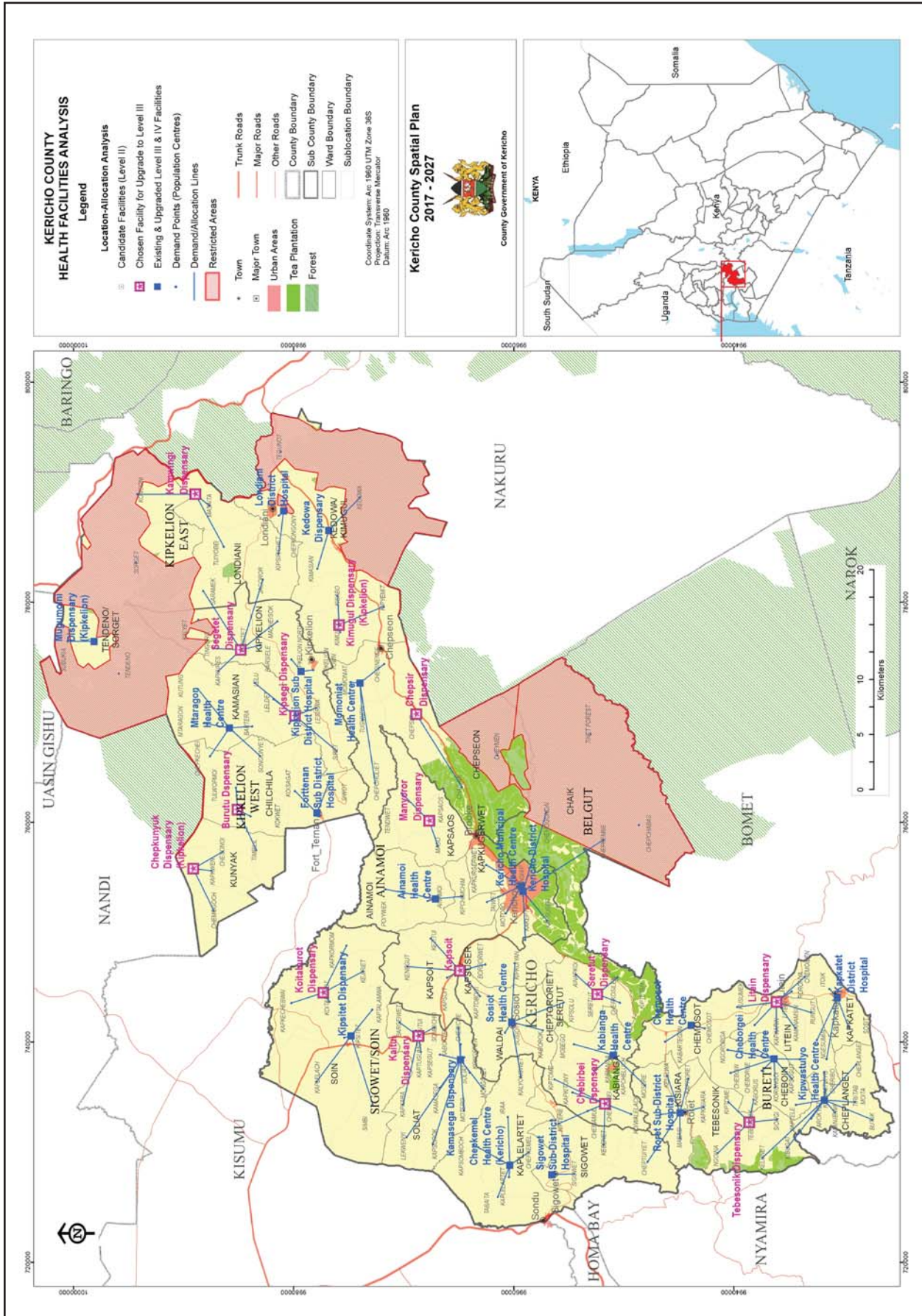
| | | | | | | | | |
|------------------------|----------------|----------------|------------------|-----------|-----------|-----------|-----------|-----------|
| Kapsuser | 19,268 | 24,032 | 31,675 | 0 | 1 | 1 | 1 | 1 |
| Belgut | 127,387 | 158,880 | 209,412 | 2 | 5 | 7 | 3 | 5 |
| Sigowet | 35,883 | 44,754 | 58,988 | 0 | 1 | 2 | 1 | 2 |
| Kaplelartet | 31,151 | 38,852 | 51,209 | 1 | 1 | 2 | 0 | 1 |
| Soliat | 16,015 | 19,974 | 26,327 | 0 | 0 | 1 | 0 | 1 |
| Soin | 21,017 | 26,213 | 34,550 | 0 | 1 | 1 | 1 | 1 |
| Soin / Si-gowet | 104,066 | 129,794 | 171,074 | 1 | 3 | 6 | 2 | 5 |
| Kericho County | 739,429 | 922,235 | 1,215,549 | 10 | 27 | 36 | 17 | 26 |

Considering the existing and required Level III facilities, Level II and Level III facilities should be upgraded to Level IV. Table 26 gives actual Level III facilities deficit for the planning period 2017-2027.

Table 26: Gap Analysis (2017-2027) for health centres

| Name | Existing Facilities Level III & IV (2017) | Required Facilities Level III (2027) | Upgraded Facilities Level II&III (2027) | Upgraded Facilities Level III (2027) | Level III Facilities Deficit (2027-2017) |
|----------------|---|--|---|--|---|
| | A | B | C | D | $E\{(B-A)+(D-C)\}$ |
| Kipkelion East | 3 | 6 | 1 | 0 | 2 |
| Kipkelion West | 3 | 5 | 0 | 0 | 2 |
| Ainamoi | 3 | 5 | 0 | 0 | 2 |
| Bureti | 5 | 7 | 1 | 1 | 2 |
| Belgut | 2 | 7 | 1 | 1 | 5 |
| Soin/Sigowet | 2 | 6 | 2 | 0 | 2 |
| Kericho County | 18 | 36 | 5 | 2 | 15 |

From the spatial analysis, existing Level II facilities were identified as candidates for upgrade to level III. This is provided in Table 27 and Map 26.



Map 26: Candidate Level II facilities for upgrade to Level III - 2017-2027

Table 27: Candidate Level II facilities for Upgrade to Level III (2017-2027)

| No. | Facility Name | Ward |
|-----|-----------------------|---------------------|
| 1 | Tebesonik Dispensary | Tebesonik |
| 2 | Chepkunyuk Dispensary | Kunyak |
| 3 | Chepsir Dispensary | Chepseon |
| 4 | Kaitui Dispensary | Soliat |
| 5 | Kimugul Dispensary | Kedowa/Kimugul |
| 6 | Kipsegi Dispensary | Kamasian |
| 7 | Koitaburot Dispensary | Soin |
| 8 | Manyoror Dispensary | Kapsaos |
| 9 | Seretut Dispensary | Cheptorriet/Seretut |
| 10 | Chebirbei Dispensary | Kabianga |
| 11 | Kapsoit Dispensary | Kapsoit |
| 12 | Kamwingi Dispensary | Londiani |
| 13 | Segetet Dispensary | Kipkelion |
| 14 | Burutu Dispensary | Chilchila |
| 15 | Litein Dispensary | Litein |

10.2.3. Dispensaries (Level II)

A level II facility should exist for every 10,000 persons - translating to an average of 30 dispensary visits per day for any services - and should be within 5 km of the target population and substituted rationally by mobile facilities where the population is sparse.

From Table 28, the total number of existing functional public dispensaries in 2017 is 106. The number of new dispensaries required by 2027 based on population projections is 28.

Table 28: Population and Gap analysis (2017-2027) for dispensaries

| Name | Population Trend | | | Exist- ing Fa- cilities (2017) | Current D e - mand (2017) | R e - quired Facil- ities (2027) | Current Deficit (2017) | D e f i c i t (2027-2017) |
|---------------------------|------------------|----------------|----------------|---|------------------------------------|--|------------------------------|------------------------------|
| | 2009 | 2017 | 2027 | | | | | |
| Londiani | 24,327 | 30,341 | 39,991 | 5 | 3 | 4 | -2 | -1 |
| K e d o w a / Kimugul | 35,833 | 44,692 | 58,906 | 3 | 5 | 6 | 2 | 3 |
| Chepseon | 35,826 | 44,683 | 58,894 | 5 | 5 | 6 | 0 | 1 |
| T e n d e n o / Sorget | 10,886 | 13,577 | 17,896 | 3 | 2 | 2 | -1 | -1 |
| Kipkelion East | 106,872 | 133,293 | 175,687 | 16 | 15 | 18 | -1 | 2 |
| Kunyak | 21,665 | 27,021 | 35,615 | 4 | 3 | 4 | -1 | 0 |
| Kamasian | 19,979 | 24,918 | 32,844 | 2 | 3 | 4 | 1 | 2 |
| Kipkelion | 25,346 | 31,612 | 41,666 | 4 | 4 | 4 | 0 | 0 |

| | | | | | | | | |
|-----------------------|----------------|----------------|------------------|------------|------------|------------|-----------|-----------|
| Chilchila | 31,064 | 38,744 | 51,066 | 7 | 4 | 6 | -3 | -1 |
| Kipkelion West | 98,054 | 122,295 | 161,191 | 17 | 14 | 18 | -3 | 1 |
| Kapsoit | 27,544 | 34,354 | 45,280 | 4 | 4 | 5 | 0 | 1 |
| Ainamoi | 17,371 | 21,666 | 28,556 | 3 | 3 | 3 | 0 | 0 |
| Kapkugerwet | 25,878 | 32,276 | 42,541 | 0 | 4 | 5 | 4 | 5 |
| Kipchebor | 26,639 | 33,225 | 43,792 | 3 | 4 | 5 | 1 | 2 |
| Kipchimchim | 11,670 | 14,555 | 19,184 | 0 | 2 | 2 | 2 | 2 |
| Kapsaos | 29,041 | 36,221 | 47,741 | 2 | 4 | 5 | 2 | 3 |
| Ainamoi | 138,143 | 172,295 | 227,094 | 12 | 21 | 25 | 9 | 13 |
| Kisiara | 21,232 | 26,481 | 34,903 | 2 | 3 | 4 | 1 | 2 |
| Tebesoni | 20,804 | 25,947 | 34,200 | 6 | 3 | 4 | -3 | -2 |
| Cheboin | 22,671 | 28,276 | 37,269 | 4 | 3 | 4 | -1 | 0 |
| Chemosot | 26,310 | 32,814 | 43,251 | 3 | 4 | 5 | 1 | 2 |
| Litein | 25,510 | 31,817 | 41,936 | 4 | 4 | 5 | 0 | 1 |
| Cheplanget | 26,802 | 33,428 | 44,060 | 2 | 4 | 5 | 2 | 3 |
| Kapkatet | 21,578 | 26,913 | 35,472 | 2 | 3 | 4 | 1 | 2 |
| Bureti | 164,907 | 205,676 | 271,091 | 23 | 24 | 31 | 1 | 8 |
| Waldai | 32,816 | 40,929 | 53,946 | 5 | 5 | 5 | 0 | 0 |
| Kabianga | 34,784 | 43,383 | 57,182 | 7 | 5 | 6 | -2 | -1 |
| Cheptorori-et/Seretut | 20,622 | 25,720 | 33,901 | 3 | 3 | 4 | 0 | 1 |
| Chaik | 19,897 | 24,816 | 32,709 | 0 | 3 | 4 | 3 | 4 |
| Kapsuser | 19,268 | 24,032 | 31,675 | 2 | 3 | 4 | 1 | 2 |
| Belgut | 127,387 | 158,880 | 209,412 | 17 | 19 | 23 | 2 | 6 |
| Sigowet | 35,883 | 44,754 | 58,988 | 6 | 5 | 6 | -1 | 0 |
| Kaplelartet | 31,151 | 38,852 | 51,209 | 6 | 4 | 6 | -2 | 0 |
| Soliat | 16,015 | 19,974 | 26,327 | 4 | 2 | 3 | -2 | -1 |
| Soin | 21,017 | 26,213 | 34,550 | 5 | 3 | 4 | -2 | -1 |
| Soin / Sigowet | 104,066 | 129,794 | 171,074 | 21 | 14 | 19 | -7 | -2 |
| Kericho County | 739,429 | 922,235 | 1,215,549 | 106 | 107 | 134 | 1 | 28 |

Note: Negative values on the table implies oversupply

Considering the existing and required Level IV and III facilities, *Table 29* gives actual Level II facilities deficit for the planning period 2017-2027.

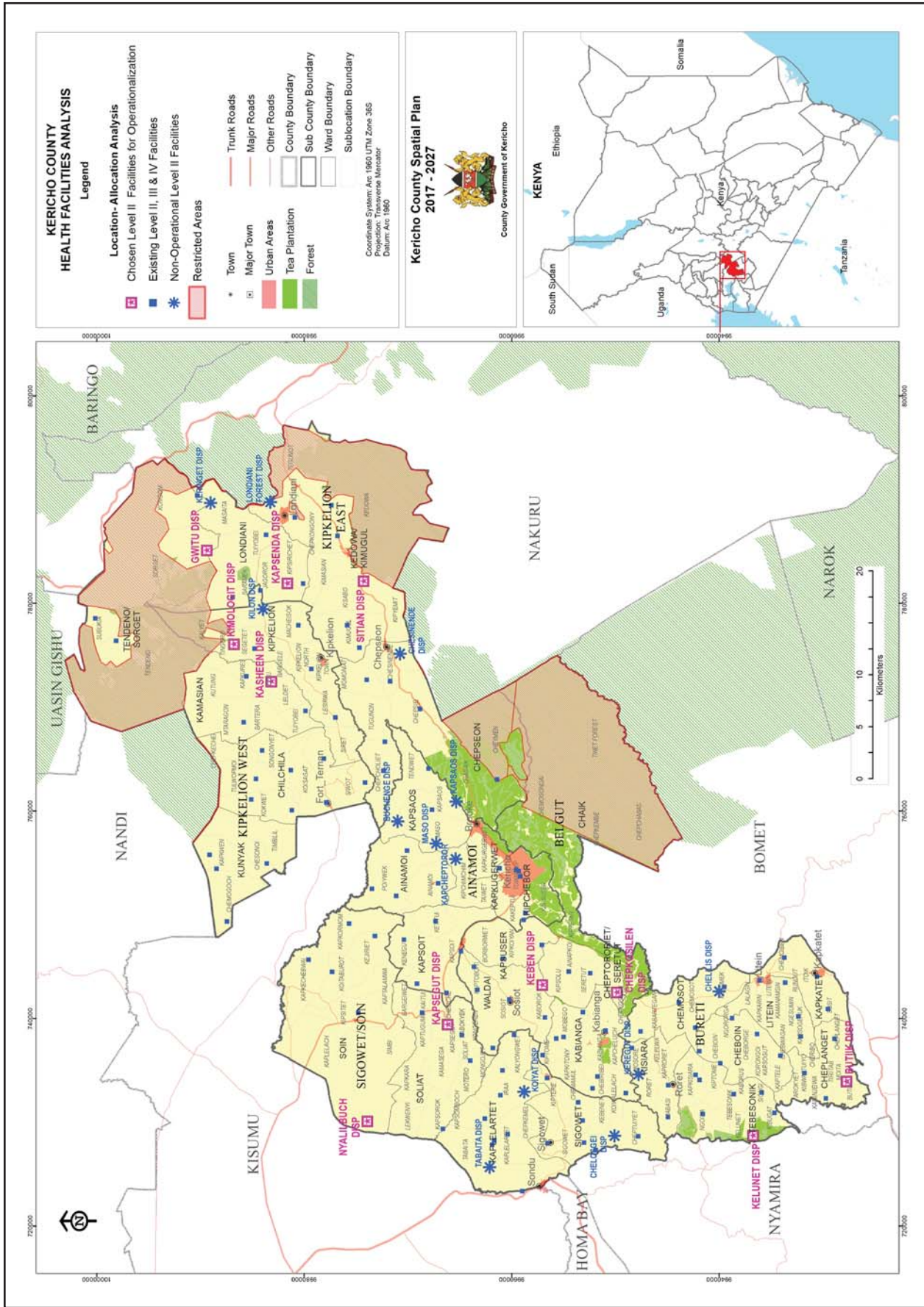
Table 29: Gap Analysis (2017-2027) for Dispensaries

| Name | Existing Facilities Level II, III & IV (2017) | Required Facilities Level II (2027) | Level III Facilities Deficit (2027-2017) |
|----------------|---|--|---|
| | A | B | C(B-A) |
| Kipkelion East | 19 | 18 | -1 |
| Kipkelion West | 20 | 18 | -2 |
| Ainamoi | 15 | 25 | 10 |
| Bureti | 28 | 31 | 3 |
| Belgut | 19 | 23 | 4 |
| Soin/Sigowet | 23 | 19 | - 4 |
| Kericho County | 124 | 134 | 10 |

From the spatial analysis, the number and distribution of dispensaries in the county is adequate. Table 30 and Map 27 shows the facilities that should be operationalised as a matter of priority.

Table 30: Priority facilities for operationalization (2017-2027)

| No. | Facility Name | Ward |
|-----|------------------------|----------------------|
| 1 | Chepkosilen Dispensary | Cheptororiet/Seretut |
| 2 | Kasheen Dispensary | Kamasian |
| 3 | Kapsegut Dispensary | Soliat |
| 4 | Nyalilbuch Dispensary | Soin |
| 5 | Sitian Dispensary | Kedowa/Kimugul |
| 6 | Kapsenda Dispensary | Londiani |
| 7 | Gwitu Dispensary | Londiani |
| 8 | Kimologit Dispensary | Kipkelion |
| 9 | Kelunet Dispensary | Waldai |
| 10 | Keben Dispensary | Tebesonik |
| 11 | Butiik Dispensary | Cheplanget |



Map 27: Candidate Level II Facilities for Operationalization (2017-2027)

10.3. Education

The Ministry of education records indicates that there are approximately 1,594 educational facilities in Kericho, of which, 158 are secondary schools, 583 primary schools, 781 ECDs, 9 special schools, 52 Adult Educations Centres, 15 Youth Polytechnics, 1 University and several sattelite campuses and colleges (Ministry of Education, 2008)

However the level of access in terms of geographic distribution for all these facilities is not well understood therefore the spatial analysis provides a measure of the geographic proximity of existing facilities in relation to population distribution and chooses the optimal facility to be upgraded and the optimal locations for new required facilities.

Location of education amenities is essential in ensuring equitable distribution of educational facilities and access to basic education. Apart from location of these facilities, transport configuration as well population size and demands are factors that are put into consideration. *Table 31* provides physical planning requirements of educational facilities in Kenya

Table 31: Education Facilities Planning Standards; Physical Planning Handbook 2007

| Level | Catchment Population | Walking Distance (Km) |
|-----------|----------------------|-----------------------|
| ECDs | 4,000 | 0 - 0.5 |
| Primary | 4,000 | 0.5 - 2 |
| Secondary | 8,000 | 0.5-3 |

The planning requirement for educational facilities recommends the physical presence of the education facilities with the ranges stipulated in Table 29. This analysis provides a geographic dimension taking into consideration the following:

- i) Population centres (towns, sub-locations and wards).
 - ii) Road network configuration of the county.
 - iii) Location of existing functional educational facilities.
- i) **Number of required facilities by 2027**

The output of the analysis is a map showing the best locations of new facilities to maximize geographic coverage towards achieving the distance threshold as well as meeting the required number of facilities by the population.

10.3.1. Early Childhood Development Education Centres

These are preparatory schools where children between 5-6 years are taught prior to joining primary schools. An ECD facility should exist for every 4,000 persons on average, with a walking distance of less than 0.5 km

Table 32 and *Map 28* shows existing functional public ECD centres. We traced and mapped 517 ECDs in 2017 with the projected number of ECDs required by 2027 based on population projections being 311. The current number exceeds the needs of the population by 279 and 206 for 2017 and 2027 respectively.

Table 32: Gap analysis for ECDs at ward level

| Name | Population Trend | | | Existing Facilities (2017) | Current Demand (2017) | Re-quired Facil-ities (2027) | Current Deficit (2017) | Deficit (2027-2017) |
|-----------------------|------------------|----------------|----------------|----------------------------|-----------------------|------------------------------|------------------------|---------------------|
| | 2009 | 2017 | 2027 | | | | | |
| Londiani | 24,327 | 30,341 | 39,991 | 21 | 8 | 10 | -13 | -11 |
| Kedowa / Kimugul | 35,833 | 44,692 | 58,906 | 25 | 11 | 15 | -14 | -10 |
| Chepseon | 35,826 | 44,683 | 58,894 | 29 | 11 | 15 | -18 | -14 |
| Tendeno / Sorget | 10,886 | 13,577 | 17,896 | 12 | 4 | 5 | -8 | -7 |
| Kipkelion East | 106,872 | 133,293 | 175,687 | 87 | 34 | 45 | -53 | -42 |
| Kunyak | 21,665 | 27,021 | 35,615 | 13 | 9 | 9 | -4 | -4 |
| Kamasian | 19,979 | 24,918 | 32,844 | 15 | 6 | 8 | -9 | -7 |
| Kipkelion | 25,346 | 31,612 | 41,666 | 18 | 8 | 10 | -10 | -8 |
| Chilchila | 31,064 | 38,744 | 51,066 | 27 | 10 | 13 | -17 | -14 |
| Kipkelion West | 98,054 | 122,295 | 161,191 | 73 | 33 | 40 | -40 | -33 |
| Kapsoit | 27,544 | 34,354 | 45,280 | 20 | 9 | 12 | -11 | -8 |
| Ainamoi | 17,371 | 21,666 | 28,556 | 11 | 6 | 7 | -5 | -4 |
| Kapkugewet | 25,878 | 32,276 | 42,541 | 6 | 8 | 11 | 2 | 5 |
| Kipchebor | 26,639 | 33,225 | 43,792 | 7 | 9 | 11 | 2 | 4 |
| Kipchimchim | 11,670 | 14,555 | 19,184 | 5 | 4 | 5 | -1 | 0 |
| Kapsaos | 29,041 | 36,221 | 47,741 | 17 | 9 | 12 | -8 | -5 |
| Ainamoi | 138,143 | 172,295 | 227,094 | 66 | 45 | 58 | -21 | -8 |
| Kisiara | 21,232 | 26,481 | 34,903 | 18 | 7 | 9 | -11 | -9 |
| Tebesunik | 20,804 | 25,947 | 34,200 | 19 | 7 | 9 | -12 | -10 |
| Cheboin | 22,671 | 28,276 | 37,269 | 20 | 7 | 10 | -13 | -10 |
| Chemosot | 26,310 | 32,814 | 43,251 | 14 | 8 | 11 | -6 | -3 |
| Litein | 25,510 | 31,817 | 41,936 | 12 | 8 | 11 | -4 | -1 |
| Cheplangget | 26,802 | 33,428 | 44,060 | 20 | 9 | 11 | -11 | -9 |
| Kapkatet | 21,578 | 26,913 | 35,472 | 12 | 7 | 9 | -5 | -3 |
| Bureti | 164,907 | 205,676 | 271,091 | 115 | 53 | 70 | -62 | -45 |
| Waldai | 32,816 | 40,929 | 53,946 | 14 | 10 | 14 | -4 | 0 |
| Kabianga | 34,784 | 43,383 | 57,182 | 23 | 11 | 15 | -12 | -8 |
| Cheptoriet/Seretut | 20,622 | 25,720 | 33,901 | 11 | 7 | 9 | -4 | -2 |
| Chaik | 19,897 | 24,816 | 32,709 | 29 | 6 | 8 | -23 | -21 |
| Kapsuser | 19,268 | 24,032 | 31,675 | 12 | 6 | 8 | -6 | -4 |
| Belgut | 127,387 | 158,880 | 209,412 | 89 | 40 | 54 | -49 | -35 |

| | | | | | | | | |
|-----------------------|----------------|----------------|------------------|------------|------------|------------|-------------|-------------|
| Sigowet | 35,883 | 44,754 | 58,988 | 21 | 11 | 15 | -10 | -6 |
| Kaplelartet | 31,151 | 38,852 | 51,209 | 25 | 10 | 13 | -15 | -12 |
| Soliat | 16,015 | 19,974 | 26,327 | 14 | 5 | 7 | -9 | -7 |
| Soin | 21,017 | 26,213 | 34,550 | 27 | 7 | 9 | -20 | -18 |
| Soin/ Si-gowet | 104,066 | 129,794 | 171,074 | 87 | 33 | 44 | -54 | -43 |
| Kericho County | 739,429 | 922,235 | 1,215,549 | 517 | 238 | 311 | -279 | -206 |

Note: Negative values on the table implies oversupply

10.3.2. Primary Schools

A primary school is an establishment providing basic education for children age between 6-13 years. A primary school should exist for every 4,000 persons on average, with a walking distance of less than 2 km.

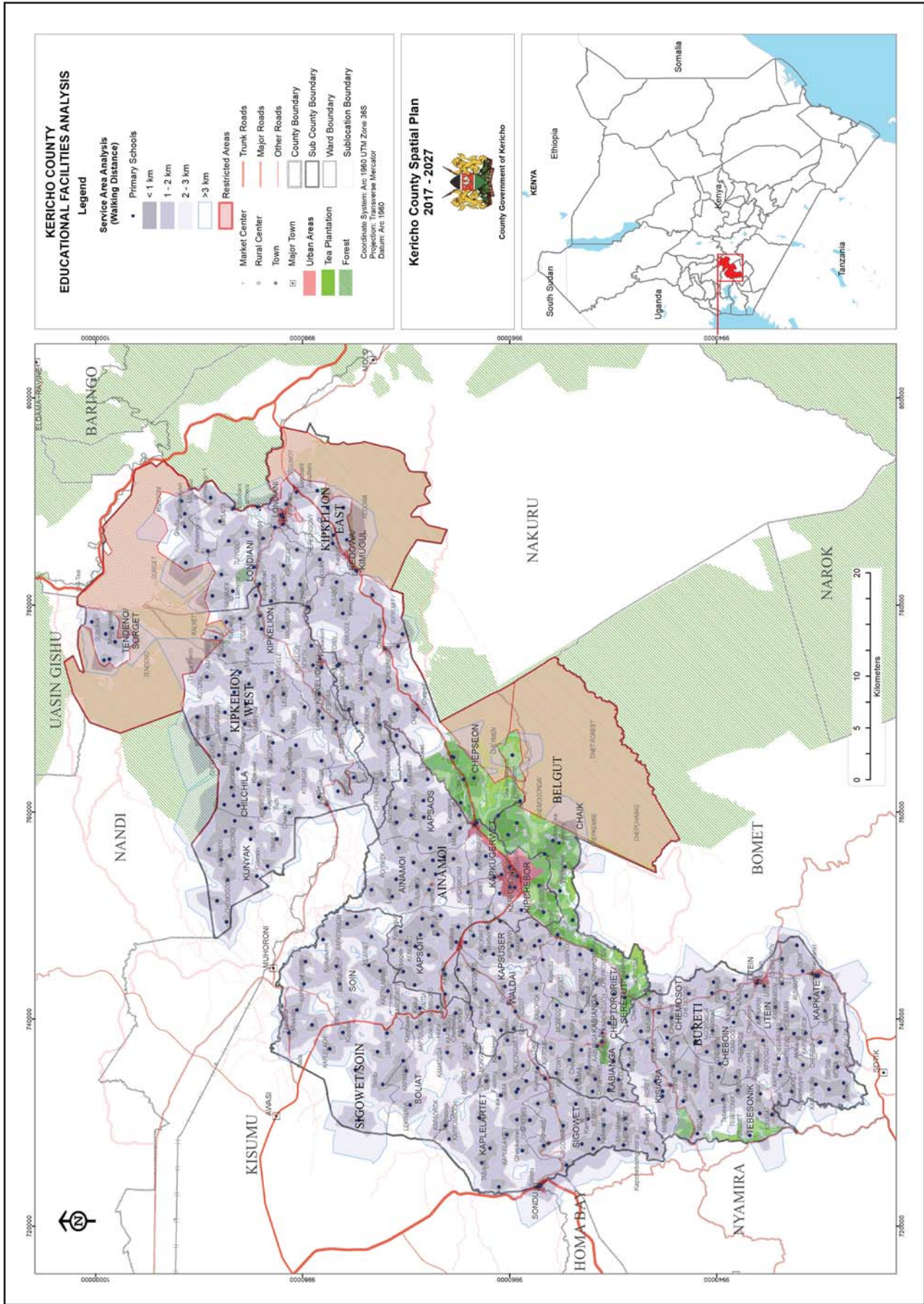
We traced and mapped 424 functional public primary schools in 2017, the number of primary schools required by 2027 based on population projections being 311 therefore the number of facilities in excess of population needs of the county by 2027 is 113. *Table 33* summarizes the analysis.

Table 33: Gap analysis for primary schools (2017 – 2027)

| Name | Population Trend | | | Existing Facilities (2017) | Current Demand (2017) | Re-quired Fac-il-ities (2027) | Current Deficit (2017) | Deficit (2027-2017) |
|-----------------------|------------------|----------------|----------------|----------------------------|-----------------------|-------------------------------|------------------------|---------------------|
| | 2009 | 2017 | 2027 | | | | | |
| Londiani | 24,327 | 30,341 | 39,991 | 17 | 8 | 10 | -9 | -7 |
| Kedowa/ Kimugul | 35,833 | 44,692 | 58,906 | 24 | 11 | 15 | -13 | -9 |
| Chepseon | 35,826 | 44,683 | 58,894 | 23 | 11 | 15 | -12 | -8 |
| Tendeno/ Sorget | 10,886 | 13,577 | 17,896 | 12 | 4 | 5 | -8 | -7 |
| Kipkelion East | 106,872 | 133,293 | 175,687 | 76 | 34 | 45 | -42 | -31 |
| Kunyak | 21,665 | 27,021 | 35,615 | 13 | 9 | 9 | -4 | -4 |
| Kamasian | 19,979 | 24,918 | 32,844 | 15 | 6 | 8 | -9 | -7 |
| Kipkelion | 25,346 | 31,612 | 41,666 | 18 | 8 | 10 | -10 | -8 |
| Chilchila | 31,064 | 38,744 | 51,066 | 20 | 10 | 13 | -10 | -7 |
| Kipkelion West | 98,054 | 122,295 | 161,191 | 66 | 33 | 40 | -33 | -26 |
| Kapsoit | 27,544 | 34,354 | 45,280 | 19 | 9 | 12 | -10 | -7 |
| Ainamoi | 17,371 | 21,666 | 28,556 | 11 | 6 | 7 | -5 | -4 |
| Kapkuger-wet | 25,878 | 32,276 | 42,541 | 3 | 8 | 11 | 5 | 8 |
| Kipchebor | 26,639 | 33,225 | 43,792 | 9 | 9 | 11 | 0 | 2 |

| | | | | | | | | |
|-----------------------|----------------|----------------|------------------|------------|------------|------------|-------------|-------------|
| Kipchim-chim | 11,670 | 14,555 | 19,184 | 4 | 4 | 5 | 0 | 1 |
| Kapsaos | 29,041 | 36,221 | 47,741 | 15 | 9 | 12 | -6 | -3 |
| Ainamoi | 138,143 | 172,295 | 227,094 | 61 | 45 | 58 | -16 | -3 |
| Kisiara | 21,232 | 26,481 | 34,903 | 11 | 7 | 9 | -4 | -2 |
| Tebesunik | 20,804 | 25,947 | 34,200 | 14 | 7 | 9 | -7 | -5 |
| Chebain | 22,671 | 28,276 | 37,269 | 12 | 7 | 10 | -5 | -2 |
| Chemot | 26,310 | 32,814 | 43,251 | 13 | 8 | 11 | -5 | -2 |
| Litein | 25,510 | 31,817 | 41,936 | 11 | 8 | 11 | -3 | 0 |
| Cheplangget | 26,802 | 33,428 | 44,060 | 11 | 9 | 11 | -2 | 0 |
| Kapkatet | 21,578 | 26,913 | 35,472 | 8 | 7 | 9 | -1 | 1 |
| Bureti | 164,907 | 205,676 | 271,091 | 80 | 53 | 70 | -27 | -10 |
| Waldai | 32,816 | 40,929 | 53,946 | 13 | 10 | 14 | -3 | 1 |
| Kabianga | 34,784 | 43,383 | 57,182 | 21 | 11 | 15 | -10 | -6 |
| Cheptorriet/Seretut | 20,622 | 25,720 | 33,901 | 9 | 7 | 9 | -2 | 0 |
| Chaik | 19,897 | 24,816 | 32,709 | 11 | 6 | 8 | -5 | -3 |
| Kapsuser | 19,268 | 24,032 | 31,675 | 12 | 6 | 8 | -6 | -4 |
| Belgut | 127,387 | 158,880 | 209,412 | 66 | 40 | 54 | -26 | -12 |
| Sigowet | 35,883 | 44,754 | 58,988 | 18 | 11 | 15 | -7 | -3 |
| Kaplelarttet | 31,151 | 38,852 | 51,209 | 21 | 10 | 13 | -11 | -8 |
| Soliat | 16,015 | 19,974 | 26,327 | 13 | 5 | 7 | -8 | -6 |
| Soin | 21,017 | 26,213 | 34,550 | 23 | 7 | 9 | -16 | -14 |
| Soin/Sigowet | 104,066 | 129,794 | 171,074 | 75 | 33 | 44 | -42 | -31 |
| Kericho County | 739,429 | 922,235 | 1,215,549 | 424 | 238 | 311 | -186 | -113 |

Note: Negative values on the table implies oversupply



Map 29: Distribution of Primary Schools in Kericho County

10.3.3. Secondary Schools

Secondary schools provide education for a period of four years to children who have completed primary school education and are of age 14-17 years. A secondary school should exist for every 8,000 persons on average, with a walking distance of less than 3km.

We traced and mapped 146 functional public secondary schools as at 2017. The number of secondary schools required by 2027 based on population projections is 165 and therefore the number of new facilities required to meet population needs of the county by 2027 is 19. *Table 34 summarizes the analysis.*

Table 34: Gap analysis secondary schools at ward level

| Name | Population Trend | | | Existing Facilities (2017) | Current Demand (2017) | Re-quired Fac-il-ities (2027) | Current Deficit (2017) | Deficit (2027-2017) |
|-----------------------|------------------|----------------|----------------|----------------------------|-----------------------|-------------------------------|------------------------|---------------------|
| | 2009 | 2017 | 2027 | | | | | |
| Londiani | 24,327 | 30,341 | 39,991 | 7 | 4 | 5 | -3 | -2 |
| Kedowa / Kimugul | 35,833 | 44,692 | 58,906 | 10 | 6 | 8 | -4 | -2 |
| Chepseon | 35,826 | 44,683 | 58,894 | 5 | 6 | 8 | 1 | 3 |
| Tendenno / Sorget | 10,886 | 13,577 | 17,896 | 5 | 2 | 3 | -3 | -2 |
| Kipkelion East | 106,872 | 133,293 | 175,687 | 27 | 18 | 24 | -9 | -3 |
| Kunyak | 21,665 | 27,021 | 35,615 | 2 | 4 | 5 | 2 | 3 |
| Kamasian | 19,979 | 24,918 | 32,844 | 6 | 3 | 4 | -3 | -2 |
| Kipkelion | 25,346 | 31,612 | 41,666 | 8 | 4 | 5 | -4 | -3 |
| Chilchila | 31,064 | 38,744 | 51,066 | 6 | 5 | 7 | -1 | 1 |
| Kipkelion West | 98,054 | 122,295 | 161,191 | 22 | 16 | 21 | -6 | -1 |
| Kapsoit | 27,544 | 34,354 | 45,280 | 3 | 5 | 6 | 2 | 3 |
| Ainamoi | 17,371 | 21,666 | 28,556 | 2 | 3 | 4 | 1 | 2 |
| Kapkugerwet | 25,878 | 32,276 | 42,541 | 1 | 4 | 6 | 3 | 5 |
| Kipchebor | 26,639 | 33,225 | 43,792 | 8 | 4 | 6 | -4 | -2 |
| Kipchimchim | 11,670 | 14,555 | 19,184 | 2 | 2 | 3 | 0 | 1 |
| Kapsaos | 29,041 | 36,221 | 47,741 | 2 | 5 | 6 | 3 | 4 |
| Ainamoi | 138,143 | 172,295 | 227,094 | 18 | 23 | 31 | 5 | 13 |
| Kisiara | 21,232 | 26,481 | 34,903 | 4 | 4 | 5 | 0 | 1 |
| Tebesoni | 20,804 | 25,947 | 34,200 | 7 | 4 | 5 | -3 | -2 |
| Cheboin | 22,671 | 28,276 | 37,269 | 9 | 4 | 5 | -5 | -4 |
| Chemosot | 26,310 | 32,814 | 43,251 | 6 | 4 | 6 | -2 | 0 |
| Litein | 25,510 | 31,817 | 41,936 | 6 | 4 | 5 | -2 | -1 |
| Cheplanget | 26,802 | 33,428 | 44,060 | 9 | 5 | 6 | -4 | -3 |
| Kapkatet | 21,578 | 26,913 | 35,472 | 5 | 4 | 5 | -1 | 0 |

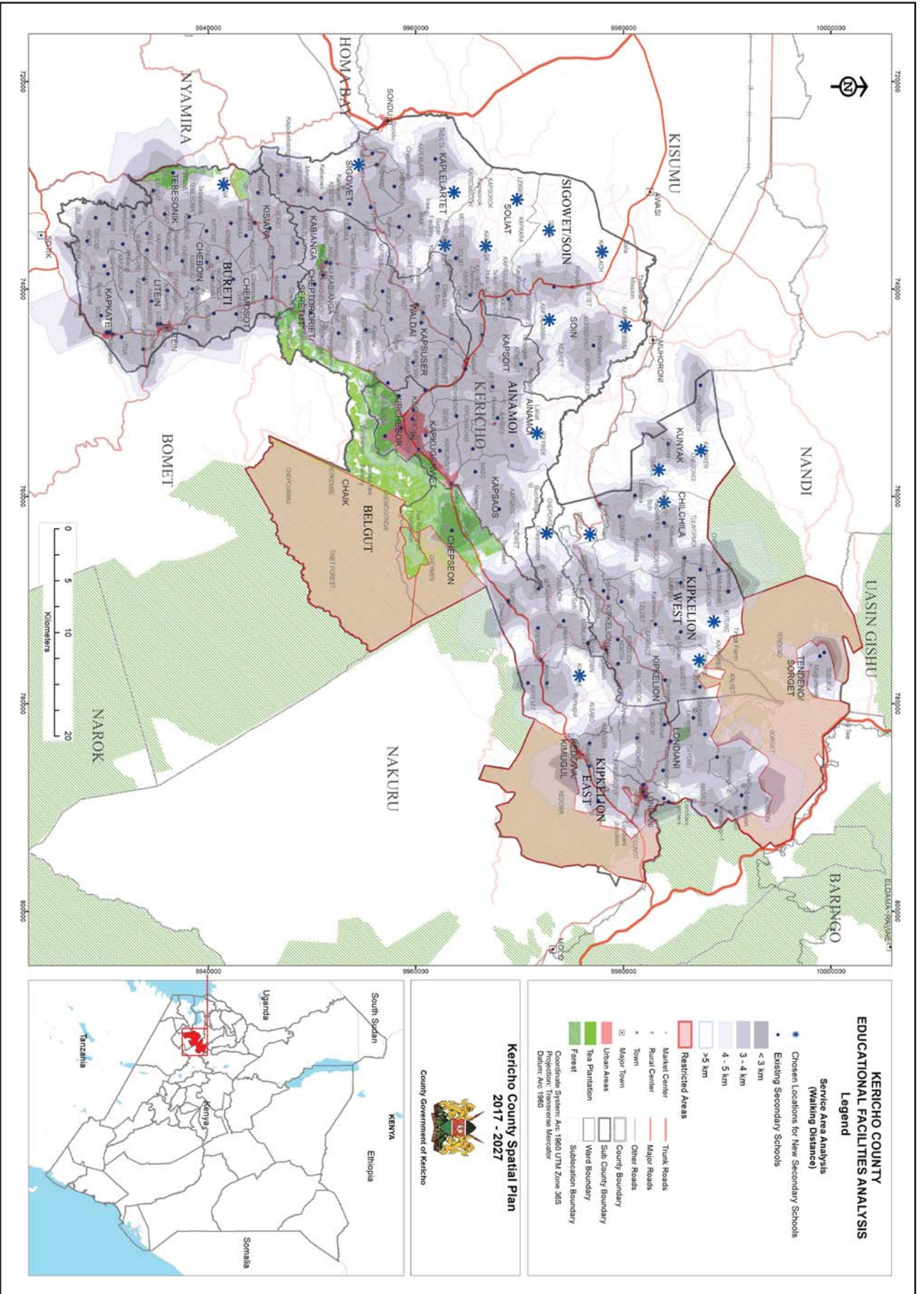
| | | | | | | | | |
|-----------------------------|----------------|----------------|------------------|------------|------------|------------|------------|-----------|
| Bureti | 164,907 | 205,676 | 271,091 | 46 | 29 | 37 | -17 | -9 |
| Waldai | 32,816 | 40,929 | 53,946 | 6 | 5 | 7 | -1 | 1 |
| Kabianga | 34,784 | 43,383 | 57,182 | 5 | 6 | 8 | 1 | 3 |
| Cheptoror- iet/Seretut | 20,622 | 25,720 | 33,901 | 3 | 4 | 5 | 1 | 2 |
| Chaik | 19,897 | 24,816 | 32,709 | 0 | 3 | 4 | 3 | 4 |
| Kapsuser | 19,268 | 24,032 | 31,675 | 4 | 3 | 4 | -1 | 0 |
| Belgut | 127,387 | 158,880 | 209,412 | 18 | 21 | 28 | 3 | 10 |
| Sigowet | 35,883 | 44,754 | 58,988 | 6 | 6 | 8 | 0 | 2 |
| Kaplelartet | 31,151 | 38,852 | 51,209 | 4 | 5 | 7 | 1 | 3 |
| Soliat | 16,015 | 19,974 | 26,327 | 3 | 3 | 4 | 0 | 1 |
| Soin | 21,017 | 26,213 | 34,550 | 2 | 4 | 5 | 2 | 3 |
| Soin / Si- gowet | 104,066 | 129,794 | 171,074 | 15 | 18 | 24 | 3 | 9 |
| Kericho County | 739,429 | 922,235 | 1,215,549 | 146 | 125 | 165 | -21 | 19 |

Note: Negative values on the table implies oversupply

Table 35 and Map 30 shows optimal location of new secondary schools for the planning period 2017 – 2027.

Table 35: List of Location of new secondary schools

| No. | Sub-location | Ward |
|-----|--------------|----------------|
| 1 | Chepcholiet | Chepseon |
| 2 | Kamasega | Soliat |
| 3 | Kapkechebwai | Soin |
| 4 | Lekwenyi | Soliat |
| 5 | Simbi | Soin |
| 6 | Kaplelach | Soin |
| 7 | Mongojet | Soliat |
| 8 | Kaptalamwa | Soin |
| 9 | Kapsomboch | Kaplelartet |
| 10 | Sigowet | Sigowet |
| 11 | Ngoina | Tebesonik |
| 12 | Kimugul | Kedowa/Kimugul |
| 13 | Tingoro | Kipkelion |
| 14 | Kutung | Kamasian |
| 15 | Siwot | Chilchila |
| 16 | Kokwet | Chilchila |
| 17 | Kapkwon | Kunyak |
| 18 | Timbilil | Kunyak |
| 19 | Poiywek | Ainamoi |



Map 30: Distribution and location-allocation for Secondary Schools

10.3.4. Tertiary institutions and Special Needs Schools

Kabianga University is highest institution of learning in the county. It has its main campus in Kabianga town and town campus within Kericho town. Other universities have their satellite campuses in Kericho and Kapkatet towns. There are over 20 technical training polytechnics, Teachers', Bible and Medical colleges. Additionally, there are a few Special Needs schools in the county. These special needs schools train PWDs and orphans. Cheplanget Secondary School and the proposed Baek Girls School in Kapsuser are some of the secondary schools categorized as Special Needs Schools. *Table 36* shows special and integrated schools in the county. *Map 31* shows some of the tertiary and special needs institutions.

Table 36: Special and Integrated Schools

| No. | Name | Level | Type |
|-----|--|-----------------------------|------------|
| 1 | Tonongoi Special Unit | ECD | Special |
| 2 | St. Kizitos Litein School For The Deaf | ECD | Special |
| 3 | Charera ECD Centre | ECD | Integrated |
| 4 | Chepkongony Special Unit | Non-Formal Education Centre | Special |
| 5 | Kipkelion Special Sch | Primary | Special |
| 6 | Kedowa Special School For The Deaf - Pri | Primary | Special |
| 7 | Tendeno Pri Sch | Primary | Integrated |
| 8 | St. Kizitos Litein School For The Deaf | Primary | Special |
| 9 | Lelach Primary School | Primary | Integrated |
| 10 | Charera Primary | Primary | Integrated |
| 11 | Cheplanget Secondary School | Secondary | Special |
| 12 | St. Kizitos Vocational For Deaf | Youth Polytechnic | Special |

10.4. Governance, Administration and Security

10.4.1. National Government Administrative units

The county is composed of six sub-counties, 15 administrative divisions - which are further divided into 85 locations that are further sub-divided into 209 sub-locations as shown in *Table 37* and *Map 32*.

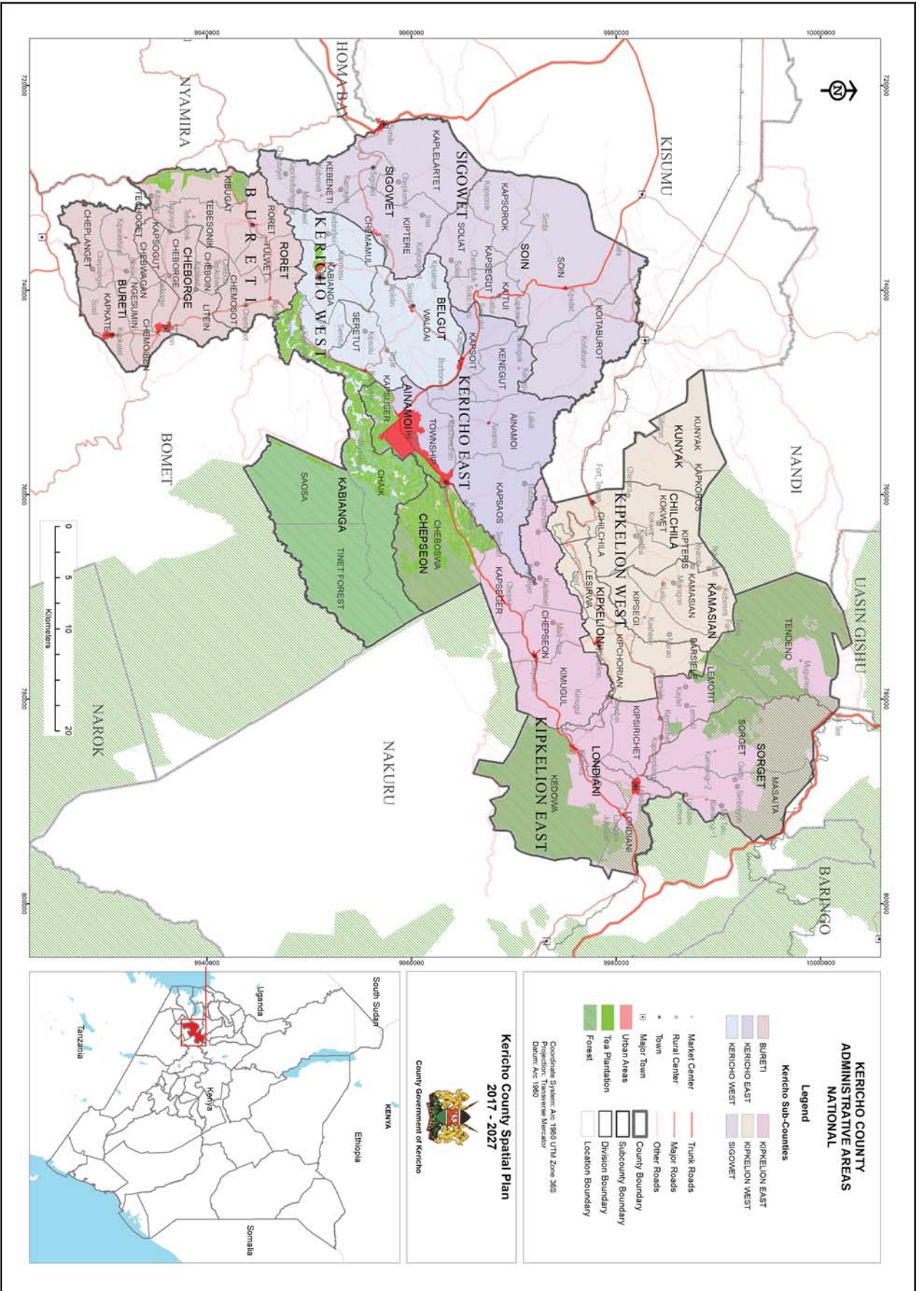
The national government is in charge of administration of the county with respect to provision of security, maintenance of peace and public order through:

- ii) The **county commissioner** who is also the chair of the county security and intelligence committee. The commissioner is also in charge of coordination of security matters in the county as well as the administration and implementation of national policies and development initiatives in the county.
- iii) The **deputy commissioner** and **assistant commissioner** are responsible for the coordination of security matters in the sub-county as well as administration and implementation of national policies and development initiatives by the national government in the sub-county (former district) level and wards (former division) level respectively.
- iv) The **chiefs, assistant chiefs** and **village elders** are responsible for the coordination of security matters as well as administration and implementation of national policies, development initiatives and maintenance of public order at location, sub-location and village levels respectively.

Table 37: Administrative units from National Government Perspective

| Sub-Counties (District) | Divisions | No of Locations | No of Sub Locations |
|-------------------------|-----------|-----------------|---------------------|
| Kericho East | Ainamoi | 11 | 24 |
| Kericho West | Kabianga | 12 | 27 |
| | Belgut | | |
| Sigowet | Sigowet | 13 | 38 |
| | Soin | | |
| Kipkelion West | Kunyak | 16 | 35 |
| | Chilchila | | |
| | Kamasian | | |
| | Kipkelion | | |
| Kipkelion East | Londiani | 14 | 32 |
| | Sorget | | |
| | Chepseon | | |
| Bureti | Bureti | 19 | 53 |
| | Roret | | |
| | Cheborge | | |
| 6 | 15 | 85 | 209 |

The number of locations and sub-locations reported does not tally with number on the ground based on existing boundaries.



Map 32: National Administrative Units

10.4.2. County Administrative units

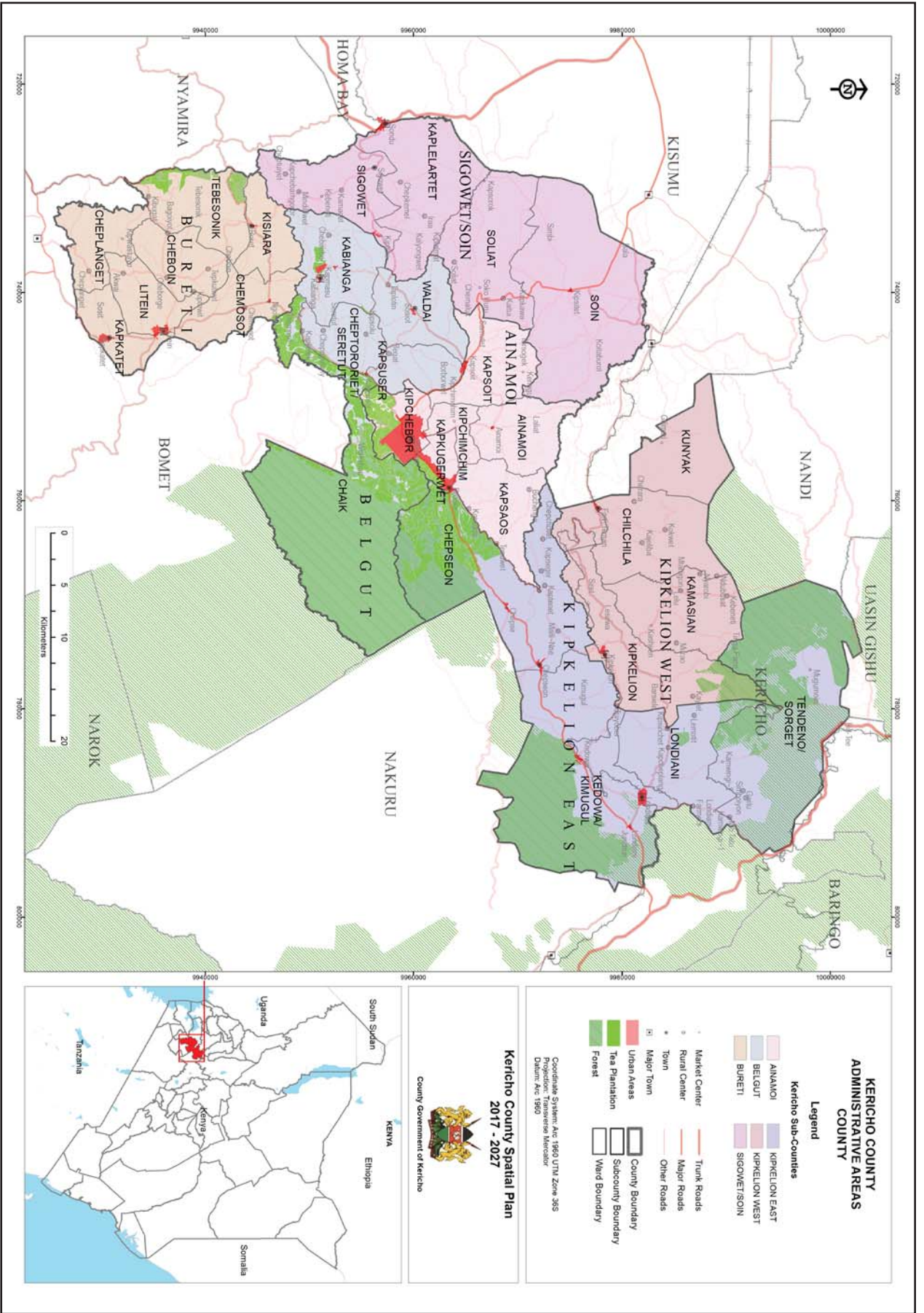
The county government is in charge of administration of the county with respect to delivery of government services, implementation of county government policies and development through:

- The **county executive committee** member in charge of public service management who supervises the administration and delivery of services and all decentralized units in the county.
- The **sub-county administrator, ward administrator** and **village administrator** who are responsible for the coordination, management and supervision of the general administrative functions including: development of policies and plans, service delivery, development activities and the provision and maintenance of infrastructure and public service facilities at sub-county, ward and village level respectively.

The county is composed of six sub-counties which coincide with the six constituency boundaries that are divided into 30 electoral wards as shown in *Table 38* and *Map 33*.

Table 38: County Administrative Units

| Constituency/Sub-counties | Wards | No of Wards |
|---------------------------|---|-------------|
| Ainamoi | Kapsoit, Ainamoi, Kapkugerwet, Kipchebor, Kipchimchim, Kapsaos | 6 |
| Belgut | Waldai, Kabianga, Cheptorriet/Seretut, Chaik, Kapsuser | 5 |
| Kipkelion East | Londiani, Kedowa/Kimugul, Chepseon, Tendeno/Sorget | 4 |
| Kipkelion West | Kunyak, Kamasian, Kipkelion, Chilchila | 4 |
| Bureti | Kisiara, Tebesonik, Cheboin, Chemosot, Litein, Cheplanget, Kapkatet | 7 |
| Soin/Sigowet | Sigowet, Kaplelartet, Soliat, Soin | 4 |
| Total | | 30 |



Map 33: County Administrative Units

10.4.3. Justice and Law Enforcement

The county government in liaison with the national government provides security, maintains peace and law enforcement through various institutions as described. *Map 34* shows the location of these facilities.

- i) **Judiciary:** Judiciary is mandated to deliver justice in line with the constitution and other laws. It is expected to resolve disputes in a just manner with a view to protecting the rights and liberties of all. Judiciary is organized in a hierarchy of courts which operates in two levels consisting of:
 - a) Superior Courts: Supreme Court, Court of Appeal, High Court, Employment and Labour Relations Court and a court to hear matters concerning the Environment, and the use of, occupation of and title to land.
 - b) Subordinate Courts: Magistrates' Courts, Kadhis Courts, Court Martial, and any other court or local Tribunal established by an Act of Parliament

Kericho County hosts a High Court, Employment and Labour court, Environment and Magistrates' Courts.

ii) **The National Police Service:**

- a) Kenya Police: The Kenya police is hierarchically structured through National Police Headquarters, The County Policing Authority, Police Divisions and Police stations. It is in charge of law enforcement.
- b) Administration Police: The administration police is commanded through a hierarchy separate from that of the Kenya Police through the Ministry of Interior and Coordination of National Government and coordinated by the County Commissioners. Administration police is mostly in charge of provision of security and maintaining peace.

Kenya Forestry Service and Kenya Wildlife Service: KFS and KWS are organized and coordinated through the Ministry of Environment and Natural Resources whose mandate is to manage and conserve wildlife and forests.

Kericho County host Kenya Forestry College in Londiani with Several stations around the Mau Forest complex. Kenya Wildlife Service has an office in Kericho which coordinates all the activities regarding wildlife conservation in the county.

- iii) **Kenya Prisons:** Kenya Prisons Service is a department in the Ministry of Interior and Coordination of National Government. It contributes to public safety and security by ensuring there is safe custody of all persons who are lawfully committed to prison facilities, as well as facilitating the rehabilitation of custodial sentenced offenders. Kericho County hosts one prison in Kericho town.

10.5. Culture, Sports and Recreation

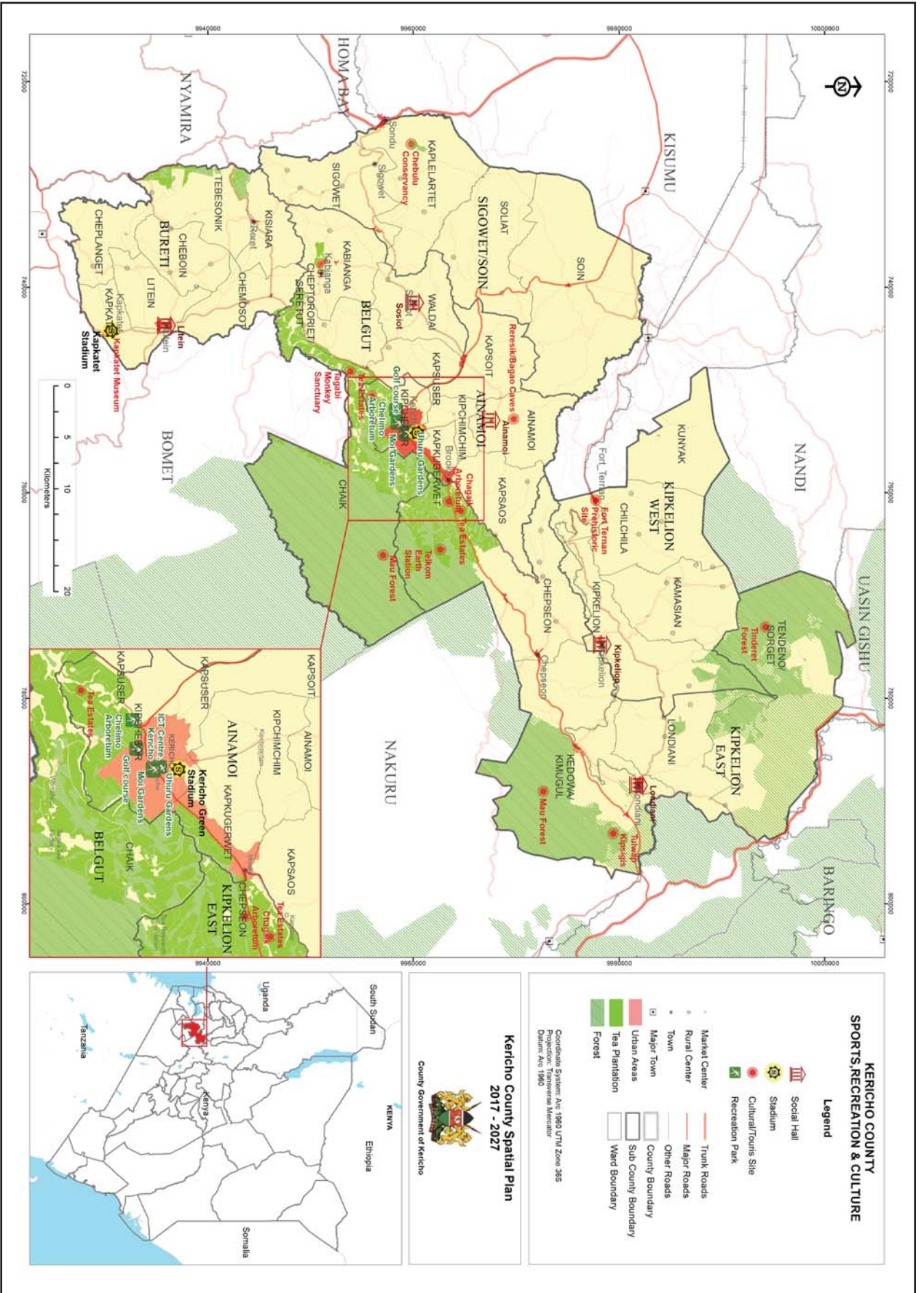
Kenya is well known internationally in sports, particularly in athletics. Sports in Kenya is played both professionally and as recreational physical activities. Kericho is home to Olympic winning long distance athletes and hosts Zoo Kericho FC which is competing in the Kenyan Soccer Premier League and Kericho Rugby Club competing in the Kenya Rugby Nationwide League.

Table 39 gives a general assessment various recreation facilities in the county.

Table 39: Assessment of recreation and sports facilities in the county.

| Facility | Type | Location | Remarks |
|--------------------------------------|--------------------------------|---|--|
| Kericho Green Stadium | Stadium | Kericho Town | Functional, under refurbishments |
| Kapkatet Stadium | Stadium | Kapkatet Town | Under construction and redevelopment |
| Other Stadiums | Reserved Space | Sigowet, Kipkelion, Londiani, Sosit | The spaces have been set aside but yet to be developed |
| Chelimo Arboretum | Recreation | Kericho Town | Functional, needs maintenance |
| Chagaik Arboretum | Recreation | Kericho Town | Functional, needs maintenance |
| Uhuru Gardens | Recreation | Kericho Town | Functional, needs maintenance |
| Other major urban centres Recreation | Recreation | Sigowet, Kipkelion, Londiani, Sosit, Litein, Kabianga, Kapkatet, Kapsoit, Kipsitet, Fort Ternan, Ainamoj, Chepseon, Kedowa, Roret | Recreation spaces not well defined |
| Kapkatet Museum | Community and Cultural Centres | Kapkatet | Functional, need enhancement |
| Social Halls and ICT Centre | Community and Cultural Centres | Londiani, Kipkelion, Kericho, Litein, Sosit, Kipsitet | Functional, Mostly administrative, requires reinvention. |

In other urban centres, sport facilities have not been developed and recreation spaces are non-existent though in some towns land is available for these facilities as shown in Map 35.





Chapter 11

Environment and Natural Resources



11.1. Environment

Mau forest which is considered Kenya's largest water catchment area lies in the county. The forest gives rise to major rivers which serve Kericho county and many other counties downstream in the Lake Victoria Basin. Climate change and environmental degradation caused by increased human activities pose a great threat to the water tower. This section provides a synopsis of environmental issues in the county.

11.2. Natural Environment

i) Climate Change

The major causes of climate change are known to be human driven with greenhouse gas emission being the greatest contributor. Climate change and climate variability impacts are evident in the county and have negative effects to the sustainability of county development. Increased incidences of heavy rains have a negative effect on county access roads increasing the costs of construction and maintenance. Increasing temperatures have made some areas known to be non-malarial zones to have malaria outbreaks. Shortened growing periods and increased dry spells due to erratic rains have become frequent posing challenges to agriculture and livestock development. High frequency of drought recurrence, frost bites, hailstorms and drying springs are some other challenges the county is facing due to climate change. Other challenges especially in highly degraded hilly areas are landslides and mudslides.

ii) Environmental Degradation

Environmental degradation in the county is caused by an increase in the number of tea and coffee factories, population pressure on available land including water catchment areas and hilltops, rural-urban migration, unplanned and uncontrolled settlements, ineffective enforcement of environmental policies and laws, inefficient solid waste management and lack of awareness on environmental issues.

The county has several degraded hilltops especially in the Nyando basin (covering Kipkelion East, Kipkelion West and Soin Sigowet sub-counties). The wetlands available in the county have problems of ownership and uncertainty thus causing encroachment and sub-segment destruction. Tionosoyiet wetland along Kericho town-Nyagacho road and Daraja-Sita wetland in Kapkatet are the most affected by car-washing activities. Kuje wetland in Chemamul area has been degraded by overgrazing and farming within the wetland. In many incidences, river banks are encroached by individual farmers to an extent of collapsing the banks.

Few industries - mainly tea factories - have incorporated environmental costs in their management practices with regards to pollution, emission control and waste management. Packaging materials used in industries e.g. polythene bags and plastics are unfriendly to environment. The recent ban of use of plastic carriers/bags by NEMA has eased the hitherto challenge of handling waste plastic paper especially in urban centres which was to blocking storm drains and breeding places for disease vectors.

Over reliance on wood fuel is one of the major contributors of environmental degradation which deplete the forest cover. 80% of residents in Kericho county rely on wood fuel for cooking while 14.4 % use charcoal. Tree-felling exposes the soil hence susceptible to soil erosion during the rainy season.

iii) Effects of Environmental Degradation

Environment degradation in the county has contributed to loss of biodiversity, floods - especially in towns and low lands - destruction of habitats along river basins, drying up of springs and poor harvest due to loss of soil fertility. It has also led to diminishing health and sanitation standards as a result of environmental pollution.

Shorter seasons both for March-April- May rain season and October-November-December rain season have been observed lately with very late onsets and early end to the season being a normal experience. Incidences of very heavy rainfall and long dry spells, during two rainfall seasons are also common with crop failures in Soim area being prevalent.

Water levels in rivers during droughts are very low due to longer dry spells and degradation in the rivers' catchments. In the hilly areas of Kipkelion, landslide and mudslide occurrences have also been on the rise with Leriswo and Barsiele being landslide risk areas. *Map 36* shows various environmental resources Kericho county.

11.3. Solid Waste management

Waste disposal is still a major challenge in most urban centres in Kericho county. Kericho town which is the largest town in the county is estimated to be generating 90 tonnes of garbage daily and Litein town on the other hand generates over 6.4 tonnes daily. The dumping site in Kericho town is due for relocation since it has been utilized fully and a contributing factor to the roadside waste disposal practices leading to environmental and public health concerns as well as blockage of drainage channels. Kapkatet dumpsite which also partly serves as a public cemetery need to be relocated to appropriate site owing environmental and public health concerns. The existing dumpsites which include Kericho, Sondu, Londiani and Litein need improvement.

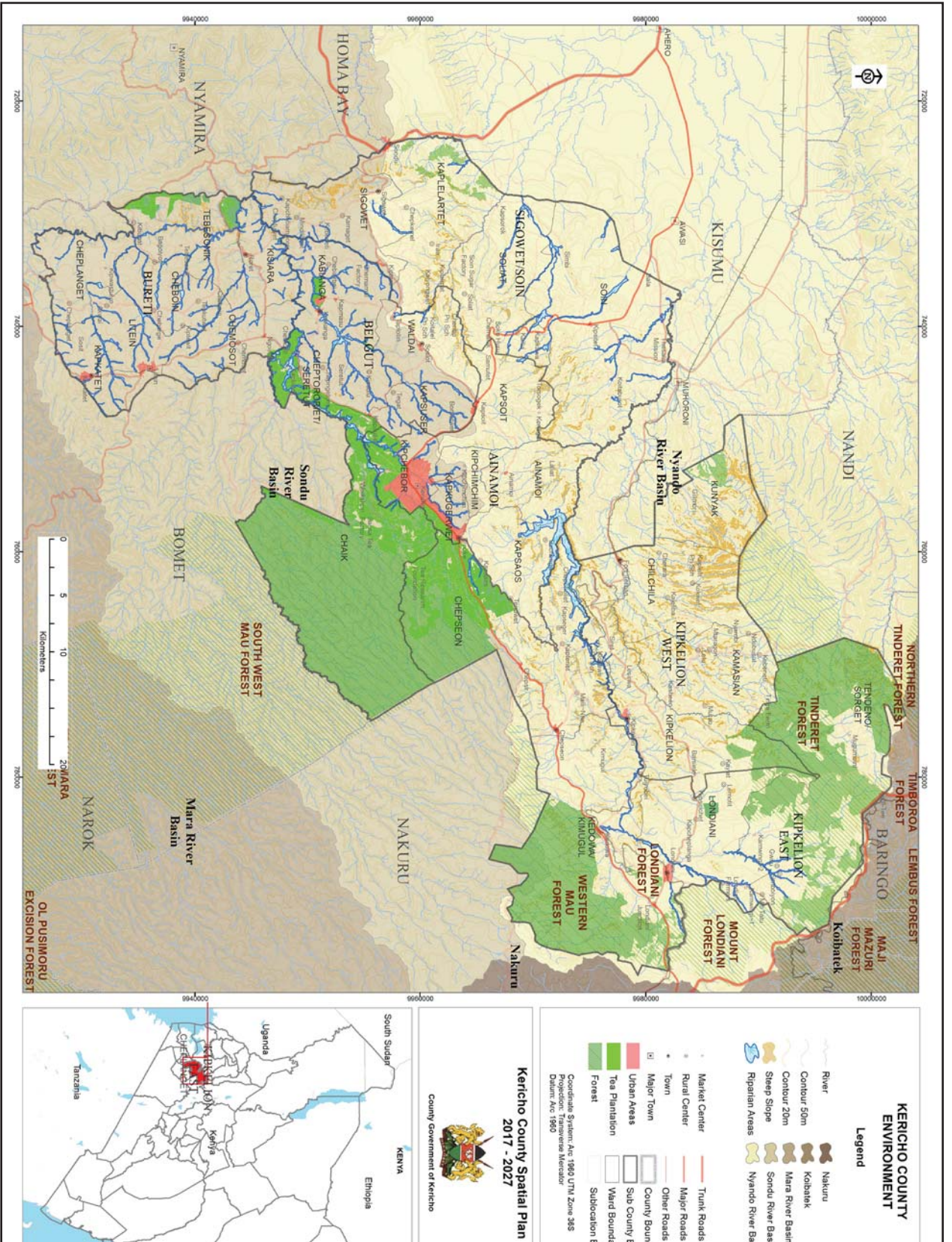
A study carried out by World Bank indicated that Kericho and Litein towns is projected to generate 3.4 Million and 0.17 Million tons of garbage in the next 30 years of which 1million and 0.5 million tons will have to be landfilled respectively as indicated in the *Table 40*. Suitable sites need to be identified and developed for landfilling wastes in these major urban centers.

Table 40: Waste Generation in Kericho and Litein Towns

| Final Disposal Methods | Percentage of Waste | Total Waste Generated (MT) | |
|---------------------------|---------------------|----------------------------|-------------|
| | | Kericho Town | Litein Town |
| Composting | 10 | 348,243 | 17,311 |
| Refuse Derived Fuel (RDF) | 30 | 104,4728 | 51,931 |
| Recyclables | 5 | 174,122 | 8,656 |
| Evaporation Loss | 25 | 870,607 | 43,276 |
| Sanitary landfill | 30 | 104,4728 | 51,931 |
| Total | 100 | 3,482,426 | 173,103 |

Source: Ministry of Lands, Housing and Physical Planning (MLHUD), 2016.

The county has been zoned into 14 garbage collection service zones where 10 zones have been outsourced and the remaining zones which cover mainly Kericho town's central business district (CBD) are served by the county using its own equipment and machinery. The towns also require adequate litter bins and land for the development of waste transfer stations or collection centres as well as law enforcement mechanisms to control indiscriminate solid waste. Close to 50-acre piece of land is required for the development of a new landfill facility. Kipsitet landfill site has been identified as the most suitable owing to the land requirement and environmental considerations.



Map 36: Environment

Part III

Synthesis





Synthesis of Problems and Development Opportunities

This chapter is an eye opener to key resource potential zones which offer strategic and significant development opportunities for the county. It presents a critical assessment of sectoral issues and offers development alternatives to address key needs of the people.



12.1. Introduction

Kericho county is encompassed with a pool of resources and assets that present a myriad of development opportunities. These aspects have been identified and analysed through the planning process and have gone a long way to inform strategic positions that are to be discussed. Assessment of the same is the key component of this chapter which will later frame the development aspirations of the county.

12.2. Planning Zones: Resource Potential Zones

The various resources, assets and opportunities that Kericho is endowed with are the backbone of the development for the county. Sustainable utilization of these aspects will result in balanced development and growth which is fundamental as prioritized in the Vision 2030 and NSP. These resources go beyond spatial features and include human resource, fiscal exchange among other dynamics. However, the CSP anticipates scenarios where the broad planning zones affect all other resource potential sectors across the spectrum due to linkages, cycles and relationships encompassed within typical society. The six major planning zones include; High Agricultural Potential Zone 1, High Agricultural Potential Zone 2, Medium Agricultural Potential Zone, Environmental Conservation areas, Urban Growth Areas and Industrial and Manufacturing Areas.

12.2.1. Agricultural Potential Zones

Agriculture is the main resource for the economy of Kericho county. It is potent across the County due to the richness of the county in light of the various geographic, soil and climatic characteristics. Various crops have high potential in different parts of the County and zones as shown in *Map 37*.

i) High Potential Zone 1

This zone covers the southern part of the county comprising the whole of Belgut and Bureti sub-counties and parts of Ainamoi and Soin/Sigowet sub-counties. The zone exhibits the following characteristics: nitisols, phaeozems and cambisols types of soils with pH of between 4.5 - 5.5 that favour tea and maize farming. The zone receives high rainfall distribution of annual mean between 1200mm and 1800mm. These characteristics also favour dairy and horticultural farming.

ii) High Potential Zone 2

This zone covers the northern part of the County comprising Kipkelion east and west sub-counties. The zone is characterised by nitisols, planosols, andosols and acrisols type of soils with pH of 5.5 - 7. Rainfall is moderate in this zone with annual mean between 800mm and 1200mm favouring cereal, coffee and potato farming. The conditions also favour rearing of dairy cows, sheep and presents an opportunity for horticulture.

iii) Medium Potential Zone

The zone covers the western side comprising of parts of Soin/Sigowet and Kipkelion west sub-counties. The area is characterised by cambisols, solonetz, luvisols and fluvisols types of soils mainly formed from sedimentation processes with soil pH of between 5.5 and 8.

Rainfall is relatively low registering an annual mean of 800mm - 1000mm compared to other parts of the county and therefore is a zone favouring marginal sugarcane growing and other drought resistant crops such as sweet potatoes, millet and free-range cattle keeping. Irrigation may be carried out as a potential agricultural prospect in the drier areas of Kapsorok and Kipsitet where the slope is favourable.

a) Crop Production Zones

i) Tea Zones

Tea is the main cash crop in the county grown both in large scale by the Multi-National Tea Companies and in small scale by the local farmers. Tea areas occupies approximately 20% of the county land available for human activities. The zone dominates the central, southern and south eastern parts of the County

ii) Coffee zones

Coffee is the second most important cash crop in the county after tea occupying about 2,893 Ha. It is grown in about 15 administrative wards but is well established in Kipkelion west sub-county which contributes 88.5% of the total area under coffee.

Table 41: County Coffee Statistics adopted from the Department of Agriculture

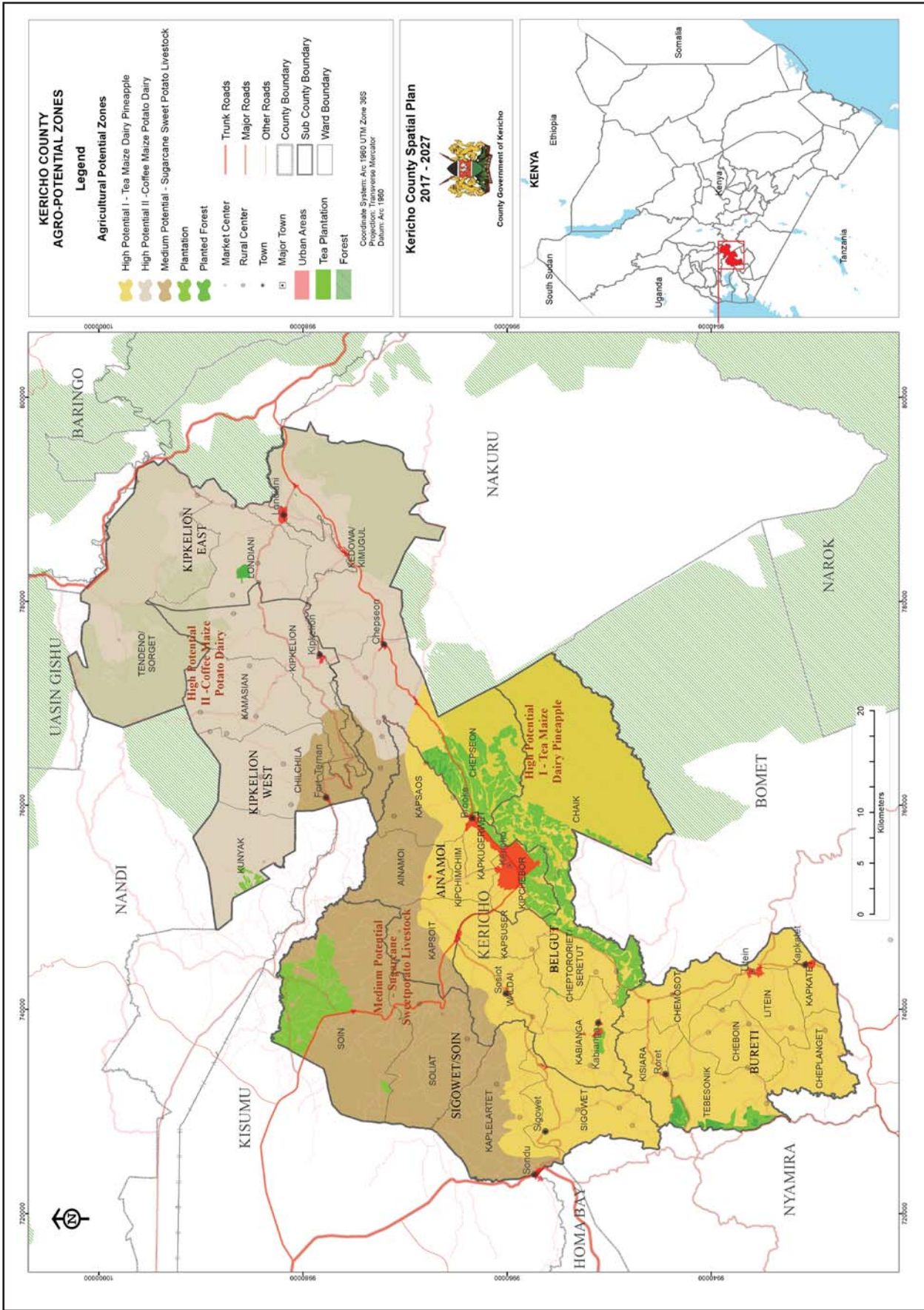
| Sub-county | Number of tress per variety | | | Area (Ha.) | Total Cherry Prod. (Kg.) | No. of Trees |
|----------------|-----------------------------|---------|---------------------|------------|--------------------------|--------------|
| | Ruiru | Batian | Indigeneous Variety | | | |
| Kipkeion West | 625,163 | 200,373 | 3,013,847 | 2,630.13 | 3,452,003 | 2,861,289 |
| Bureti | 189,574 | 28,405 | 24,840 | 109.53 | 297,396 | 263,114 |
| Ainamoi | 77,534 | 38,399 | 42,814 | 83.53 | 27,118 | 75,097 |
| Kipkelion East | 23,628 | 25,173 | 18,030 | 36.31 | 63,959 | 43,348 |
| Soin-Sigowet | 25,131 | 1,401 | 21,374 | 26.92 | 84,938 | 37,095 |
| Belgut | 11,175 | 2,313 | 1,814 | 7.05 | 8,548 | 8,491 |
| Total | 952,205 | 296,064 | 3,122,719 | 2,893.5 | 3,933,962 | 3,288,434 |

iii) Sugar cane zones

Sugarcane-growing in the county has been declining over time mainly due to low yields occasioned by poor quality seed cane, poor disease management and delayed harvesting. This has made farmers within the county to substitute the crop with other crops. Sugarcane belts are found in the lower parts of Soin/Sigowet sub-county and Kipkelion west grown both in large scale in the estates and small scale by small land holders. These zones need better management to ensure improved yields to farmers. The physiographic conditions are best.

iv) Mixed crops

The county is endowed with good physiographic conditions that favours cultivation of a variety of crops. Basically, small scale farmers in the county engage in intensive mixed crop farming. *Table 42* shows crop production during the two rainy seasons in 2016 experienced in the county among small scale farmers.



Map 37: Agricultural Potential Zones

Table 42: Crop Production in 2016 in Kericho County

| CROP | YEAR 2016 | | | YEAR 2016 | | | YEAR 2016 | |
|----------------|------------------|--------------------|----------------|------------------|--------------------|----------------|--------------------|----------------|
| | LONG RAINS | | | SHORT RAINS | | | TOTAL | |
| | Target Area (Ha) | Achieved Area (Ha) | Quantity (Ton) | Target Area (Ha) | Achieved Area (Ha) | Quantity (Ton) | Achieved Area (Ha) | Quantity (Ton) |
| Maize | 40,200 | 37,540 | 121,832.7 | 1,250 | 546 | 0 | 38,086 | 1,353,697 |
| Beans | 20,600 | 16,018 | 10,341.45 | 3,100 | 3,177 | 2,454.75 | 19,195 | 142,180 |
| Sorghum | 930 | 847 | 1,332.36 | 0 | 0 | 0 | 847 | 14,804 |
| Finger millet | 710 | 586 | 542.52 | 0 | 0 | 0 | 586 | 6,028 |
| Irish potatoes | 415 | 357 | 5,651.14 | 215 | 169 | 1381.93 | 526 | 63,937 |
| Sweet potatoes | 134 | 120 | 1,715.45 | 110 | 140 | 1,224.85 | 260 | 26,730 |
| Coffee | - | - | | - | - | - | 3,600 | 18,000 |
| Tea | - | - | | - | - | - | 21,020 | 210,200 |
| Sugarcane | - | - | | - | - | - | 7,343 | 220,290 |

b) Livestock Development Zones

i) Dairy Development zones

Dairy farming is well established in most parts within the county as an economic activity. Statistics from the county department of agriculture indicate that there were 270, 959 grade animals producing 180 million litres of milk annually. This implies, the average yield is 5 litres per cow against a potential yield of 15 litres under semi-intensive production system (Odoyo, 2015). The suitability analysis for dairy farming showed that 68 percent of county land is moderately suitable where natural factors form the basis for analysis. This means with better farming practices and adoption of modern technologies, the yield can be improved even further.

The zones that have potential for dairy development cut across most parts of the county with Belgut, Bureti and Kipkelion East sub-counties already having set the pace by being the dominant dairy zones in the County.

ii) Sheep, goat meat and beef production potential zones

Rearing of sheep, goats and cattle for beef in the county is traced back to the way of living of the Kipsigis people who are the majority settlers in Kericho county and were predominantly a pastoralist community. Currently exotic breeds are predominantly reared in Kipkelion East sub-county, whereas indigenous breeds are reared in Soin/Sigowet and lower parts of Ainamoi sub-county.

12.2.2. Environmental Conservation Areas

Environment and natural resources are valuable assets that must be sustainably utilized by the current and future generations. The natural resources include forests, surface and ground water, air, sunlight and minerals while the environment is the totality of the

surrounding including the physical features. The status of environment in the county is threatened by unsustainable land uses and drastic effects of climate change. Nonetheless, the environment and natural resources offer a wide range of benefits and opportunities for the county and national economic development. *Map 38* illustrates environmental assets Kericho county has. These resources ought to be protected and conserved to ensure sustainable utilisation. Proper management mechanisms should be deployed on the critical environmental areas.

i) Natural and Planted Forests

The county is endowed with natural and planted forests. Some forests adopt agro-forestry development systems as well as restricted systems. The restricted forests depict more indigenous character and are hence protected from any exploitation. These resources have mostly been zoned out and gazetted. However, the initiatives to restore the forests seem to be ineffective calling for better structures to be put in place for enhanced conservation.

ii) Water Towers

The Mau Forest Complex entailing a number of forests is a critical resource impacting the entire Lake Basin Region. The water tower impacts an entire ecosystem that is the backbone of sustainable development. This ecosystem in turn inspires a myriad of environmental and economic possibilities that may be harnessed.

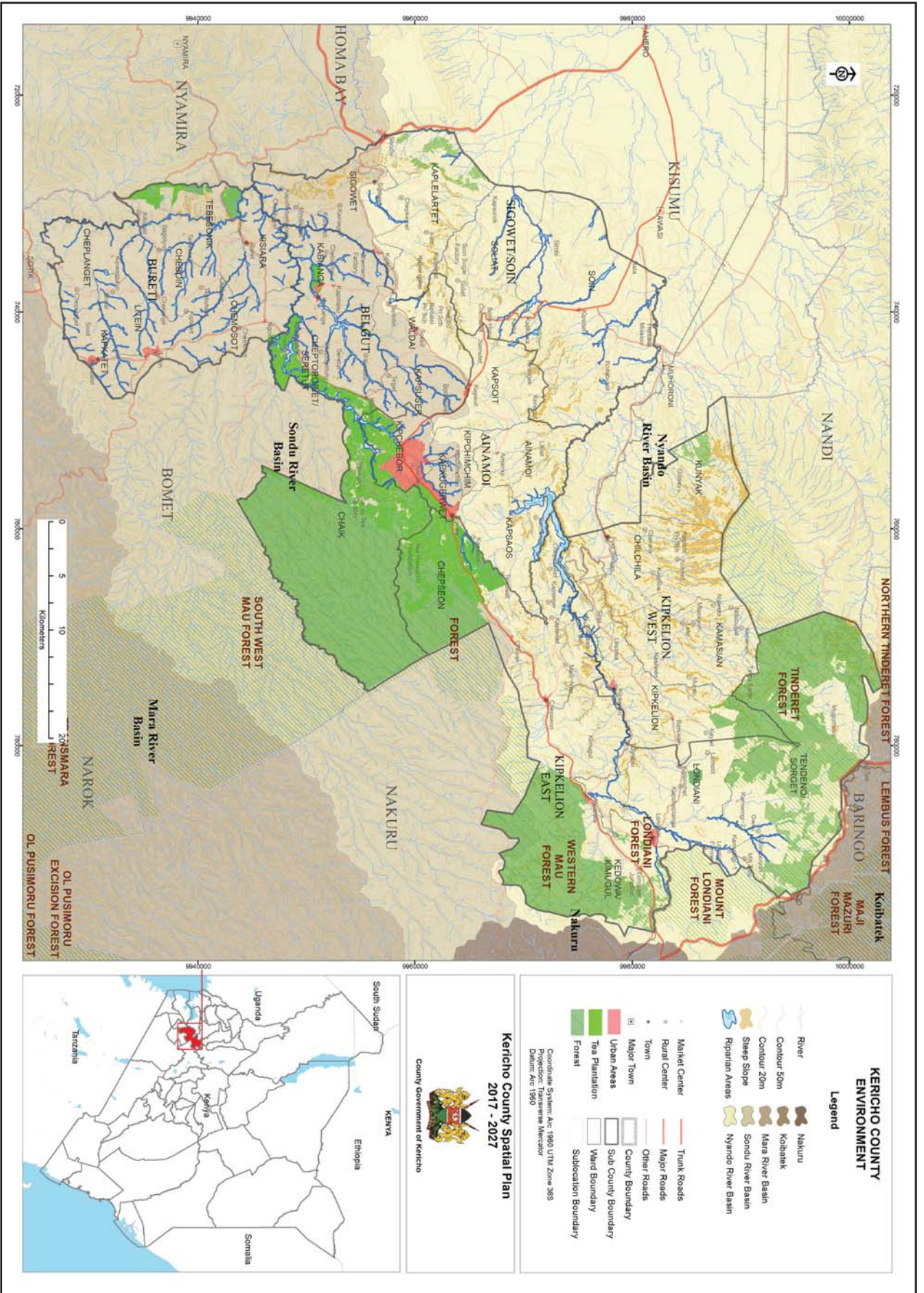
iii) Riparian Corridors and Drainage Basins

These are key resource belts that affect development not only at the source but also along the courses. The Sondu and Nyando drainage basins has several rivers that run through from the Mau water towers to the Lake Victoria. The rivers have experienced substantial water reduction while some of the tributaries have dried up all together due to poor management efforts. The Nyando river basin is the most affected including Kipchorian river amongst others. Farming activities along the riparian corridors largely accounts to the negative impacts being experienced. This calls for zoning out such environmentally sensitive areas and employing serious conservation measures specifically for riparian areas to rejuvenate and conserve them.

The riparian area recommended for conservation of most rivers is about 30m from the highest watermark. However, this is subject to review when planning these ESAs depending with the use of the abutting area, i.e. urban or rural land uses. The riparian belts in urban areas can be scaled between 2m - 30m as deemed relevant and on a case by case basis.

iv) Steep Areas

These are areas with a slope of 25% and above. These areas are not within developable limits. However, conservation should be done in such areas to ensure protection of soils and its functions within the ecosystem. Such areas within the county include: Kuniyak and several parts of Kipkelion, Chebulu and several parts of Sigowet areas as well as some areas within the Western Mau forest.



12.2.3. Urban Growth Areas

Development opportunities pose potential for growth of urban areas as demand for services and other urban goods increase. However, in most cases this growth is unanticipated resulting in urban sprawl which counters positive urban development. This section discusses growth scenarios anticipated within various urban contexts in the County. *Map 39* illustrates potential urban growth areas in the County.

i) Intra-Connective Urban Growth

Urbanization in the county is advancing gradually due to devolution effects being realized country wide. The pattern of urban growth occurs on axial basis, i.e., along major transit routes as illustrated in *Figure 26*.

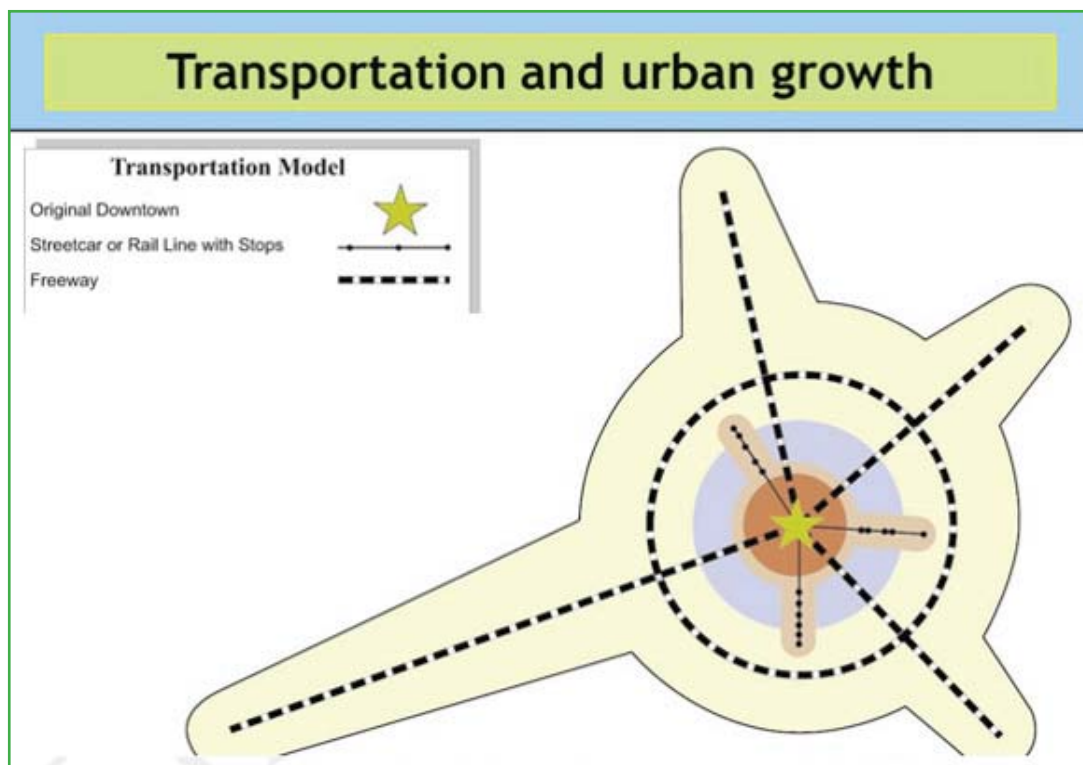
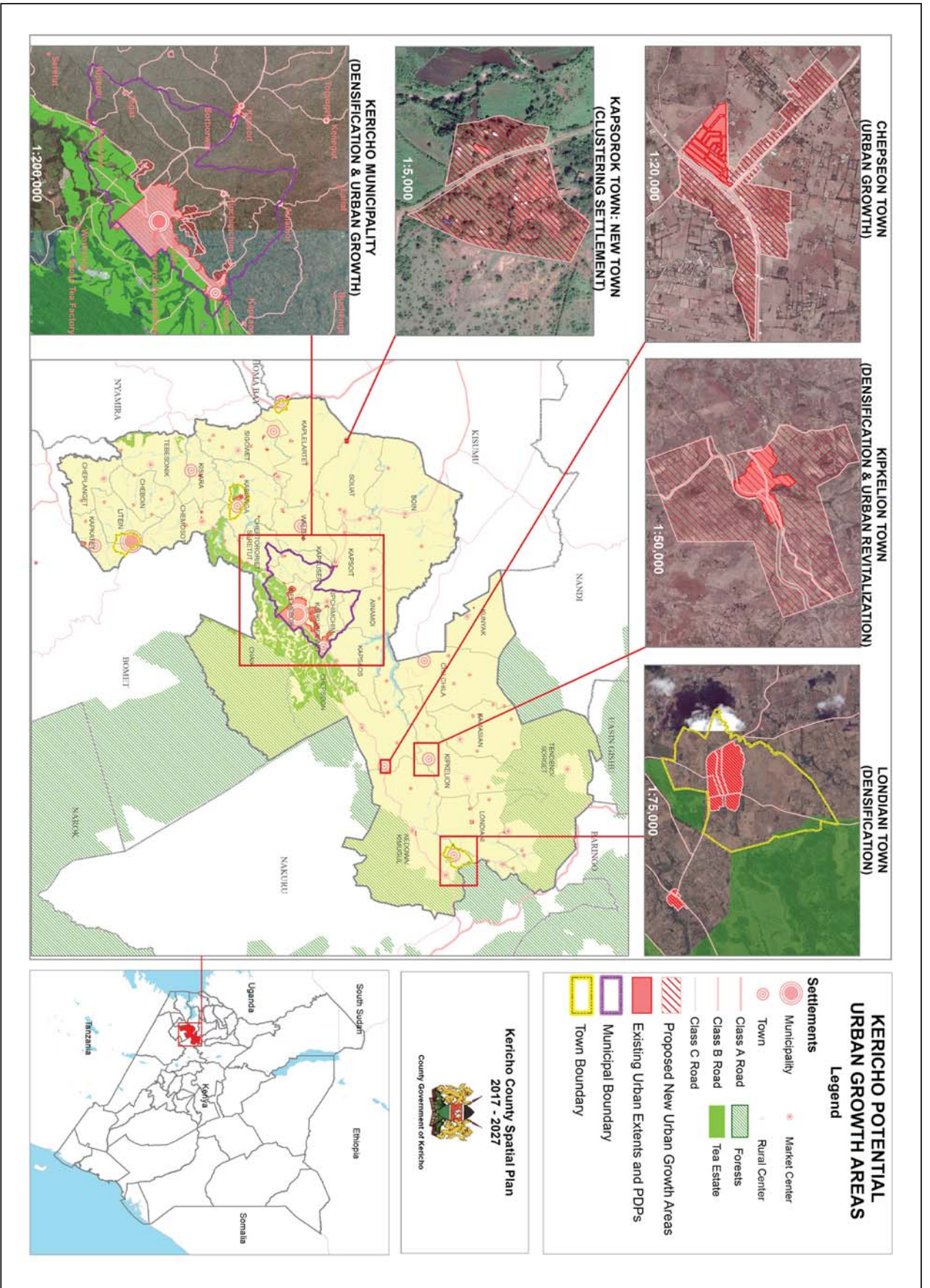


Figure 26: Axial Development Illustration

The Kericho-Brooke-Kipchimchim-Ainamoi-Kapsoit-Kapsuser belt has been zoned out as the Kericho Municipality. This zone is experiencing growth in urban development due to strong inter-dependent forces between economic and residential functions. Litein has also been granted charter for the status of municipality due to the increased population and consequent need for spill over of urban services and utilities.

The major axial routes within the county have spurred and shaped development to a great extent especially settlements. Assessment on human settlements denotes that growth of most service centres, urban and rural, have been significantly impacted by transit corridors. Linear and junction towns are the most common across the county. Further, the anticipated SGR line is bound to influence growth of the service centres where transit stations will be located.



Map 39: Potential Urban Growth Areas

ii) Other Potential Growth Areas and Proposed Extents

Most of the major urban centres exhibiting distinct and dominant characteristics are flourishing economically hence a gradual but notable growth of the urban extents. Kipkelion is anticipated to undergo gradual economic revival due to the potential it holds with regards to the local economic and infrastructural resources. Kapsorok is also a major potential urban centre along the Sondu-Kipsitet route. It holds central significance to the Soin-Sigowet zone. Further, for the sake of balanced development, Kapsorok area needs a central service town that can cater to needs of the people around. This will reduce marginalization and pull the people closer with an intent to open up opportunities for locals. Further, it will enhance capitalization on the linkages which Kapsorok has with other major towns through transit corridors. The same applies to Mtaragon, a proposed growth node for balancing development in the northern part of Kipkelion West sub-county. Sondu is also expected to be a key growth area due to the proposed SGR terminus and consequent operations.

12.2.4. Manufacturing, Processing and Other Industrial Zones

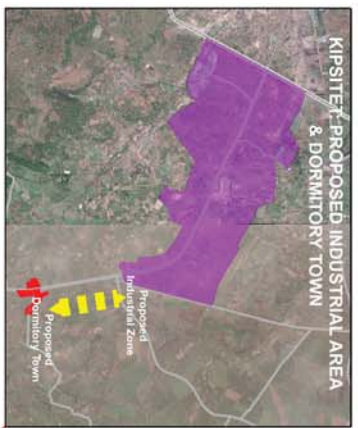
The National Spatial Plan envisions Kericho as a food basket in the national context while the Vision 2030 looks at development from an industrialization point of view. Kericho envisions itself to solidify its economic prowess through industrialization across the board. Consequently, industrialization enables ripple effects in other socio-economic sectors including creation of employment and improved service provision. Map 44 indicates potential industrial development areas.

i) Agro-based Industrial Agglomeration

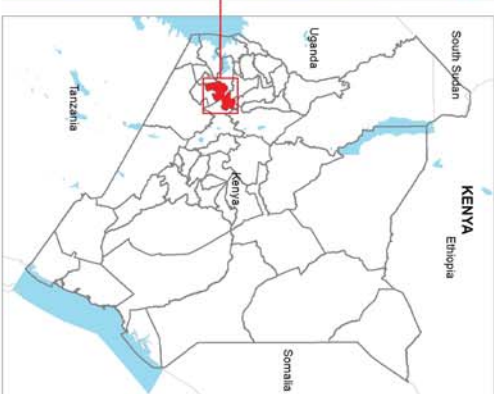
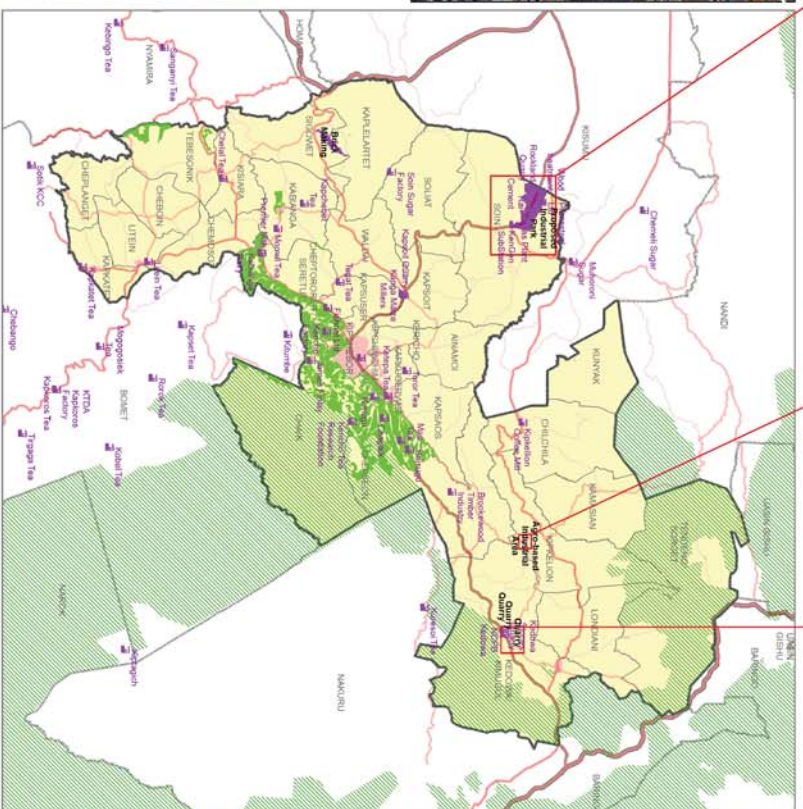
Value addition and marketing is a major economic gap that is amiss. Production is consistent for most agricultural produce. However, establishing reliable markets for the produce has proved a major challenge and consequently the processing of such produce is left only to a few enabled investors including parastatals and private companies within the greater region. Establishing and zoning out agro-based light and medium industries and agglomerating them, i.e., abutting terminuses will be a key incentive towards improved production. Also, costs of production will be lower and localized hence circulation of profits realized within the county. Kipkelion town has the potential for optimal location of such agro-based industries considering its centrality within the food basket areas. Roret town is also an optimal location for medium industries including horticultural, dairy and cash crop.

ii) Manufacturing Industrial Zone

Most of the heavy industrial establishments at Kipsitet area entail steel, cement and power generation industries. The national and county governments have planned to further expand this area into an industrial park to incentivise processing and manufacturing. About 30 companies have already expressed interest in locating of their establishment in this area and the belt anticipates more. Zoning out of the area is key for environmental reasons as well as to plan for settlements and service provision.



- 8000ha coverage of the Industrial Park
 - Manufacturing Activities: Electronics, Biomedicine, Engineering
 - Plots are awarded to investors on Leasehold (99years).
 - Park entails Residential area complete with community amenities
- PROPOSED INDUSTRIAL ZONE IN KIPSITIT**
- 1000ha coverage within the Industrial Park
 - Manufacturing Activities: Cement, Steel, Wood Treatment Industries, Thermal Power Plant
 - Park abuts critical Transit Infrastructure B1 road



**Kericho County Spatial Plan
2017 - 2027**

County Government of Kericho

**KERICHO COUNTY
PROPOSED INDUSTRIAL BELTS**

Legend

- Industries
- Roads
- Urban Extents
- Forests
- County Boundary
- Industrial Zones
- Tea Estates

Map 40: Proposed Industrial Belts

iii) Other Industrial Estates

Pockets of industrial establishments within urban and rural set-ups are evident. Location of industrial establishments along key link roads and rail infrastructure is critical to ease transportation of raw materials and finished products. The Kenya Industrial Estates (KIE), as well as Small-Medium Industries (SMIs) have so far been allocated land in Kericho town abutting the commercial development area, as well as in Litein town. Activities may range from partial processing and packaging for value addition among light industries to complete and intensify processing activities for particular produce.

iv) Geological Resource Belts

Quarries and extensive construction burrow pits are critical resources of economic and infrastructural significance respectively. The quarries and pits should be zoned out and subjected to development control measures as well as conservation to mitigate negative health and environmental impacts. This applies to sand pits and brick-making areas as well based in Kedowa, Roret areas.

12.3. Framing Sectoral Needs and Interpretation

This section outlines general assessment drawn from the aforementioned resources and assets within the County. It also establishes a framework to exploit opportunities and manage constraints to enhance development.

12.4. Land Suitability Assessment for Agriculture

Land suitability analysis for agriculture was done to optimize agricultural production within the county. This was done for various crops grown in the county in order to optimize agricultural production. Emphasis was put on food crops in line with what the stakeholders of the county envisioned, that is, to be a food secure county by the year 2027. The same was also done for livestock and fisheries. The suitability analysis yielded results of different qualities of land that were classified as most suitable, moderately suitable, marginally suitable, least suitable and restricted areas.

The county covers 2,569km² of land. The land cover was broadly classified as: agricultural land (small scale and large-scale agriculture), forest cover (natural and planted), built-up areas (urban centres), wetlands, and physical infrastructure (roads and rail line). Analysis was done on the agricultural land with the rest of the cover being categorized as restricted land use.

The total suitable land was at 67 percent while 33 percent was restricted for any agricultural activity due to its current use. Agricultural land was categorized as suitable whereas urban footprints, gazetted forests, large scale tea, coffee plantations, sugarcane plantations, wetlands and all land under physical infrastructure as restricted. *Table 43: Suitability assessment for various crops and livestock in the County below shows suitability assessment for various crops and livestock.*

Table 43: Suitability assessment for various crops and livestock in the County

| Crop/Livestock | Percentage Suitable Area | | | |
|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|
| | Most Suitable (%) | Moderately Suitable (%) | Marginal-ly Suitable (%) | Total Area Suitable (%) |
| Industrial Crops | | | | |
| Tea | 23 | 21 | 23 | 67 |
| Coffee | 16 | 33 | 18 | 67 |
| Sugarcane | 15 | 50 | 2 | 67 |
| Pyrethrum | - | - | - | - |
| Food Crops | | | | |
| Maize | 10 | 53 | 4 | 67 |
| Irish Potato | 10 | 53 | 4 | 67 |
| Sweet Potato | 31 | 36 | - | 67 |
| Sorghum | 6 | 59 | 2 | 67 |
| Pineapples | 25 | 38 | 4 | 67 |
| Bananas | 22 | 43 | 2 | 67 |
| Wheat | 1 | 39 | 27 | |
| Livestock | | | | |
| Dairy Cattle | 17 | 47 | 3 | 67 |
| Sheep & Goats | 11 | 49 | 7 | 67 |
| Poultry | 10 | 52 | 5 | 67 |
| Dual Purpose Cattle | 24 | 40 | 3 | 67 |

12.5. Human Settlements Assessment

Current trends in human settlement both in the rural and urban contexts, occur in linear pattern for most centres in Kericho county. This is mainly along transit routes linking service centres. Nucleated settlements are common in junction /market set ups. Further, most of the settlements exhibit paucity of services and utilities that should otherwise be provided as stipulated within the Urban Areas and Cities Act 2011. To address this phenomenon, establishing a rank/hierarchy of these settlements with regards to population is key. The hierarchy in turn informs the levels of services required in each category of settlement. *Table 44* and *Table 45* below highlights the current and expected hierarchy of settlements in the county respectively.

Table 44: Current Service Centres; Source: GeoMaestro 2017

| County | Municipality | Towns | Market Centres | Rural Centres | |
|---------|--------------|-------------|-------------------|------------------|----------------|
| Kericho | Kericho | Sondu | Barsiele | Tegat | Kipsirichet |
| | Litein | Kipkelion | Kipchimchim | Cheborge | Kokwet |
| | | Kabianga | Kedowa | Torsogek | Chebirbei |
| | | Sosiot | Kapmasu | Simbi | Chepkemel |
| | | Sigowet | Kiptere | Iraa | Kiplalmat |
| | | Chepseon | Roret | Kalyongwet | Lelu |
| | | Londiani | Gilimori | Soliat | Mtaragon |
| | | Kapkatet | Hill-Tee | Maili~Nne | Kebeneti |
| | | Brooke | Kamwingi~1 | Tuiyobei | Seretut |
| | | Fort-Ternan | Kamwingi~2 | Cheptuiyet | Sosit |
| | | | Kebeneti | Mindililwet | Chemoiwa |
| | | | Chepsir | Kapsaos | Cheboin |
| | | | Soko-Huru | Tendwet | Cheplanget |
| | | | Kapsorok | Buchenge | Kipsolu |
| | | | Kenegut | Kapseger | Kimugul |
| | | | Kasheen | Kaptenet | Tepkutwet |
| | | | Mugumoini | Jagoror | Kaylet |
| | | | Tebesonik | Akwai | Kajeliba |
| | | | Chemosit | Kapcheplanga | Cherara |
| | | | Ngoina | Lemotit | Kapkelek |
| | | | Kipsitet | Gwitu | Chepngetuny |
| | | | Londiani-junction | Sachang'wan | Taplotin |
| | | | Kipwastuiyo | Simboiyon | Kapchebangoror |
| | | | Ainamoi | Miti Tatu | Kaitui |
| | | | | Chepcholiet | Kamaget |
| | | | | Kiptewit | Murao |
| | | | | Bagoiyot | Ndubusat |
| | | | | Kibugat | Nyairobi |
| | | | | Londiani-Farmers | |

Table 45: Projected hierarchy of settlements, 2027

| County | Municipality | Towns | Market Centres | Rural Centres | |
|----------|--------------|---------|---------------------|------------------|----------------|
| Kericho | Kericho | Sondu | Barsiele | Tegat | Kipsirichet |
| | | Litein | Kipkelion | Kipchimchim | Cheborge |
| | Kabianga | | Kedowa | Torsogek | Chebirbei |
| | Sosiot | | Kapmasu | Simbi | Chepkemel |
| | Sigowet | | Kiptere | Iraa | Kiplalmat |
| | Chepseon | | Gilimori | Kalyongwet | Lelu |
| | Londiani | | Hill-Tee | Soliat | Kebeneti |
| | Kapkatet | | Kamwingi~1 | Maili~Nne | Seretut |
| | Brooke | | Kamwingi~2 | Tuiyobei | Sosit |
| | Fort-Ternan | | Kebeneti | Cheptuiyet | Chemoiwa |
| | Roret | | Chepsir | Mindililwet | Cheboin |
| | Ainamoi | | Soko-Huru | Kapsaos | Cheplanget |
| | Kapsorok | | Kenegut | Tendwet | Kipsolu |
| | Mtaragon | | Kasheen | Buchenge | Kimugul |
| | Kipisitet | | Mugumoini | Kapseger | Tepkutwet |
| | | | Tebesonik | Kaptenet | Kaylet |
| | | | Chemosit | Jagoror | Kajeliba |
| | | | Ngoina | Akwai | Cherara |
| | | | Londiani - junction | Kapcheplanga | Kapkelek |
| | | | | Lemotit | Chepngetuny |
| | | | Kipwastuiyo | Gwitu | Taplotin |
| | | | | Sachang'wan | Kapchebangoror |
| | | | | Simboiyon | Kaitui |
| | | | | Miti Tatu | Kamaget |
| | | | | Londiani-Farmers | Murao |
| | | | | Chepcholiet | Ndubusat |
| | Kiptewit | Nyarobi | | | |
| Bagoiyot | | | | | |
| Kibugat | | | | | |

Population is key in informing service provision within settlements. A population census is expected in the year 2019 and this will be helpful in determining accurate population data for such settlements. *Table 46* is an illustration of population considerations entailed in classifying settlements. Kericho and Litein are classified as municipalities owing to the population of over 100,000 whereas Kipkelion and Londiani are classified as towns.

Table 46: Urban Population Projections for Classification of Urban Areas in the County:

| Urban Area | Urban Population (Urban & Peri-Urban) | | |
|------------|---------------------------------------|---------|---------|
| | 2009 | 2017 | 2027 |
| Kericho | 101,808 | 150,700 | 223,072 |
| Litein | 78,622 | 116,379 | 172,269 |
| Kipkelion | 46,760 | 69,216 | 102,456 |
| Londiani | 43,152 | 68,875 | 101,951 |

12.6. Economic Development Assessments

The main economic mainstay of the county is agriculture related activities contributing about 60% of the county's GDP. This sector is dominated by the main cash crops and food crops including tea, coffee, sugarcane, maize and dairy produce. The economic gains are both direct and indirect in relation to profits and employment factors respectively realized throughout the value chains.

With regards to employment, the formal sector is mainly anchored in Kericho town which acts as both the county headquarters and the main commercial hub. With the benefits of agglomeration, Kericho town edges out the other towns within the county to place itself in competition with other regional towns such as Kisii, Narok and Kakamega. The formal sector is dominated by banking and financial businesses, retail shops, distributors, shopping malls, entertainment spots, restaurants and light industrial activities. Litein is fast developing as a major commercial hub as well as Sondu, Chepseon, Londiani, Kapkatet among others.

In the informal sector, 70% of informal employment is in the rural areas which supports most of the self-employed persons and those farming (CEAP, 2015) Within the urban areas, welding, garages, carpentry and metal works form the largest share of the informal industries. All these is what is mostly regarded to as the jua kali sector which provides an alternative form of employment. This sector is not fully developed as it is still done in small scale.

Mining and quarrying sector is picking up gradually as an economic activity within the county. Kericho county has a high potential of natural stones especially in Kedowa. Sand and murram harvesting is predominant in Ainamoi, Belgut and Bureti. There is also potential of bauxite mineral in Ainamoi location, a mineral used in the manufacturing of cement. (CGK, 2013).

The tourism sector has not been fully exploited but the county is working on reviving activities and rehabilitating around 10 tourist attraction sites including Fort Ternan museum, Tagabi Monkey Sanctuary, Chebulu conservancy, Tulwap Kipsigis, Chagaik arboretum, and Kapkatet Museum. Agro-tourism is a potential for the county as it prides itself as an agricultural county. Other opportunities exist for the economic sector within the county including:

- Strategic location of Kericho county in relation to major markets in its regional context, that is, Nakuru and Kisumu
- Existing retail markets and proposed agricultural produce markets within service centres
- Proposed Standard Gauge Railway with a terminus at Sondu which opens up the county to regional markets
- Prospects to establish value-addition industries
- Availability of raw materials to boost and formalize the mining & quarrying industry

12.7. Urbanization and Urban Land requirement Assessment

Globally, the world is gradually urbanizing. Consequently, it is projected that by 2050, 50% of the world shall have urbanized fully. In Kenya, the average growth rate of urban areas cumulatively is at about 3.3%. The previous population census conducted in 2009 shows that the Kenya urban population accounted for 31.3 % of Kenya’s population. Contextually, the urban population of Kericho County constitutes about 285,789 persons, which is 38% of its populace (KNOEMA, 2009).

The main factors that spur urbanization are socio-economic activities, political factors as well as infrastructural development. Urban growth may occur as new towns as well as through urban sprawl in existing urban centres. In both cases urban land demand should be determined in order to enhance development control. This is fundamental for purposes of protecting the much resourceful peripheral land where rural development activities take place.

Most of the towns in Kericho county have local physical development plans to guide development. However, from the existing situation and development trend analysis, some towns have outgrown the planned urban extents and hence need review. The urban growth has to be streamlined together with anticipated growth in order to achieve an objective review of the existing PDPs. Ultimately, the PDPs will be instrumental in controlling urban growth and informing the relevant infrastructure to expand or establish in tandem with needs. *Table 47* shows case by case urban land demand scenarios for major urban centres.

Table 47: Urban Land Demand Assessment

| Urban Centres | Existing Land (Ha) 2017 | Projected Land Demand Deficit (Ha) | Total Land Projections (Ha) 2027 | Total Land Allocated (Structure Plan) |
|---------------|-------------------------|------------------------------------|----------------------------------|---------------------------------------|
| Kericho | 1961 | 301 | 2262 | 2262 |
| Sondu | 90.8 | 13.94 | 104.74 | 111.6 |
| Litein | 114 | 17.5 | 131.5 | 133 |
| Londiani | 125.8 | Nil | 125.8 | 125.8 |
| Kipkelion | 49.8 | Nil | 49.8 | 49.8 |
| Roret | 17 | 2.61 | 19.61 | 19.6 |
| Kapkatet | 75 | 11.5 | 86.5 | 107 |
| Sosiot | 25.4 | 3.9 | 29.3 | 29.3 |
| Kabianga | 84 | 12.9 | 96.9 | 98.2 |
| Kapsoit | 50.1 | 7.7 | 57.8 | 57.8 |
| Kipsitet | 13.72 | 2.11 | 15.83 | 17.6 |
| Kipchimchim | 11.6 | 1.8 | 13.4 | 13.4 |
| Chepseon | 13 | 2.0 | 15 | 15 |
| Kapsorok | 15.78 | 2.42 | 18.20 | 18.2 |
| TOTAL | 2,647 | 379.38 | 3,026.38 | 3,026.38 |

12.8. Assessment of Functionality of Rural Areas

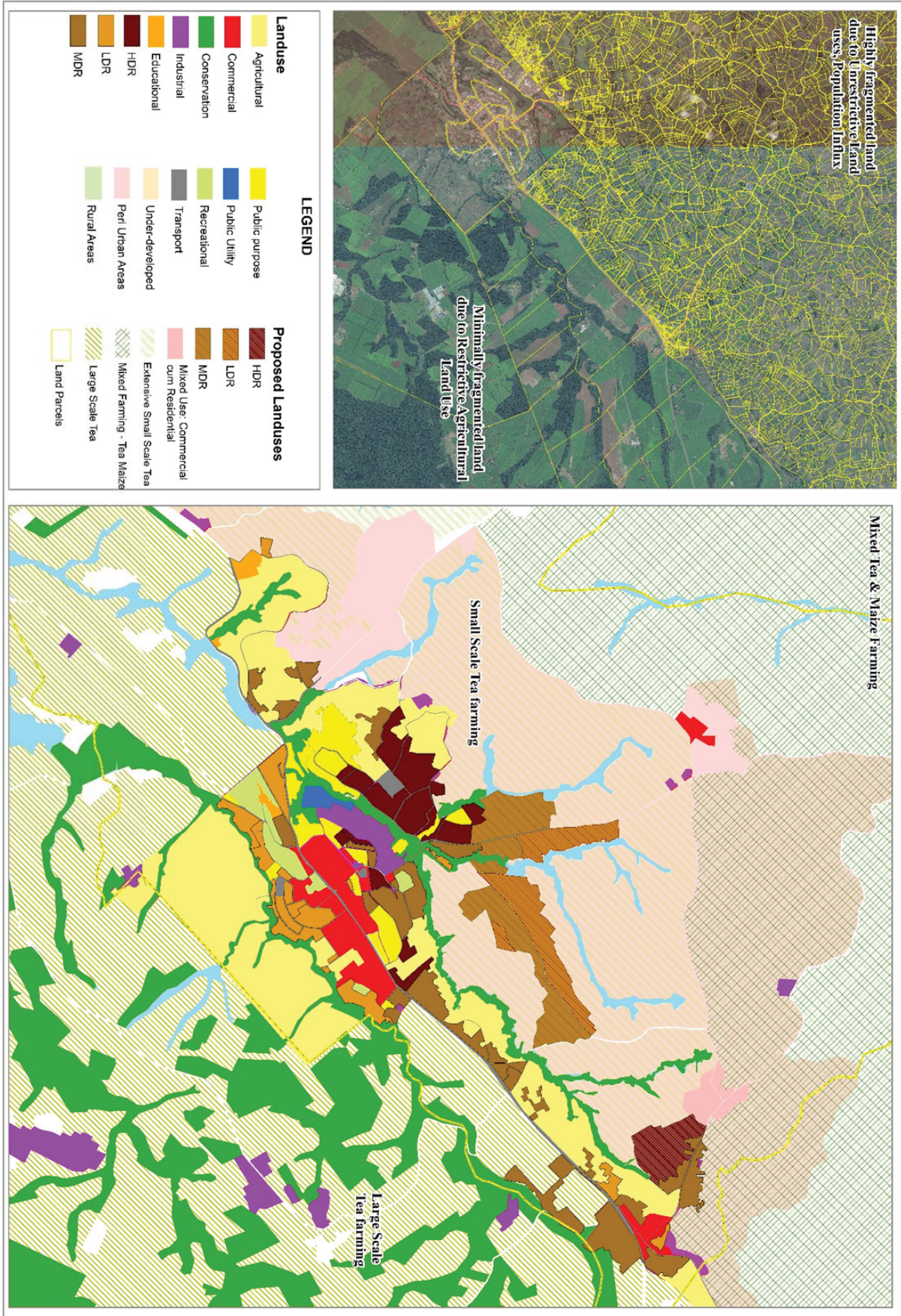
The rural scape encompasses agriculture, forestry, wetlands and related economic activities that may entail pond - fishing, lumbering and commercial farming. Agriculture alone accounts for 60% of the land cover in the county. This statistic coupled with that of urbanized areas covering about 15%, goes to show that most of these agricultural activities are carried out within rural areas. The rural landscape therefore comes out as predominantly conservation and agriculture based along with the economic ripple effects generated by these key aspects.

12.9. Housing Demand Assessment

Housing within the rural scope caters for the needs of most people. Clustering settlements is encouraged within both the urban and rural areas in terms nucleation and densification respectively. Agglomeration enables optimal utilization of shared infrastructure for economic and social purposes. The major urban centres experiencing rapid urban growth consequently need more housing supply in tandem with growth needs. This entails the municipalities, towns and market centres. This may require efforts such as those enlisted below to not only improve housing supply but enhance development control in the process.

- Establishing home ownership schemes
- Development control
- Establishing land bank for public housing
- Encouraging settlement patterns that minimize cost of providing infrastructure and other services
- Clustering Settlements

KERICHO MUNICIPALITY URBAN DEVELOPMENT



Map 41: Land Demand and Proposed Land Use Allocation for Kericho Town

12.10. Transport Demand Assessment

i) Road Transit

The road network consists of four major types of grading with regards to the surface material being, earth, gravel, surface dressing and pre-mix road surfaces. The unpaved roads entail the Earthen and Gravel roads while the paved roads entail surface dressing and pre-mix surface roads. The earthen roads encompass a total coverage of 2,370 km, gravel roads 497 km, surface dressing-based roads and pre-mix surface-based roads having 450km. This shows that most roads in Kericho county need revamping of the surface in order to ease transit especially during rainy seasons considering the county experiences relatively hefty amounts of rainfall most times of the year owing its suitability for agriculture.

Balanced development is a key concern that the CSP intends to address. In a bid to enhance access to services especially in the marginalized areas of Soin/Sigowet and Kipkelion, key link roads to strategic towns should be opened up through upgrading to bitumen standard. This includes the Sondu-Kapsorok-Kipsitet and Kipkelion-Mtaragon-Hill Tee roads. Further Kipkelion area around Kunyak and Chilchila are highly inaccessible due to poor road condition worsened by the terrain. The roads should be upgraded to gravel condition and bridges erected to enhance accessibility.

Most of the towns lack designated and well-planned bus terminuses which riddles the transport sector with challenges such as congestion. The main urban centres including Kericho and Litein should further incorporate local and regional terminal facilities.

Kipsitet is metamorphosing into an industrial town and the menace of truck parking along the service lanes may persist. Consequently, parking facilities for these trucks should be planned for to organize circulation in the town.

ii) Railway Transit

The existing railway transport within the county is defunct. However, the CSP proposes operationalization of the utilities to revive rail transit. This will enhance flow of goods and services in the regions including Kericho, Nakuru, Kisumu, Eldoret. Further tourism potential from the historical perspective (Lumbwa in Kipkelion and Fort Ternan archaeological site) can be harnessed through passenger travel via the railway line to these stations. The SGR line and proposed terminus at Sondu will open up the county to development opportunities on a regional context.

iii) Air Transit

The challenge in Kericho county is lack of commercialized air transit considering the county is laced with a myriad of economic activities and potentials that could elevate the local GDP. The proposed tourism activities and industrial development will lead to an expanded market demand regionally for various products. Commercialization of the Kerenga airstrip, will therefore strategically enhance economic and social linkage of the county on regional and international scopes considering the contribution of resources and produce of Kericho county to the national GDP.

12.11. Water Sector Assessment

Agriculture being the main economic activity in the county consumes water in larger capacities. However, most of the crops are rain fed hence demand for water in this sector is proposed for areas earmarked for irrigation. Further, expansion of water reticulation networks especially within the urban areas due to increased demand for domestic and industrial uses should be prioritized for purposes of improved sanitation and public health. Most of the social amenities including health facilities and schools are equipped with water storage facilities although supply of water is inconsistent. The National Government has initiated three major water projects in line with the Vision 2030 outlined in the National Water Masterplan. These are Itare, Koru and Londiani (Masaita) dams which are intended to draw water from the Lake Victoria Catchment Area (LVSCA) basin to the Rift Valley Catchment Area (RVCA) basin through interwater basin transfer facilities as well as providing water for various uses in Kericho. The CSP proposes channelling of this water back to Kericho to cater for the aforementioned domestic and industrial uses.

KEWASCO, through the Ministry of Environment and Sanitation has established a sewage treatment plant near the industrial area of Kericho town. The treatment ponds are functional and the treated effluence is drained into River Tionosoyiet. However, the facility is underutilized. CSP proposes expansion of Kericho sewer system to cater for increased urban population as well as establishment of sewer facilities in other major towns across the county.

i) Water Sources Assessment

The topography of the county and the many sources of water makes it easy to develop gravity schemes that can cover the whole county. Earth dams and water pans are a source though not common. On the lower parts especially Soin/Sigowet and Kipkelion sub-counties the landscape presents a good topography for development of dams and water pans that could be applied for multiple use.

The assessment of ground water potential in the county has not been done. The presence of sufficient good quality surface water however presents a more cost-effective solution when compared to investing in bore drilling. The topography of the county taken into consideration allows mostly for gravity systems which are less expensive than pumped systems required by boreholes which are expensive in the long run.

In the short term, the County should consider doing borehole explorations on areas currently underserved particularly the low lands. The county should also consider use of solar water pumping to ensure sustainable cost of pumping.

ii) Water Infrastructure Assessment

Water supply coverage in the County is still low. Only 30% of the households do not have access to safe water. The existing infrastructure run by KEWASCO and TILWASCO is no longer adequate due to increased population. Similarly, small rural water schemes are not sustainable due to high cost of operation and maintenance particularly in rural areas where community management committees lack necessary skills and authority.

The CSP proposes constructing of new water supply schemes to augment the existing ones, in line with the County Integrated Water and Sanitation Master Plan (IMaP) which

outlines strategies for universal access of water and sewerage services in Kericho county. The IMaP will guide planning, implementation and management of water infrastructure in the county.

iii) Water Service Management Assessment

Capacity for water service management is weak across the board. Most of the water committees and management groups are not aware of the legal frameworks present. The county in consultation with other stakeholders should consider increasing the capacity of the Water user committees involved in water supply and management. Areas of improvement are financial and technical capacity, governance and gender. More women need to be incorporated on the management committees to increase the sustainability of systems since they are most affected when there is scarcity. The county also needs to come up with a structured method or criteria of setting water tariffs to ensure equity among the community members. There is also a need to set up a strong coordinating body among all the actors in water and sanitation sectors, the coordination will eliminate duplication and gaps in the communities.

The CSP proposes capacity building of water user committee in terms of organization, management, operation and maintenance as well as partnering with all stakeholders. They should integrate land management programs for the county to facilitate conservation and preservation of water catchment areas.

iv) Water Demand For The County

Table 48 summarizes the current capacity of the major water schemes.

Table 48: Existing Water Schemes Capacity

| Water Scheme Service Providers | Average No. of Design connections (households) | Average No. of Supplied connections (households) | Total Design capacity m ³ /day | Total Operational/ Supply Capacity m ³ /day |
|---|--|--|---|--|
| KEWASCO | 18,000 | 12,000 | 12,900 | 5,934 |
| TILWASCO | 7,179 | 7,481 | 1,436 | 717.90 |
| Total | 24,179 | 19,481 | 14,336 | 6,652 |
| Water Demand | | | 101,175 | |
| Deficit | | | 86,839 | 94,523 |
| Short term improvements will result in extra capacity | | | | 7,683.9 |

From the table above, it is clear that there is need in the short term to improve the schemes and utilize the 50% lost capacity. The improvement will come from accounting for the lost water, disconnect illegal connections and enhance operational capacity by proper maintenance.

The various number of connections that are active and inactive vary from project to project. The connections are also affected by the reducing water supply from the source

due to environmental degradation, unmaintained systems, and illegal connections.

The community groups and individual stakeholders have been key in enhancing construction and operation of water points to the rural level with the help of the national and County governments. This has balanced out water provision in the rural area with that in the urban areas and market centres. The current schemes however do meet the current demand to ensure adequate water provision in the county.

Table 49: Percentage of possible sources mix to meet the demand

| No. | Surface Water (Largely) Rivers | Rain water harvesting (Dams, Water pans & household tanks) | Underground water (subsurface and underground) |
|--------------------------|--------------------------------|--|--|
| Domestic | 65% | 35% | 5% |
| Large scale agriculture | 20% | 80% | 0% |
| Urban Centres and Towns | 85% | 15% | 5% |
| Institutions & Factories | 80% | 10% | 10% |
| Small scale agriculture | 5% | 85% | 10% |

The CSP as a short-term measure proposes improvement of the operational capacity for the existing water supply and implementation of large water supply projects targeting major urban centres and strategic economic zones in the long run.

12.12. Environment Assessment

i) Environment

Environmental degradation is a major concern for Kericho county and is caused by cultivation along rivers and destruction of wetlands leading to loss riparian areas, encroachment of forests for cultivation and poor farm management practices leading to soil erosion and desertification, pollution and natural disasters like landslides and flooding during rainy seasons.

Through preparation of the CSP, a framework of environmental management under the county government will be laid to include: protection of the county's vast forest cover from encroachment by human activities including settlements and other economic endeavours, implementation of afforestation and re-forestation programs, enacting and enforcing legislations to curb illegal logging, charcoal burning and cultivation of riparian areas and hilltops especially in Nyando basin.

ii) Solid Waste Management

Poor solid waste management especially in urban areas, leading to pollution and flooding due to clogged drainage canals is a major challenge in Kericho county. Currently the county has one designated land fill in Kericho town serving Kericho CBD. Kericho's peri-urban areas and other major towns such as Litein do not have designated solid waste collection areas.

The CSP proposes establishment of a waste management system covering the whole county with one main solid waste management site. Each big town will have a small holding ground (transfer station) for solid waste collection before onward transportation to the main management site.

12.13. Social Facilities Demand Assessment

i) Health

Spatial analysis highlights critical areas in Kericho county which require health facilities in terms of geographical distribution and 2027 population projections.

Level IV facilities are currently inadequate and there's need to upgrade five facilities by 2027. Candidate facilities for this upgrade are Cheborgei and Kabianga health centres. Others are Kamasega, Kipsitet and Nugumoini, dispensaries.

Fifteen Level II facilities were identified for upgrading to Level III. These are Tebesonik, Chepkunyuk, Chepsir, Kaitui, Kimugul, Kipsegi, Koitaburot and Manyoror Dispensary. Others are Seretut, Chebirbei, Kapsoit, Kamwingi, Segetet, Burutu and Litein dispensaries.

To sufficiently provide access to health care, non-functional health facilities need to be operationalized. The facilities to be prioritized for operationalization to ensure equitable access to health care across the county are Chepkosilen, Kasheen, Kapsegut, Nyalilbuch, Sitian, Kapsenda Gwitu, Kimologit, Kelunet, Keben and Butiik Dispensary.

However, other areas outlined below require improvement and strengthening.

- a) Physical infrastructure including improving condition of buildings, access to water, electricity and sanitation.
- b) Inconsistent supply of drugs though adequate
- c) Overwhelmed medical personnel due to high number of patients

The overall assessment indicates almost all facilities have good physical infrastructure. However, there is inconsistent supply of drugs, other medical supplies and inadequate personnel. A further analysis across the county border and privately managed facilities would give a further insight and possible better partnership in health provision.

ii) Education

Spatial analysis highlights critical areas in Kericho county which require education facilities in terms of geographical distribution and 2027 population projections.

The overall assessment indicates that Kericho county has no deficit in ECD and primary schools and a slight deficit in the required number of secondary schools for the planning period (2017-2027) as shown in *Table 50*.

Table 50: Deficit areas for secondary schools

| No. | Sub-location | Ward |
|-----|--------------|----------------|
| 1 | Chepcholiet | Chepseon |
| 2 | Kamasega | Soliat |
| 3 | Kapkechewai | Soin |
| 4 | Lekwenyi | Soliat |
| 5 | Simbi | Soin |
| 6 | Kaplelach | Soin |
| 7 | Mongojet | Soliat |
| 8 | Kaptalamwa | Soin |
| 9 | Kapsomboch | Kaplelartet |
| 10 | Sigowet | Sigowet |
| 11 | Ngoina | Tebesonik |
| 12 | Kimugul | Kedowa/Kimugul |
| 13 | Tingoro | Kipkelion |
| 14 | Kutung | Kamasian |
| 15 | Siwot | Chilchila |
| 16 | Kokwet | Chilchila |
| 17 | Kapkwen | Kunyak |
| 18 | Timbilil | Kunyak |
| 19 | Poiywek | Ainamoi |

Therefore, the county should focus on:

- a) Providing good physical infrastructure for the existing facilities such as, classrooms, playgrounds, labs, libraries and sanitation facilities
 - b) Ensure consistent supply of learning materials such as books and lab equipment
 - c) Providing adequate personnel (teachers) and
 - d) Equip youth polytechnics and vocational training institutes.
- iii) **Governance, Administration, Justice and Law enforcement**
- a) **Governance and Administration**

Following adoption of the Constitution of Kenya 2010, political and administrative boundaries have changed. The new administrative levels are county, sub-county and ward. Previously the administrative levels were province, district, division, location and sub-location. The county government is currently using the new structure to carry out its governance and administrative functions whereas national government is using the pre-2010 structure to administer its functions in the county.

The point of convergence between the county government and national government on matters security and administration is at the county level. Therefore, administrative extents/boundaries and functions below the county level ought to be harmonized.

b) Justice and law enforcement

Whereas the law enforcement, security and administration of justice is considered adequate in Kericho, boundary conflicts are pre-dominant along its western border. Incidences of cattle theft are predominant in Nyakach along Soin neighbourhood.

Functionality, status and level of utilization of many administrative and security facilities are largely unknown with county and national government activities sometimes uncoordinated. However, synergy between national and county government has continually improved from 2013 with better understanding of the devolved system. The main cause of lack of synergy is in conflicting areas of administration e.g. national government district boundaries do not coincide with the sub-counties.

c) Recreation, Sports, Tourism and Culture

Despite Kericho being known nationwide for sports (Zoo Kericho FC which is competing in the Kenyan Soccer Premier League and Kericho Rugby Club competing in the Kenya Rugby Nationwide League), recreation and sports facilities are in dilapidated state except the Kapkatet stadium which is undergoing an upgrade through NYS program and Kericho Green Stadium. Cultural/community centres are non-existent or non-operational. In most cases, the social halls are not accessible to the public.

The county faces a myriad of challenges in tourism despite having huge potential for agro-tourism including: the tourist sites are not yet to be developed, the road condition to the sites are poor, lack of reliable transport to the sites, signage and marketing is non-existent and supporting infrastructure like airstrips and hotels are not up to standard.

12.14. Development Challenges and Prospects within Resource Potential Zones and Sectors

Having examined the county resources, it is important to note the challenges and potentials are as summarized in *Table 51*.

Table 51: Development Opportunities per zones

| Summary Area | Resource Potential Zones | Description | Spatial Problem Areas | Challenges | Prospects |
|------------------|--------------------------|-------------------------|---|---|--|
| Physical Setting | Conservation Areas | Water tower | Encroachment in Nyando River Basin entailing River Kipchorian and tributaries | Deforestation at Londiani, Western Mau, Tinderet, Tendeno, Sorget. | Institutional support by KFS which can liaise with locals to initiate reforestation. |
| | | Forested areas | | Clearing forest trees for charcoal | Conservation initiatives by County Govt along riparian e.g. tree planting program along River Kipchorian |
| | | Riparian areas | Paucity of conservation on steep slope areas | Encroachment of riparian areas for farming activities | Availability of County environmental policy that can be enforced. |
| | | High Slope areas (<25%) | Deforestation | Poor farming practices along slope causing siltation of rivers. | Farmer trainings from farmer cooperatives as well as the County Govt |
| | | River Basins | | Pollution from farm chemicals. | Regulation of tree felling and charcoal burning activities through licensing |
| | | | | Clearing of hilltop vegetation leaving the soils bare | Harmonize functions of county and national environmental institutions in conservation. |
| | | | | Rapid and uncontrolled growth of rural centres creating higher demand for charcoal and encroachment of forests for settlement | |
| | | | | Overlapping roles of environmental Management institutions. | |

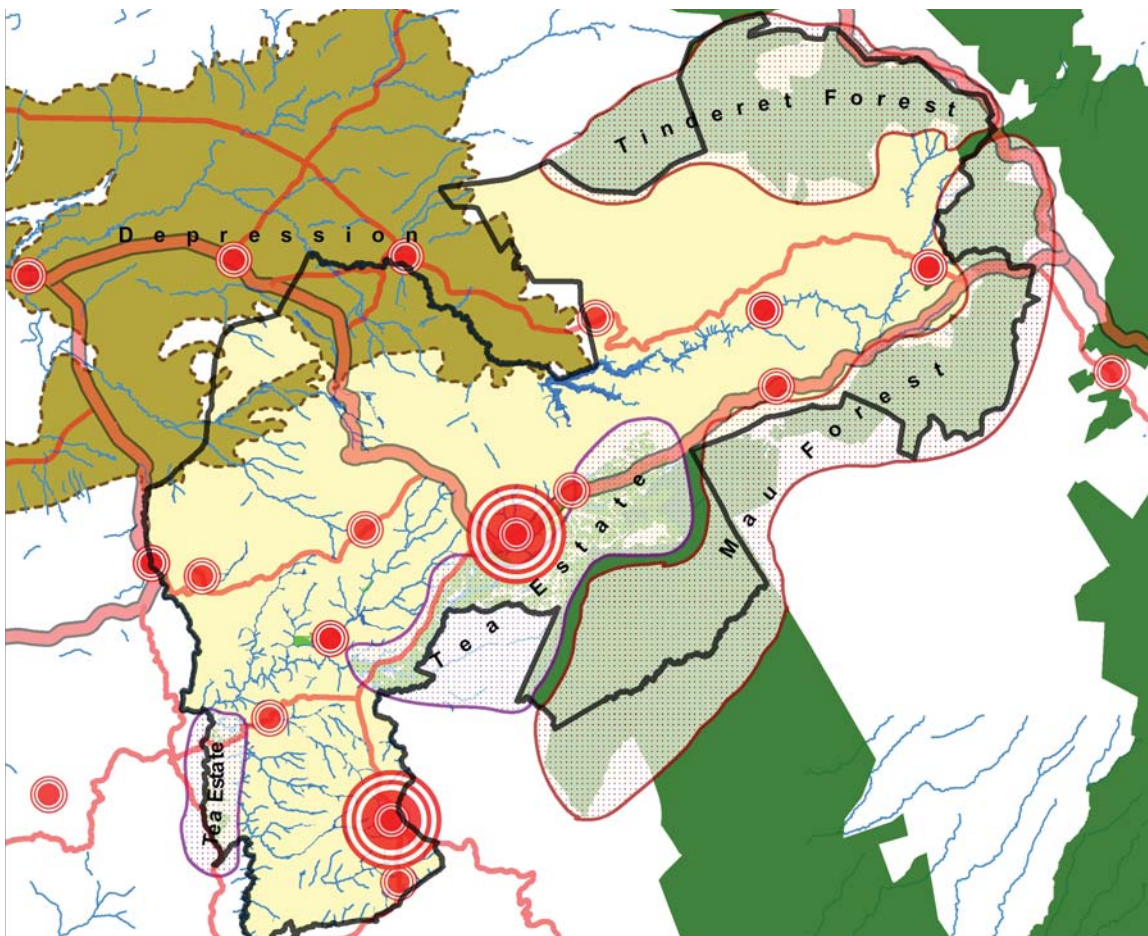
| Summary Area | Resource Potential Zones | | Description | Spatial Problem Areas | Challenges | Prospects |
|--|--------------------------|-----|--|---|---|--|
| Agriculture | High Potential 1 Zone | II | Tea, Maize, Dairy, | Land fragmentation due to population increase in Belgut, Bureti and Ainamoi | Crop Farming Poor quality of fertilizers and low usage/adoption of inorganic fertilizer leading to low production. | Crop Farming Provision of subsidized inputs to farmers |
| | High Potential 2 Zone | III | Maize, Coffee, Potatoes, Dairy, Sheep | Encroachment of forest and riparian reserves around Mugumoini to Kjkkelion Drought around the lowland areas of Fort Ternan | Unpredictable rainfall patterns and overreliance on rain-fed agriculture leading to low production. High land fragmentation leading to small parcels of land which are less productive High dependence on family labour and low adoption of agricultural mechanization | Irrigation programs to enhanced production during low rain seasons Improve mechanization for cash crop and large-scale food crop farming Establish external markets for produce |
| | Medium Potential Zone | IV | Sugarcane, Sweet Potatoes, Ranching | Sondu- Kapsorok-Iraa areas exhibiting low sugarcane production | Lack of stable markets for crop produce i.e. price fluctuation Lack of soil conservation structures and measures Low accessibility or lack of extension and veterinary services. Inadequate capital to purchase farm input and venture in agriculture. Livestock Farming Low accessibility or lack of extension and veterinary services. Inadequate pasture for animals due to continued land fragmentation and competition from crop farming. Low adoption of improved farming methods such as use of AI to improve animal breeds. Continued drought hitting the western parts of the County has made it difficult for animals to access adequate water and also pasture is continually reducing. Lack of stable market for livestock produce both locally and outside the County causing fluctuation of prices which has discouraged farmers from livestock farming. Pests and diseases infesting on animals affect the quality and quantity of livestock produce and sometimes even cause loss of animals. Fish Farming Inadequate investment capital to engage in fish farming. Lack of technical skills in fish processing i.e. from pond preparation to harvesting. Water supply is a problem especially during the dry season making it unsustainable. Fingerlings are not readily available as they are sourced from other counties. | Enhance value addition to increase market price of finished products Establish local industries that can process cash crops to the finished product Improve training for farmers through ATIs, Demo Farms, Field days and show Livestock Farming Building capacity of extension officers to reach farmers in various parts of the County Establish better market access for livestock products through direct sale Promote fodder growth for easier access by farmers which will result quality breeds To increase capital access to livestock farmers through financing and credit facilities Fish Farming Sensitization of farmers on fish farming Promote market access for fish products |
| Transport, Water and sanitation services | - | - | Terminal Facilities Bridges Roads Water | Urban Areas Kipkelion and Chilchila Rural areas Rural areas Urban areas | Inadequate provision of terminal facilities Inaccessibility of areas due to terrain constrains Poor condition of key link roads connecting production areas to markets and industries Inaccessibility to clean water i.e. dry seasons water rationing within towns Poor solid and liquid waste management | Expansion of existing bus stations and acquisition of land for bust station in other towns Construction of bridges Upgrade of road surface conditions to enhance connectivity Harness surface water through dams and tanks Curtail non-revenue water and improve reticulation utilities and supply Designate land-fills and transfer stations. Connect households to sewer utilities. |

| Summary Area | Resource Potential Zones | Description | Spatial Problem Areas | Challenges | Prospects | |
|----------------------------------|----------------------------|-------------|-------------------------------|--|--|---|
| Economy | Industrial Potential Zones | V | Agro-based Industries | Roret and Soin areas where industries are non-operational | Limited agro-processing industries to encourage Value addition and production Non-operationalized factories in Roret and Soin Poor condition of roads Constrained market for finished products Lack of incentives for local industrialists to locate factories. Unemployment | Revive Roret pineapple industry. Facilitate operationalization of Soin Sugar factory by equipping it with necessary instruments for processing and packaging Improve markets for processed produce through infrastructural development including commercializing airport operations Improving road standard used for transporting raw materials(produce) from farms. |
| | | | Manufacturing Industrial Area | Kipsitet road construction /burrow pits | Untapped potential for location of manufacturing industries | Resource mapping on all mineral sites/ quarries |
| | | | Quarries | Kedowa un-zoned quarries Roret sand harvesting zones | Un-zoned quarries and sand harvesting areas Negative environmental and health impacts of the quarries | Zoning out resources for development control and for economic purposes Environmental Impact Assessment and Audits to be conducted on quarries and burrow pits and management plans rolled out. |
| The People and Human Settlements | Urban Potential Zones | VI | Service centres | Under-developed centres: Kapsorok Mtaragon and Kipkelion Urban sprawl Under-serviced settlements | Paucity of infrastructure and service provision in the urban centres causing an outburst of urban problems against the existing systems. This includes liquid and solid waste management as well as water provision Unplanned rural settlements Poor enforcement of existing development plans for urban areas Declined economy due to lack of diversity on investments | Open up and develop New Town model for clustered human settlements within agricultural rural area. Revitalize economies of potential growth centres Layout relevant services and infrastructure for urban development and settlement structures Zoning and proposed strategic development to secure hinterland for agriculture and conservation. |
| Social Services and amenities | - | - | Health Education | | Inadequate staffing, medical supplies and emergency services Poor transition in levels of schooling Inadequate and unequipped vocational training centres based on industrial needs. Inconsistent feeding program for ECDEs | Equip sub-county hospitals with emergency services and improve staffing. Provide alternative sources of funding. Develop community centres. Enhance sustainable feeding programs |



The County Spatial Structure

This chapter presents the form of the county. This is defined by natural and man-made physical features. These features shape the county and will continue to shape the orientation in which human activities develop which gives the county its unique spatial structure.



13.1. Introduction

Kericho county is structured by both the natural physical features and the man-made physical features. These features have shaped and will continue to shape the orientation in which human activities/development exist in the county thus giving it its unique spatial structure.

In order to formulate the County Structure Plan, the existing spatial structure of the county needs to be studied and analysed in detail. Developments tend to take certain direction considering what constrain them. Analysis of the existing spatial structure of the county is crucial based on the following advantages;

- i) To assess the development trends of the county.
- ii) To assess the strengths and weaknesses that are associated with the spatial structure of the county especially those attributed to the natural physical features.

13.2. Man-made and Natural Impermeable Edges

The county development trends have been influenced by both the man-made and the natural occurrences.

The natural impermeable edges are the natural forests, valleys and depressions, wetlands and steep slopes.

i) The natural forests

The county has four main forest reserves comprising of the South Tinderet, Mt. Londiani, Western Mau and South-West Mau covering a total area of 60,347Ha. These forest reserves have been gazetted to ensure their conservation and preservation.

The gazettement of these forests was done to protect them from encroachment from adverse human activities such as farming, construction etc.

ii) Wetlands

Riverine wetlands consists of the permanent and seasonal rivers that originate or traverse flowing westwards and draining in the Lake Victoria. There are also the swampy/marshy areas found especially where the rivers meet generally flat terrains.

The wetlands are protected areas under the various acts and policies of the Kenya hence all the activities taking place around them are supposed to be regulated to prevent encroachment and their ecosystem being destroyed.

iii) Land Forms

Kericho lies west of the Great Rift Valley. The volcanic activities during its formation

greatly influenced the landforms within the County. Geological composition of the County consists predominantly of tertiary volcanic with some parts experiencing quaternary sedimentation.

Landforms affect the topography of the County and therefore dictates the types of activities being carried out.

The man-made impermeable edges are: the multi-national tea estates, the sugar belts, physical infrastructure and urban centres

iv) **Multi-National Tea Estates**

The multi-national tea plantations lie east of Kericho town along the B1 and C23 roads and forms the eastern edge. The plantation is an edge to other development and as observed; a linear strip of settlements run parallel to the tea plantation from Chepsir to Premier market centres.

v) **Urban Areas**

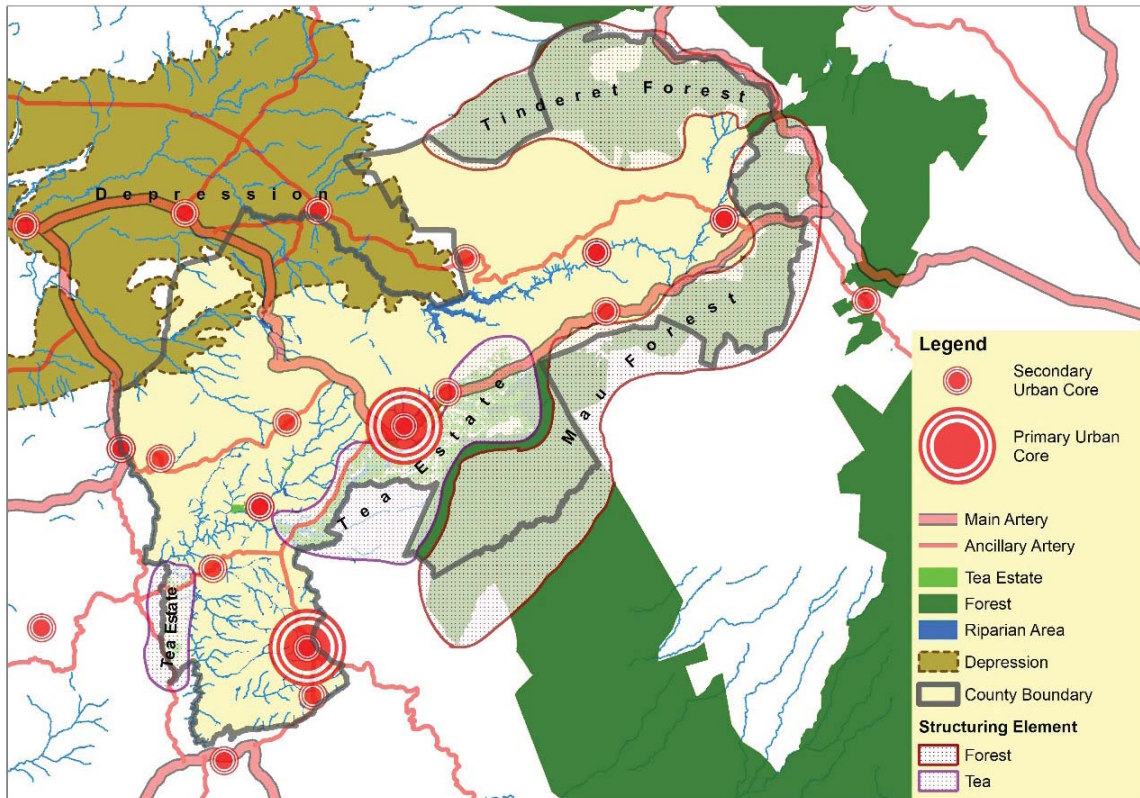
Urban areas are human settlements that agglomerate land use activities in a relatively small geographic area. Urban areas in the county have taken this traditional approach and are characterised by high population densities and high infrastructure of the built environment. The major ones in the County are Kericho, Litein, Sondu, Roret and Londiani.

Urban centres attract developments due to several factors such as economies of scale, ready markets, and better infrastructure supply. This is not different from what is experienced in the county as the urban centres and the market centres are booming with development.

vi) **Physical Infrastructure**

Kericho county harbours one of the major transit towns in the western region, Kericho town. The town is traversed by B1 highway and for a long time this road has been a major route to Kisumu city until the recent completion of Londiani-Muhoroni road that was upgraded to bitumen standards. Kericho town also connects to Bomet and Kisii counties through C23 and C24 roads. There are also other important roads links within the county. Human activities have aligned themselves along these corridors as it is evident that even the major urban areas of the county are located along these belts.

There also exists trunk infrastructure that discourage permanent human activities near them such as the high voltage electricity infrastructure, the pipeline that traverses the northern part of the county around Londiani and the existing railway line.



Map 42: Kericho County Structuring Elements

13.3. The Sondu River versus the Nyando River Belts

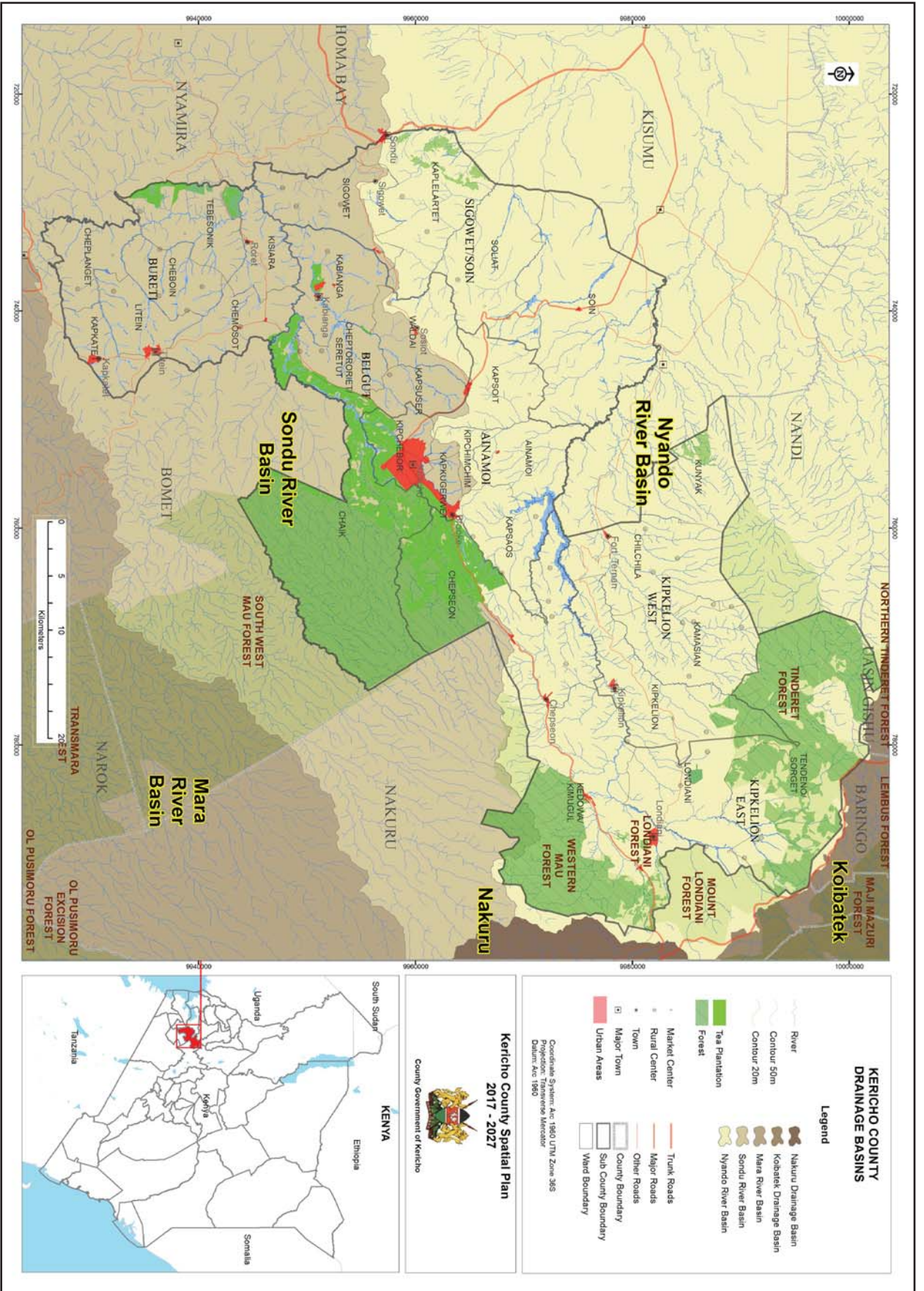
Kericho county lies in two river basins namely the Nyando River basin occupying the Northern parts of the county and Sondu River basin occupying the Southern parts. The basins are a determinant of analysis of the drainage of the rivers where those forming the Nyando basin are the tributaries of Nyando river and those forming the Sondu basin are tributaries of Sondu river.

13.3.1. The Nyando River Basin

This basin is found on the northern part of the county covering Kipkelion East, Kipkelion West and parts of Ainamoi and Soin/Sigowet sub-counties. The rivers in this basin originate from the Tindaret, Londiani and Western Mau forests flowing south-westwards to form River Nyando at Kano plains that dissipates into swamps in Kusa area before discharging into Lake Victoria at Winam gulf. The major rivers forming the Nyando basin are Ainapng'etuny and Kipchorian rivers.

13.3.2. The Sondu River Basin

The Sondu River basin lies on the southern part of the County covering Bureti, Belgut and parts of Ainamoi and Soin/Sigowet sub-counties. The tributaries of Sondu River that forms this basin originate from the South-Western Mau forest and flow westwards. The two major rivers that confluence their waters to form River Sondu are Yurith and Kipsonoi rivers. This basin is characterized by diverse land use activities namely: forestry, large-scale and small-scale agriculture (tea, maize and dairy activities), urban and sub-urban settlements and developments and tea industries.



Map 4-3: Map Showing the Nyando and Sondu River Basins

13.4. The Rift-Valley/ Lake Victoria Interface

13.4.1. The Mau Escarpment Influence

Kericho county is found on the western highlands of the Great Rift Valley that forms the Mau Escarpment. The edge of the escarpment to the west lies the Western Mau, South-western Mau, Tinderet and Mt. Londiani forests. The terrain of the county especially towards the northern and north-western parts are as a result of the formation of the Great Rift Valley. The terrain is extremely rugged at Kuniyak, Chilchila in Kipkelion West sub-county and gradually gentles towards the southern parts of the county.

The influence of the Mau escarpment is evident from the relief rainfall received in the county, relatively low temperatures in areas bordering the escarpment, soil types and the terrain. These aspects of physiography have significant influence on human activities being carried out.

13.4.1.1. Relief Rainfall Patterns

The county experiences relief rainfall attributed to its height above sea level that stands between 1230m and 2830m. The mean annual amount of rainfall received is between 1000mm and 1600mm and is generally well distributed across the county (*Map 44*) with variations attributed to the change in topography, which puts areas to the west on the rain shadow.

The rainfall pattern greatly influences the distribution of human activities within the county. Agriculture is the mainstay of Kericho with most locals relying on it. Good climatic conditions for rainfed agriculture has seen the county's wettest regions experience high population densities and as the amount of rain declines westwards and so does the population density.

13.4.1.2. High Altitude Areas

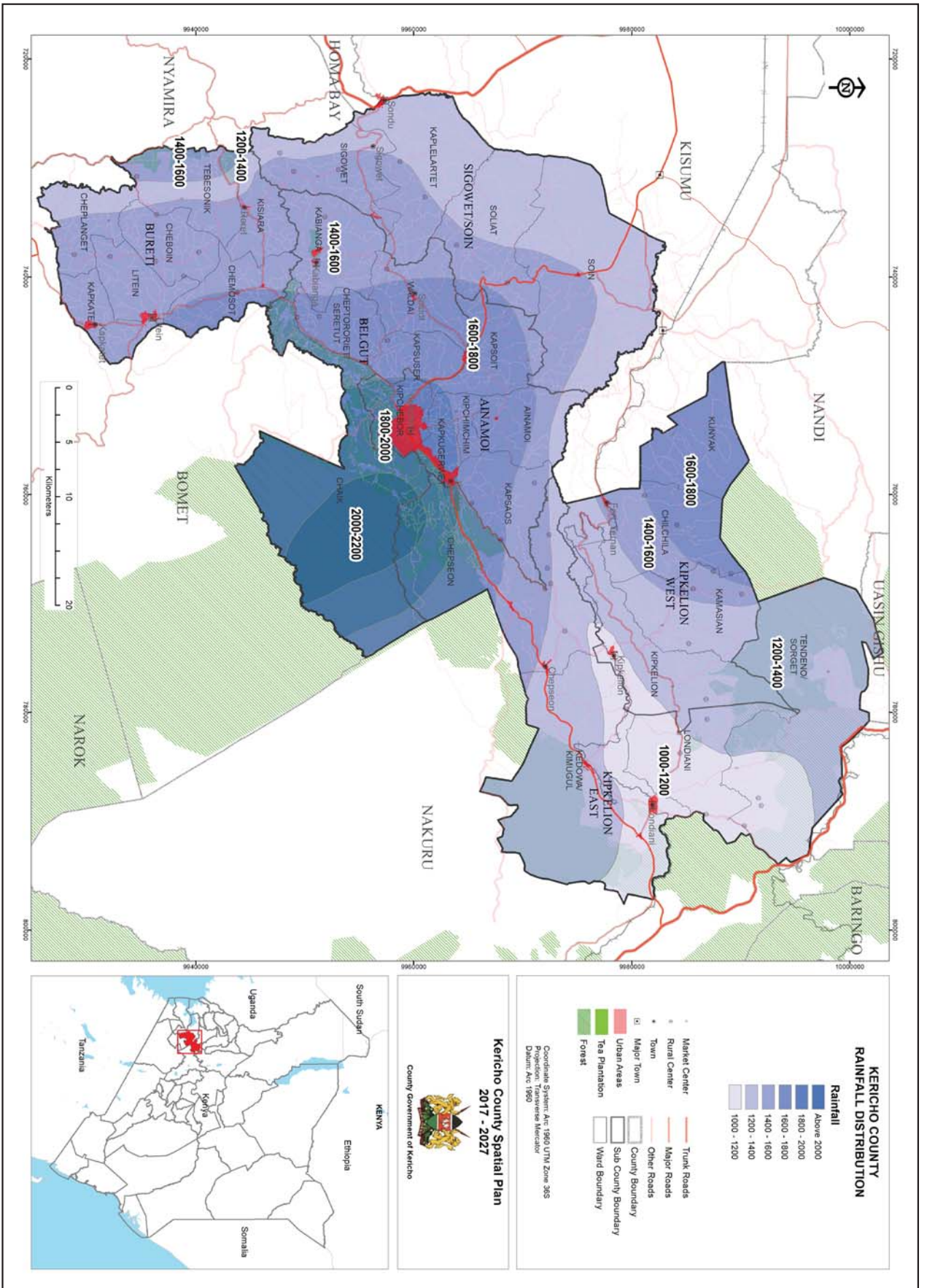
The county's altitude ranges between 1800 m and 2800 m above the sea level. The terrain characteristics vary across the whole county with some areas depicting mountainous landforms, hills, depressions, U-V shaped valleys and ridges (*Map 45*).

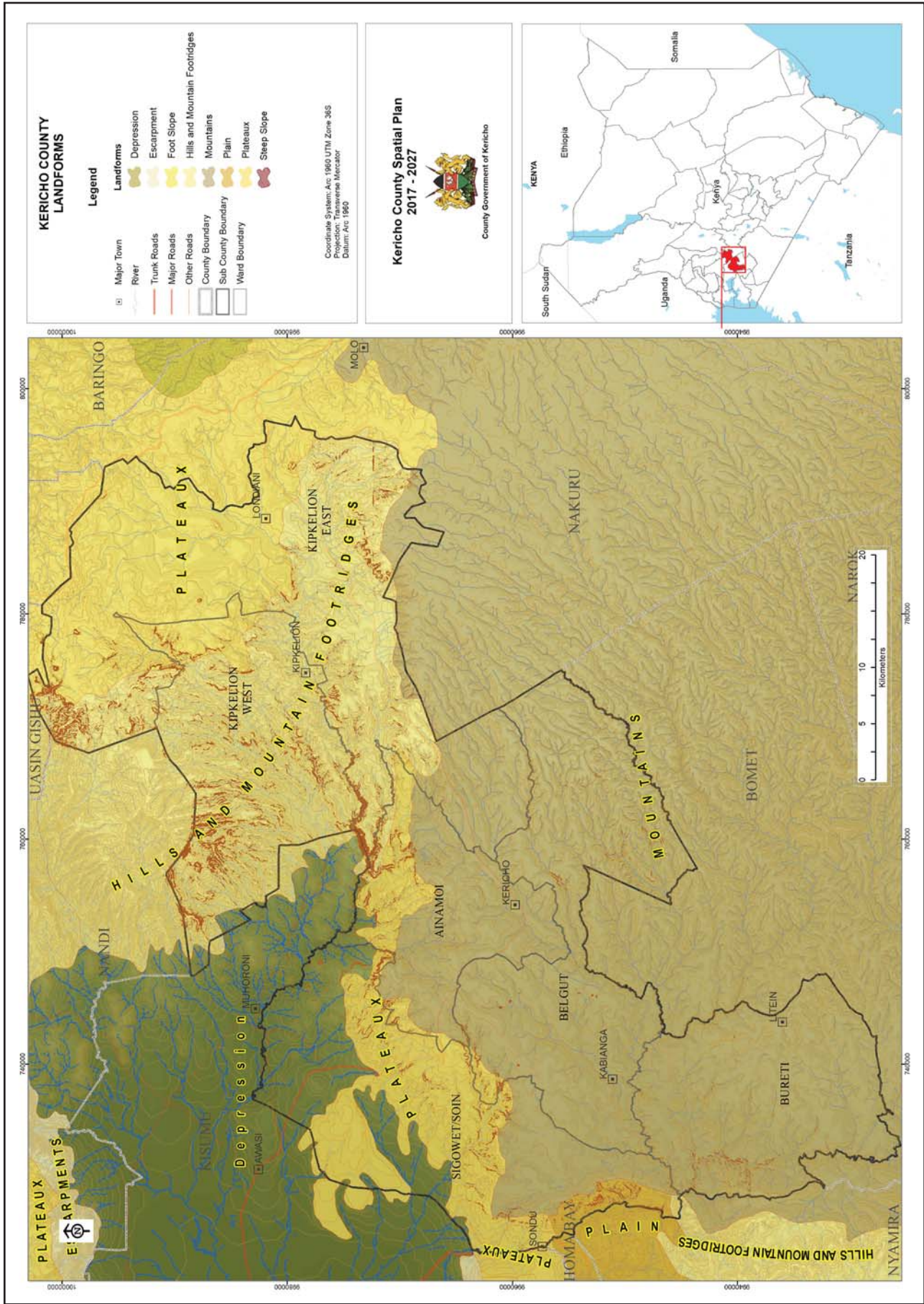
As observed, majority of the people occupy the mountainous regions and that is where a lot of human activities take place. The areas with a series of hills otherwise rugged terrain are less inhabited hence lesser human activities although increasing population has forced people to modify the terrain to suit their activities.

13.4.1.3. Water Towers/Wet climes

The main water tower in the county is the south-western Mau forest evident from the rivers that originate from there; which flow westwards traversing most parts of the county. The county government together with the national government have put tremendous efforts to protect this tower from encroachment by human activities. It has therefore largely remained in its natural state despite illegal encroachment that is sometimes reported.

Map 44 Mean Annual Rainfall Distribution within the County





Map 45: Land Forms in Kericho County

13.4.2. Lake Victoria Influence

Lake Victoria lies to the west of Kericho county where the waters from the rivers within the county drain to after they confluence to River Nyando and River Sondu. The lake has a significant influence in the county's rainfall and a key geological feature characterised by a large depression at the western border of the county. The depression suggests the initial extent of the lake. The depression also marks the boundary between the Kericho and Kisumu counties

13.4.2.1. Dry Climates

Kericho county is a generally wet but the effects of climate change are fast being experienced on the western and north-western parts like Kipsitet, Fort Tenan, Kapsorok, Sondu where rainfall has gradually reduced in the recent past.

Agricultural developments in these regions are gradually reducing due to decline in rainfall. Meanwhile, other developments such as industrial and conservation land-uses are coming within these regions for instance Kipsitet area along Kisumu road where several industries have been set up.

13.4.2.2. Plains and Nyanzian - Kavirondian Batholiths

The county's geology is majorly composed of tertiary volcanics due to the influence of the Great Rift valley formation. The Nyanzian-Kavirondian batholiths occupy just a small part to the west of the county forming the greater Lake Victoria basin.

The geology of the county for a long time has been stable with no cases of earthquakes, sinking, up-folds etc. This encourages diverse human activities such as farming, heavy construction, quarrying and dressing of building blocks and settlements.

13.5. Small versus Large Land Holdings

Land in Kericho county is predominantly held in freehold and leasehold tenure system. Small land holders comprising mostly of natives are hold freehold tenure whereas large land holders comprising the multi-national tea companies hold leasehold tenure system.

Land holding sizes in the county as shown in *Figure 27* dictate the type and extent of activities being carried out. The multi-national tea companies own large tracts of land where they have grown tea in large scale whereas the small land holders practice mixed farming where they grow cash crops, food crops and rear livestock on their farms.



Figure 27: Small landholders versus Large land holders around Brook area

13.6. Transportation-Influenced Structure

Transport network influence development along their corridors by making the abutting land more valuable. The county is traversed by key link roads that connect Kericho to regional central places.

Development of the railway line during the pre-colonial era largely contributed to the growth of Kipkelion, Fort-Ternan towns as well as development of smaller urban centres around these terminal towns. These towns have stunted in development after collapse of the railway transport system. Contemporarily, the settlements within the county both rural and urban tend to align along the road networks which begin as nodal developments then metamorphosise into linear, ribbon or axial towns. This is due to the fact that accessibility plays a central role in matters settlement and trade.

About ten urban centres have developed along the Mau Summit-Kericho-Kisumu road and six along the Kericho-Litein highway. This goes a long way to depict how transport infrastructure influences settlement. Further, good road connectivity in Ainamoi, Belgut and Bureti sub-counties contribute to the development of urban centres and industrial development. The anticipated SGR terminus in Sondu is bound to affect land sizes, tenure and use in terms of compatibility and optimal use of land.

TRANSPORT INFLUENCED STRUCTURE

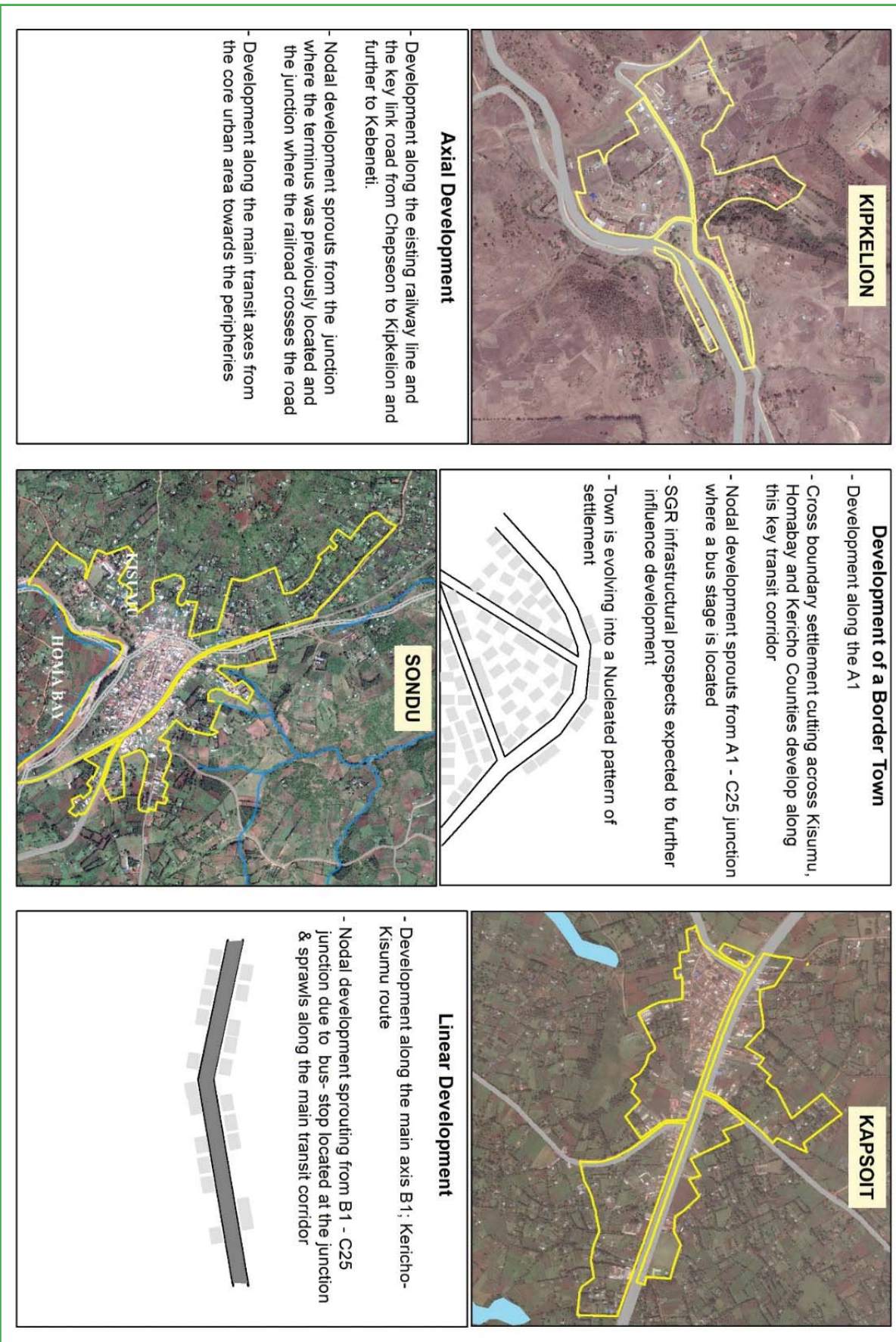


Figure 28: Transport-influenced development structure

Part IV

The Plan





Plan Proposals and Development Strategies



14.1. Introduction

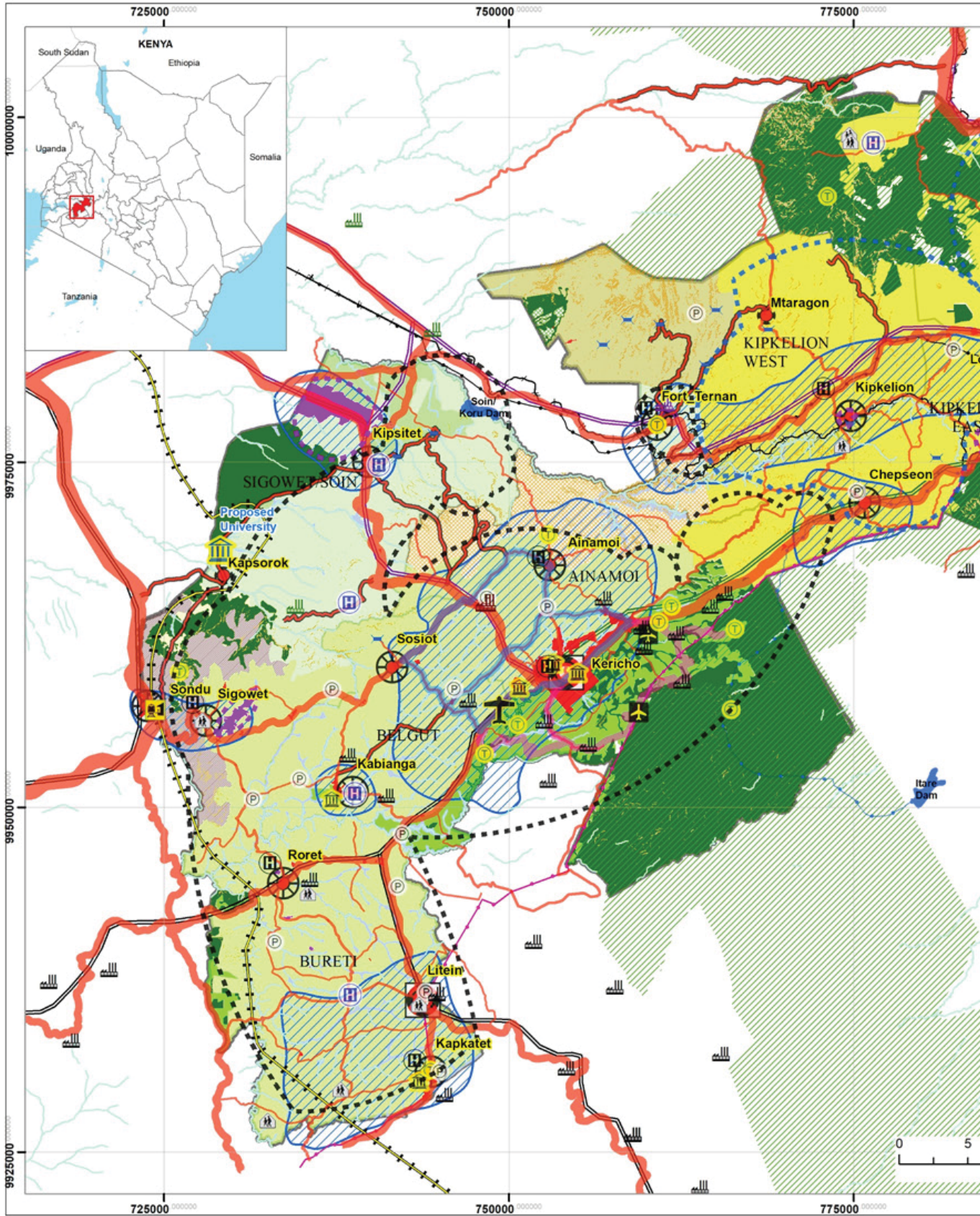
This chapter lays out framework for development of the CSP proposals and development strategies. It introduces the plan and gives strategic direction through the various programs and policies that should guide development within the plan implementation window. Further it outlines the plan implementation criteria which is a key component geared towards realization of the proposal.

14.2. County Spatial Development Plan

Kericho county envisions itself as **“A sustainable agro-industrialized county fostering equitable socio-economic growth and environmental values.”** This vision is to be realized through the proposals put forward in this plan as they are aimed at achieving sustainable and balanced development of the county.

Kericho county presents numerous possibilities that inspires it to thrive in all sectors. The County Spatial Plan anticipates various development scenarios based on the vision and assessments undertaken throughout the plan preparation. Development of the proposal is thematically based to enhance sectoral development in a bid to realize the county’s aspirations. In-depth policy directions have been formulated with an aim of addressing the sectoral proposals put forward through various programs and projects. This section provides insight on the key pillars of the plan including agricultural and economic development, human settlement, physical and social infrastructure as well as the natural environment.

Agricultural development is the main pillar structuring the plan. This is to be realized through three broad potential zones: High Potential Zone I, High Potential Zone II and Medium Potential Zone. Within each of the zones, specific agricultural enterprises are to be enhanced in a bid to encourage specialization as well comparative advantage within agro-ecologies. These include large scale coffee zones, large scale tea zones, large scale sugarcane zones, irrigation zones and mixed farming areas. This development considers the whole value chain which not only looks at production but also marketing, processing and consumption. Development of agro-based industries within the county is proposed in a bid to enhance local processing for purposes of cutting costs incurred by producers between harvesting and transportation to respective industries. This will also enhance value addition which is key in fetching improved returns to the farmers. Further, local processing will increase backward and forward linkages which will in turn promote overall economic development as well the socio-economic status of producers. The plan intends to improve local marketing of processed as well as direct-sale produce by optimally locating produce markets within key Strategic Economic Towns. This will provide a focussed avenue for local sale of produce. Further the plan intends to open these agricultural goods to regional markets. Linkage of produce to regional markets has necessitated proposals on infrastructural development. The key projects entail commercialization of the Kerenga airport, location of a terminus at Sondu along the proposed SGR, operationalization of existing railway services specifically Kericho-Kisumu & Kericho-Nakuru lines as well as upgrading key link roads. Ripple effects of the resultant linkages will spur rapid urbanization and open marginalized regions to balanced development. This will improve economic well-being of locals through increased revenue generation and service delivery. For sustainability and posterity, agricultural development intends to integrate environmental management and conservation mechanisms at the production/farm level. *Map 46* presents the County Development Structure Plan.



Map 46: County Development Structure Plan

14.3. Development Strategies

The County development model intends to achieve its vision and objectives through strategic programs within each sectoral context. The programs are anchored on policy directions that will be instrumental in guiding implementation of the programs and projects posed. The development strategies are anchored on the Vision 2030 aspirations as well as the National Spatial Plan which are the guiding development frameworks for the CSP.

14.3.1. Optimization of Land Utilization for Enhanced Agricultural Productivity

Global Sustainable Development Goal number three is to “End Hunger”. It aims at ending hunger, achieving food security and improved nutrition; and promoting sustainable agriculture by 2030.

Agriculture directly contributes 25 percent, and a further 26 percent indirectly to the National Gross Domestic Product (GoK, 2007). Kericho county economy is mainly agro-based with more than two-thirds of the total population depending directly on agricultural enterprises. The National Spatial Plan, (2016) identifies Kericho as one of the grain basket areas that need prioritisation and protection to ensure food security. It is also one of the leading tea growing counties and hence, agriculture remains a crucial pillar for development in the county.

Majority of the agricultural activities are rain-fed, thereby predisposing small-scale farmers to instances of food insecurities and general low agricultural productivity owing to the changes in climatic pattern. As a tea producing county with about 21,000 ha under smallholdings, the small-scale tea farming enterprise is exposed to global tea price fluctuations caused by a myriad of reasons such as the cost of production and overproduction amongst others. Massive sub-division and high conversion of agricultural land into other uses such as industrial and urban zones due to population increase further worsen the scenario resulting into uneconomical portions. The areas that have recorded massive conversion and sub-division of land includes; Kapsoit, Kipchimchim, Brooke and Kapsurer which are immediate satellite towns to Kericho town. The NSP proposes the protection of agricultural land by restricting sub-division of land and diverting urban development away from agricultural areas through a coordinated, sustainable land use plan. Therefore, there is a need for the local farmers to adopt modern technologies of production and for the agricultural sector stakeholders to work together towards enhancing access to both input and output markets.

For better targeting of agricultural production, a land suitability analysis and mapping has been done for both crops and livestock, see table 43. This is aimed at sustainably boosting agriculture production through global best farming practices that heavily rely on the prevailing agro-ecologies.

Kericho County Government agriculture goal is **“to transform Kericho county’s agriculture through sustainable agricultural intensification and modernisation of agro-based enterprises into commercially-oriented and competitive economic activities that boost food security, enhance local economic growth and provide gainful employment to the residents of Kericho”**.

The goal is broad and requires more than the agricultural sector to achieve it. Within the domains of the agricultural sector, the specific objectives are to:

- Promote profit-oriented agricultural production
- Improve access to quality inputs, financial services and local and international output markets.
- Modernize agricultural production systems while optimising land utilisation.
- Improve delivery of extension and advisory services to increase farmers' adoption of research outputs, innovations and management practices.
- Promote climate-smart agricultural practices for environmental sustainability
- Formulate and implement food security policies and programs.

Policy Thrust

Land is the most critical factor of production in agriculture. Generally, limited availability of productive land is a significant constraint to increased agricultural production. In Kericho county, the high potential arable land is dominated by multinational commercial agriculture while the rest of the land is subject to competition among various land uses such as urban development, smallholder agriculture, infrastructure development, markets, homesteads, afforestation and conservation. Expansion of major urban areas such as Kericho, Kapsoit, Sondu and Litein combined with population pressure has caused fragmentation of fertile agricultural land making the land parcels agriculturally un-economical.

Cognizant of the competing interests making land utilization agriculturally unsustainable, the county Government has developed optimization of land utilization strategy to deal with the situation. The strategy focuses on **intensification of agricultural production and strives to harmonize land allocation and uses**. The aim is to restrict land fragmentation and sustain economic use while ensuring conservation of natural resources.

Besides the focus on input-output market, the spatial plan gives special attention to modern methods of production. The plan puts emphasis on mechanization of smallholder agricultural activities; modernization of the post-harvest handling and value addition of agricultural products to prolong shelf life. It further emphasizes adoption of agro-ecologically suitable crop varieties.

Policy Statements

- 1) **Safeguard agricultural lands against land sub-division and urban sprawl**
 - The delineated urban extent shall be gazetted and adhered to. This will ensure that urban growth limits are observed, and sprawl curbed in-order to safeguard agricultural land.
 - Densification of urban development shall be encouraged to optimize use of urban land and mitigate sprawl to agricultural areas.

- Land falling within the identified high potential agricultural zones shall be strictly designated for agriculture production purposes.
- Sub-division of agricultural land shall be strictly regulated. Minimum land sizes of 1.0 ha for medium and 0.4 ha for high agricultural potential zones.
- Fragmentation below the set limits is uneconomical and therefore not recommended.
- Change of user of land shall be strictly regulated in tandem with the County Spatial Plan guidelines.

2) Intensification of sustainable agricultural production

- Sub-county specific specialization of agricultural enterprises based on competitive advantage shall be promoted as identified according to the potential of the zones.
- Creation of agricultural zones based on agro-ecological possibilities, socio-economic and physiographic conditions, and competitive advantage shall be implemented.
- Infrastructural facilities that link production zones to market centres shall be facilitated.
- Drought tolerant crops for medium potential agricultural zones shall be promoted.
- Fish production through farmer mobilisation and facilitation of fingerlings provision and market access shall be promoted.
- Modernized livestock keeping through appropriate animal husbandry, product processing and timely marketing.
- Animal nutrition shall be enhanced through promotion of improved fodder development amongst farmers and access to affordable feeds and supplements.
- Soil fertility improvement through utilisation of both organic and inorganic fertilisers shall be promoted.

3) Strengthening research-extension linkages and extension delivery system.

- Priority shall be placed on building capacity of farmers to adopt global best practices of agriculture to boost production, improve value addition and marketing.
- Farmer-to-extension officer ratio shall be improved towards attaining the global recommendation of 1:450. This is important in enhancing extension outreach to farmers.
- Interaction between research and extension must be improved and made effective to facilitate transfer of new technologies, innovations and management practices (TIMPs).
- Mechanisms for identifying farmers' problems shall be put in place in order to influence the setting of research agenda. This means agricultural research will be demand-driven.

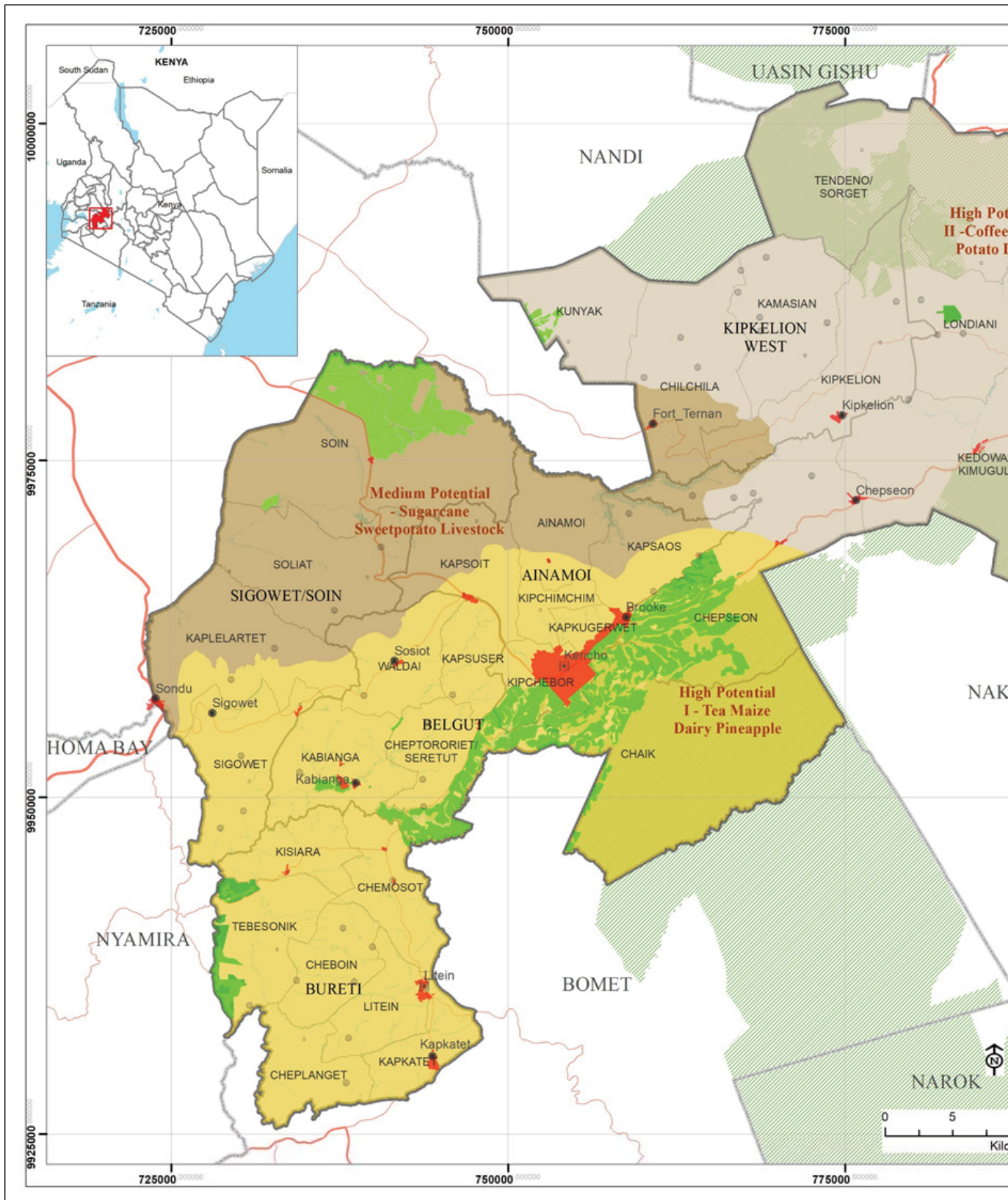
- Training and demonstration farms shall be improved/set and equipped strategically to facilitate passing of best agricultural practices to farmers. The following projects are underway or are being proposed by the county.
 - A 50-acre farm in Londiani has been set up which will be used as a demonstration and seed multiplication farm for pyrethrum and Irish potatoes.
 - Set up livestock, coffee and sugarcane demonstration farms in partnership with KALRO at Norman Brooke's farm located in Kunyak area
 - Set up and foster sugarcane demonstration and seed research farms at Soko Huru in Soliat to improve the quality of sugarcane variety.
 - Complete the construction, equip and operationalize Soim Agricultural Training Institute.
 - Partner with Tea Research Institute to foster research and extension services in tea sector and collaborate with Agricultural Society of Kenya to promote technology and innovation dissemination and transfer.
 - A functional ICT-based farmers' information centre which will provide current market prices, information on agricultural production techniques, pest management, soil fertility management and enterprise specific manuals shall be set up and equipped in each sub-county.
 - Programs and projects to sensitize and empower the youth and women to venture into agribusiness or farming as a business shall be formulated and implemented.
- 4) **Promotion of soil and water conservation and fertility improvement**
- Proper integration of farming with the environment will be a key strategy in ensuring sustainable utilization of agricultural land resource base in the county.
 - Formulation and enforcement of soil and water conservation regulation shall be a priority to protect areas that are prone to land degradation. Such lands are found in areas with slopes of above 25 percent.
 - For instance, most areas in Kipkelion, Kunyak, Tinga farm, Lemotit, Kibugat, Kebeneti and those in the Nyando river basin have steep slopes and require serious soil conservation measures. Agricultural malpractices such as encroachment of river banks, de-vegetation of land lying on steep slopes, cultivation across the contours and failure to observe the riparian reserve have resulted massive environmental degradation.
 - Control of soil erosion shall be ensured through promotion of proper tillage and general best practices in farming. The following practices will be prohibited: farming across the contours, farming up to the river banks, excessive application of inorganic fertilisers, excessive application of pesticides and herbicides, farming beyond recommended slope, over-grazing and other appropriate practices.

- Integrated farming systems and water harvesting shall be promoted for adoption.
 - This is by use of an integrated system of households including mixed farming, agro-forestry, conservation etc.
 - Water harvesting measures – off-site (dams, roof-catchments, rocks, water pans) and in-situ (mulching, infiltration ditches, terraces, strips (grass, stones/rocks))
- 5) **Access to input and output agricultural markets**
- Access to quality inputs, financial services and local and international output markets shall be enhanced.
 - Infrastructural facilities that link production zones to market centres shall be implemented.
 - Collective approaches such as cooperatives, farmer group input acquisition and output marketing initiatives (to take advantage of economies of scale) shall be promoted
 - Farmers’ co-operatives/groups shall be strengthened. Empowering farmer co-operatives; capacity building on co-operatives formation, dynamics and operations; clear coordination of farmer co-operatives with the line ministries/ departments
 - Post-harvest handling practices that conform to international standards shall be initiated to ensure acceptability of the agricultural products in the local and international markets.
 - Reduction of the cost of production through the timely availability of farm inputs at an affordable price by eliminating costly middle-men and shortening the procurement chain shall be implemented.
 - Agricultural produce/product markets shall be strengthened through direct marketing and linkage to better markets.
 - Regulatory frameworks to enable processing and direct sale/marketing of selected crops shall be established.
- 6) **Strengthening agro-processing and value-chain development**
- Agro-processing shall be set up at strategic areas (SEPAs) to facilitate value chain efficiency. Value addition of agricultural produce in line with the need to improve market access and better prices to farmers will be promoted. These agro-industries will be;
 - **Tea**

Expansion of existing factory capacities, improve road accessibility in various areas as outlined in the infrastructure strategy.

- **Coffee**
Improvement of pulping, roasting, milling and packaging facilities, and marketing.
- **Sugarcane**
Promote sugarcane production & processing as one of the investment opportunities for the County.
- **Pyrethrum**
County government to support access to seedlings, market and produce processing
- **Woodlots**
Wood processing industries where there is agro-forestry.
- **Fruits**
Pineapple, avocado, bananas, passion-fruits (proposed pack house in Ainamoi, Roret pineapple processing industry)
- **Roots and Tubers**
Sweet and Irish potatoes, carrots and cassava. For instance, the County government has partnered with SACOMA which is an international company to assist sweet potato farmers process their produce.
- **Cereals**
Maize, sorghum and millet.
- **Dairy/Milk**
Cooling plants such as milk cooling plants will be set up and distributed across the county based on the need.
- **Meat Products (beef & poultry)**
Improve breeds, identify suitable zones, infrastructure, abattoirs and cooling plants and canning
- **Fish Farming**
Small scale fish product processing industries within the rearing zones.

The broad zones have been categorized into specific agriculture enterprises aimed at promoting specialization in the mentioned areas for better production and improved market access as shown in *Map 47* and *Map 48*.



Map 47: Broad Agricultural Potential Zones

14.3.2. Spur Economic Productivity at Household Level through Enhancing Market Systems to activate Economic Prosperity.

Agriculture remains the key economic driver by contributing about 60% of the county's G.D.P. The Vision 2030 aims at enhancing industrialization which is a key development proposal aimed at achieving enhanced economic growth. The National Spatial Plan envisions improving economic prospects of regions by opening them up to local and regional markets. The economic strategy intends to prioritize the aforementioned aspects by strengthening agro-industrial economies as discussed in this section. It is projected that this strategy will not only improve value addition, market access but also enhance socio-economic status of the locals at the household level. *Table 52* provides the basis of framing the economic strategy.

Table 52: Facts and Basis of Framing the Economic Strategy

| Economic issues to be addressed | County facts | Spatial Consideration |
|---|---|---|
| Creating and sustaining adequate household income | 87% of landowners have title deed. 84% of economy agriculturally based. | Location of agro-based value addition industries |
| Kericho County's regional economic performance advancing attributes | Extensive road network Railway connectivity Good electricity connectivity Lake Basin Regional Economic Bloc Member | Provision of key infrastructure such as, trunk roads, pipeline, railway, water, waste management and housing in a sustainable way |
| Augmenting the economic performance in the county across socio-economic sectors | 61% immunization cover 575 public health facilities 1,054 ECDEs | Provision of health, educational, sports and community facilities |
| Enhancing County's innovation and competitive capabilities | 23% Forest Area ICT centres Centres of excellence Research Institutes such as Forest Research Institute, Tea Research Institute, etc | Preserving and protecting the environmental assets including river banks, forests, landscapes and cultural heritage sites Enhance access and awareness of ICT infrastructure, improve transition and consequent enrolments from secondary schools to centres of excellence. Mainstream County specific agenda into the research activities to address local relevant emerging issues |

County Product Portfolio

Table 53 shows the growth-share matrix that highlights the potential of different products setting them against the dynamic market share environment. The data is based on review of household survey indicating challenges faced by households, County and national level economic statistics and crop suitability analysis.

Table 53: Growth-share matrix

| | |
|---|---|
| 1) High market share | 2) Low market share though the market is growing |
| <ul style="list-style-type: none"> • Dairy livestock • Beef livestock • Maize • Sorghum • Pineapple • Beans • Sweet Potato • Irish Potato | <ul style="list-style-type: none"> • Fish Farming • Horticulture • Coffee • Banana and Avocado • Sugarcane • Natural Stone • Sand • Pyrethrum |
| 3) High marginal income | 4) Low market share but with growth potential |
| <ul style="list-style-type: none"> • Tea | <ul style="list-style-type: none"> • Tourism |

- i) High market share and significant market growth. Kericho is considered a food basket with significant crops and livestock production potential. The crops and livestock enterprises shown under item 1 in *Table 50* are agricultural enterprises whose production in the county is significantly high and they already command a major market share. The remaining gaps that require investment are market and postharvest-related focusing on farm mechanization, value addition, organizing markets and logistics.
- ii) Low market shares though the market is growing. The enterprises in this category, although they have high potential, have a productivity that is currently below optimum levels. Their low performance is influenced by low adoptability by smallholder farmers, lack of technical know-how, low input access and lack of ready and reliable markets.

In order to boost their market share, the county needs to consider direct investment towards extension services, awareness in terms of the enterprise potentials locally and regionally, mechanization, enhancement of quality and suitable inputs and credit facilities.

- iii) High marginal income. Tea is the only high marginal income enterprise in the county that requires minimal additional capital injection. It has a stable international market with predictable profits. Despite the stability, there is room for improvement especially in terms of returns to smallholder farmers and enhancing production per unit area. There is an opportunity in the introduction of high value varieties, streamlining and mainstreaming the marketing channels through a more inclusive involvement of the county government and general smallholder farmers by speeding up friendly policy formulations e.g. the ban of middle-men.

- iv) Low market shares but with growth potential. Though the county has notable tourist attractions portfolio, the tourist flow is currently low. The tourism potential lies in harnessing the strong cultural heritage, agro-tourism, edu-tourism and eco-tourism. Deliberate investment effort shall be channelled towards improving tourism related infrastructure, attractive packages and aggressive marketing locally, regionally and globally.

Policy Statements

The aim of the economic strategy is “to promote economic prosperity through sustainable sector developments and enhancing market system.” The specific objectives are:

- i) Sustainable development: Environmental, economic and social aspects;
- ii) Equitability and diversity: Recognizing the need to pull all citizens forward.

To operationalize the strategy, three policy statements, and accompanying programs, have been formulated.

- 1) **To promote economic prosperity through sustainable sector developments and enhancing market system.**

Though productivity is evident at household level, this is usually consumption oriented with little effort to monetize. Small scale holders account for over 50% of land titles. Farmers point to the lack of proper information and the lack of organized markets.

- Promotion of value addition farm extension services: Value addition services that include market information
- Set up of a central farmers’ markets in Kapkatet, Sondu, Rotet and Fort Ternan. Centrality of location and connectivity of the market to border counties through major roads
- Pilot a mobile-based grain commodity exchange market: This has been experimented successfully in Tigania West in Meru county. The basis of developing the platform is informed by the observed doubling of market prices of grain crops three months after harvest.
- Promoting region based commercial groups: Most crops are geographically concentrated making it easier to pool farmers’ commodities and improve market outcomes. This could take the form of SACCOs that integrate

- 2) **To promote Kericho county’s competitiveness, productivity and entrepreneurship.**

There is growing concern of farmland subdivision below economic viable units. There is also evidence of pseudo-urbanization characterized by lack of decent jobs and proliferation of squatter settlements in towns. This is usually attributed to population movement to urban settlements without corresponding development or change in the structure of the economy.

- Designation of three Strategic Economic Planning Areas (SEPAs): This is based on the dominant mainstay of households, ownership and spatial characteristics.

Such designation attracts investments and allows focus of county resources towards pooled goals.

- Building a more enterprising culture by developing strategic partnerships between training and research establishments and farmers to promote enterprise and innovation throughout the education system. This will then generate network forums and mentoring opportunities as well as international certification.
- Conducting a valuation survey of environmental assets to promote conservation and improvement. This will inform buy-in of communities who now engage in degradation of riparian area for agricultural purposes
- The county to strategically place itself through industrial developments; to be the leading LREB supplier of agricultural commodities (tea, dairy, coffee and high value crops e.g. pineapple and avocados etc) and non-agriculture products e.g. Kedowa building stones, cement, steel etc; develop logistical hubs at Kericho, Sondu and Kipkelion towns to promote market exchange and access, agro-eco and health tourism

3) To promote social inclusion and broad participation in the county's economy.

Though the county's economy is predominantly agricultural driven, there exists a significant demography of non-land owners who may not have access to land to improve incomes. There are also regions with low agricultural productivity necessitating alternative means of livelihood.

- Promoting industrialization of extractive industry: The natural stone dressing and sand harvesting is predominant in Kipkelion East constituency which registers the highest levels of unemployment in the county. Institutionalizing these industries progresses them beyond informality and allows higher revenues to be realized within the county.
- Build capacity for milk production and marketing of milk products. Dairy farming has been associated with rural households hence promoting the rural development agenda. The average rural household in the county has 3 cows with a daily average milk production of 8 litres per cow. This production is approximately half of a rural farmer in Murang'a county. There is therefore a potential for significant improvement of household livelihoods by improving milk production outcomes.

4) Strategic Economic Planning

For the realization of the strategy, three strategic economic planning areas (SEPAs) have been identified as shown illustrated in *Map 49*. The three SEPAs with their potential areas of influence are as follows:

1) Large Scale cash crops

- Predominant areas: Bureti, Belgut, Ainamoi
- Estimated Zone Area: 620 Square Kilometres
- Impact (Estimated Households): 30,000 (25% of population)

- Strategic Economic Towns (SETs): Kericho
 - Economy Tea
 - Spatial risk factors: Land fragmentation, soil erosion, poor infrastructure
- 2) Food Basket
- Predominant areas: Kipkelion West and Kipkelion East
 - Estimated Zone Area: 610 Square Kilometres
 - Impact (Estimated Households): 70,000 (50% of population)
 - Strategic Economic Towns (SETs): Roret, Kipkelion, Kapkatet, Fort tenan
 - Economy: Maize, Beans, Sorghum, Milk
 - Strategic value chain industries
 - Spatial risk factors: Land fragmentation, soil erosion, poor infrastructure
- 3) Industrial/ Extraction
- Predominant areas: Soin Sigowet, Kipkelion east
 - Estimated Zone Area: 473.2 Square Kilometres
 - Impact (Estimated Households): 30,000 (25% of population)
 - Strategic Economic Towns (SETs): Soin, Kedowa
 - Economy: stone dressing, brick making and sand harvesting
 - Spatial risk factors: Environmental degradation.

14.3.3. Improving access to Quality Social Services

Social services are activities designed by a government and its development partners to promote the social well-being of its people with particular needs. These services include: education, health, recreation, emergency services, governance & public administration, cultural centres and community facilities. Provision of these services is aimed at promoting social change, protect vulnerable groups and development in society. All these are anchored by SDGs, The Kenya Constitution, Vision 2030, NSP and regulating policies.

Education is an essential tool for achieving sustainability as it allows citizens to acquire knowledge, skills, attitudes and values that are necessary to shape a sustainable future. This is enhanced through promotion of healthcare which ensures progress in basic human values of saving and improving lives. Government is mandated to provide security for human life and investments by enacting and operationalising necessary policy, legal and institutional framework. Access to government services by all without prejudice is a noble responsibility of every government institution. Other important social services include recreation, tourism, culture, sports and community services whose benefits are improvement of human well-being, individual empowerment and promotion of inclusive communities.

Goals and Objectives

The County Government has set out “to promote social inclusion, diverse cultural prospects and quality life through provision of basic social services”. This goal has been set out to be achieved through the following objectives:

- Promotion of access to education, health and social services through adequate essential supplies and equipment, infrastructure improvement and staffing.
- Safeguarding institutional ownership by facilitating land registration and provision of ownership documents.
- Promotion of sustainable public health practices through awareness and provision of supporting infrastructure such as public toilets, smoking zones and cemeteries.

i) Education Sector

The overall assessment indicates that the county has no deficit in ECD and primary schools however there is a slight deficit in the number of secondary schools for the planning period. Despite the number of basic education facilities, quality of education and transition rates remain a challenge.

Policy Statements

The county has adopted strategies aimed at improving the learning environment through the following policies and programs.

1) Promote access to basic education to all

- Ensure physical access to ECD centres within 2km walking distance for young children. An inventory including geographical location of all the public ECD schools to be carried out including an assessment of their status in terms of location, physical infrastructure, staffing and enrolment.
- Ensure that all the ECD centres are in good physical condition through construction of new and/or renovation of existing facilities.
- Improve staffing, management and equip all ECD centres. This will be achieved through streamlining management, regular inspection, standardized curriculum and procuring required teaching materials.
- Promote access to education for people living with disabilities. There is need to liaise with national PWDs agencies to carry out assessment on special needs schools.

2) Improve transition in primary, secondary and tertiary institutions

- An inventory and assessment of public primary and secondary schools to document their geographic location, physical infrastructure, staffing and enrolment status.

- Improve the physical condition of education facilities
 - Put in place education incentive strategies for needy students
- 3) **Enhance quality of education**
- Strict enforcement of approved education programs.
 - Liaise with national institutions and development agencies to adopt programs such as Tusome or Preide to enhance quality of education while ensuring recommended teacher-student ratio is achieved.
 - Secure land for all public schools by provision of ownership documents.
 - Encourage Public Private Partnership in development programs
- 4) **Promote skills development in the county**
- Strengthen vocational training through infrastructure development and staffing.
 - Operationalization of non-functional youth polytechnics and construction of new facilities where required.

The optimal distribution of educational facilities is critical in ensuring equity. *Map 50* shows the distribution of education facilities, deficit areas and optimal sites for location of new facilities.

ii) **Health Sector**

The overall assessment indicates that most health facilities are in good condition, however, stocking of drugs and medical supplies is inconsistent and inadequate personnel.

Policy Statement

Provide access to effective, safe and quality health services for all residents of Kericho County.

The county plans to improve access to effective, safe and quality health services for all its residents through the following initiatives;

- Ensure access to a health facility by locating them within a walking distance of 5km as per the ministry of health standards.
- Prepare an inventory and assessment of health facilities to include geographic location, status, staffing, services and utilization.
- Review staffing levels and capacity in all the health facilities to address imbalances in the number of trained and competent staff.
- Provide the required health services at the appropriate level of the health system by equipping and operationalizing all the health facilities in the county.

- Strengthen patient referral system while considering national guidelines.
- Consistent supply of essential medicines/drugs and consumables; Establish and endorse a standardized essential medicines and medical supplies containing items appropriate for the health facility needs at different levels and adapt an effective medicines management system with KEMSA, to ensure essential medicines for the treatment of common illnesses are available at all times.
- Provision of emergency services. Equip every sub-county hospital (Level IV) with an ambulance.
- Promote public health and sanitation. Initiate health education programs to the public, provide appropriate health facilities in all urban centres such as, toilets and smoking zones and strengthen enforcement of public health regulations
- Strengthen leadership, coordination and health financing. Provide financial and technical support to the health system to cover any financial gaps e.g. promoting signing up to NHIF through the network of health facilities across the county and coordinate health programs for local and external partners.

The optimal distribution of health facilities is essential in ensuring access to health services. *Map 51* shows the distribution of health facilities, optimal selection of facilities to upgrade for different levels of care and priority facilities for operationalization.

iii) Governance, Administration and Security

Whereas law enforcement, security and administration of justice is considered adequate in Kericho, their functionality, status and level of utilization is largely unknown and is coupled with uncoordinated county and national government activities. To curb this, initiatives aimed at improving synergy in provision of government services have been formulated as follows: *Map 52* shows the distribution of various governance, administrative and security institutions.

Policy Statement

Improve access to government and security services

- Modernization of physical infrastructure. This is aimed at reorganizing provision of governance services at the lowest administrative level. To do this there is need to prepare detailed inventory on infrastructure and staffing at these facilities. This will facilitate assessment of decentralized functions from the county and sub-county levels.
- Promote unity and cohesion among different communities in the county, organize and participate in peace building initiatives in collaboration with national institutions like NCIC through public barazas. This will also create awareness on government development programs.
- Promote coordination between the national and county administrative levels, liaise with the relevant national institutions to streamline county and national administrative structures to ensure seamless coordination of government services.

iv) Recreation, tourism, culture, sports and community services

Tourism sector is faced with a myriad of challenges ranging from undeveloped sites, poor access roads, lack of reliable transport to the sites, lack of signage and non-existent marketing.

Community centres are either non-existent or non-operational. These are social halls which are seldom available to the public. Recreation and sport facilities are concentrated in Kericho and Kapkatet towns (*Map 53*). Towards improving these standards, the following development strategies have been formulated.

Policy Statement

- 1) Empower local community through establishment of community centres
 - Improve well-being, participation of local community in social and economic development. Plan, construct and equip community centres with social halls, community libraries, recreation facilities, ICT centres, PWD and the aged facilities and county administrative offices among other facilities within recommended walking distance of 5 km.
 - Improve the social wellbeing of the vulnerable in the county through making an accurate register. Establish social protection program e.g. cash transfer to people living with severe disabilities and liaise with the national institutions for success of the *Inua Jamii* program. Strictly reserve a specific and substantial employment and business opportunities such as tenders to PWD in the county.
- 2) Enhance economic opportunities through sustainable tourism development
 - Planning, development and investment in tourism and cultural sites. Construct and equip various tourist and cultural sites, improve access to the sites and provide reliable transport to the sites.
 - Develop, package and promote, unique tourism products afforded by the county. Promote agro-tourism by planning and developing nature trails and tourism circuit across the beautiful rivers, forest, and tea landscape of the county.
- 3) Enhance economic opportunities, promote unity and cohesion through development of sports
 - Development of a sustainable and diverse sport and recreation industry. Construct, renovate and properly equip various stadia in major urban centres
 - Develop and nurture athletics talent in the County. Establish a countywide athletics talent identification program and develop a suitable facilities training and skill development.
 - Develop and nurture performing arts. Provide space and professional support to talented artists, establish at least one centre for performing arts and music in the county and organize regular concerts, sporting and cultural events such as marathons.

14.3.4. Provision of Functional Physical Infrastructure and Systems

In view of the national development strategies, the Transport and Infrastructure sector has been articulated as fundamental for national, regional and local development and growth. The Vision 2030 recommends integration of infrastructure development projects. The National Spatial Plan empowered by the Vision 2030, envisions the overall goal as to strengthen and create linkages to agricultural, tourist and urban areas. Contextually, the main strategy put forward by the Kericho County Spatial Plan intends to improve on physical infrastructure and related systems. The major aspects entail improving transportation, energy, water supply and sanitation systems. This will in turn provide consistent linkages to socio-economic drivers. Consequently, it is anticipated that the standard of living for the locals will significantly improve considering the economic potential of Kericho county. This is in tandem with the county goals for the transport and water sectors which are *“to improve standards of living through affordable, reliable and efficient transport and infrastructural systems”* and *“to promote the living standard of the County residents through ensuring affordable water and sanitation services, and a clean safe environment for all”* respectively.

This strategy will be achieved through the following objectives

- To enhance accessibility to institutions and services
- To facilitate transit of agricultural produce and inputs, to and from farms and markets
- To increase access to safe water and basic sanitation
- To enhance solid waste management
- To promote use of energy saving devices, and uptake and utilization of alternative renewable energy.

i) Transport

Policy Statement

Improvement of transport infrastructure and systems to enhance accessibility, linkages and free circulation. Map 54 shows transport and infrastructure development strategy.

This policy will be achieved through the following programs:

Roads

- **Separation of traffic:** Population influx directly increases capacity demand on the existing roads provisions. Primary arterial and urban roads on secluded sections have an overwhelmed capacity to accommodate human and vehicular traffic hence serious congestion. The county government shall liaise with other agencies including KENHA and KURRA to re-design roads to improve capacity and separate various forms of traffic. This will further enhance inter-modality and improve safety for road users.

- **Link Roads:** Key link roads and sections of poor condition or missing links will be identified and prioritized for opening up, improvement, upgrading & maintenance. This includes construction of by-passes and ring road to ease congestion in Kericho town as well as construction of bridges on some road sections.
- **Terminal Facilities:** The County Government shall acquire land for building new and expansion of existing terminal and parking facilities in urban areas. This will enhance better, faster circulation and an efficient, organized matatu industry for inter and intra-county travels.
- **Improvement and Maintenance of Rural Roads:** The county government will carry out grading, gravelling and routine maintenance of rural roads under the county's jurisdiction.
- **Improvement of Road Junctions Capacity:** Construct roundabouts and interchanges where there is traffic congestion.
- **Drainage in Urban Centres:** Improvement of drainage in urban centres.
- **Road Marking and Signage:** The county shall identify and liaise with national roads authorities to mark and install signage on roads.

Air

- **Securing Land for Air Fields:** The county government shall secure land for future development of air fields.
- **Upgrading of Kerenga Airstrip:** Measures will be instituted between KAA and the county government to upgrade Kerenga Airstrip infrastructure and operationalise it consequently promoting commercial usage.
- **Public Private Partnership in Air Transport:** The county government will reach an agreement with the private multinational airfields, to open them up to the public in cases of emergency services.

Rail

- Revival of existing railway line. The county government will liaise with other counties and Kenya Railways to operationalize the existing railway line within the viable regional economic bloc
- SGR Terminus in the county. The county government to liaise with the Kenya Railways to establish SGR termini within the county. This will open up the abutting areas for regional economic potential.

ii) Water and Sanitation

Urban Setting

In urban areas the key challenges are coverage of the reticulation system particularly in informal and peri-urban settlements, losses due to illegal connections and unaccounted

for water (UFW) and high cost of operations and maintenance. However, formation of commercially oriented autonomous water companies like KEWASCO and TILWASCO has significantly improved performance of service provision, cost recovery and sustainability.

The investment needs and maintenance costs for sewerage systems are much higher than for water supply systems. In areas where settlements are unplanned and consumption of water is low, sewerage systems cannot viably be built and operated. In Kericho town where sewerage systems exist, a large proportion of households are not connected due to a small are of coverage of the system. In other medium towns in the county sewerage services do not exist.

Rural Setting

Majority of rural water supply sources are non-piped systems. The small-scale piped systems face challenges of sustainability, reliability (insufficient source, maintenance) and water quality. Sustainability of rural water facilities is affected by limited community ownership of the water systems and insufficient maintenance. In addition, communities are often not adequately trained in running the installations and management aspects, such as book-keeping. They also register a high turnover of committee members. Many rural providers are not operating professionally enough and are not commercially-oriented, leading to low performance and collapse.

Sanitation issues do not yet receive the same attention as water in rural areas. Coverage of sanitation can only be achieved with basic sanitation installations responding to requirements such as number of users, security, environmental compatibility and acceptability.

Policy Statement

Sustainable access to safe water and sanitation to all. *Map 55* shows water sector development strategy.

This policy will be achieved through the following water and sanitation programs:

- **Expand access to safe water and conserve water sources**
 - **Completion of Development of a County Integrated Water and Sanitation Master Plan (IMaP):** The IMaP will outline strategies for universal access of Water and Sewerage Services in the county. It will also guide planning, implementation and management of water infrastructure in the county.
 - **Water Resources Management:** The county Government shall, in partnership with all stakeholders, put into place integrated land management programs for the county to facilitate conservation and preservation of water catchment areas and resources.
- **Increase sustainability, access and benefits of economies of scale**
 - **Completion of ongoing water supply projects:** The county will put in place a plan to improve the operational capacity for the existing water supply

schemes particularly those operated by KEWASCO and TILWASCO. This will be achieved by completing and expanding the already started feasible projects and construction of water treatment facilities.

- **Water Supply to Kericho Town and surrounding shopping centres:** Improvement of current system to reduce the water losses and enhancing the capacity.
- **Water Supply to Litein, Kapkatet and surrounding shopping centres:** Litein is a municipality and Kapkatet is an important strategic market for the region with many institutions. The two settlements are approximately 5 kilometres apart and would be viable to establish on water supply system for the two.
- **Water Supply to Londiani, Kipkelion and Fort Ternan Town and surrounding shopping centres:** The settlements fall on the same basin close to Kipchorian river and can take advantage of gravity to supply to Kipkelion and Fort Ternan from the ongoing Masaita dam in Londiani. Additional consideration for water harvesting and storage for the system to cater for irrigation in these lowlands of Buchenge, and Fort Ternan etc. Masaita dam is already in the national water master plan.
- **Water Supply to Kabianga, Chepyogaa urban area and surrounding shopping centres:** The settlement is currently receiving an influx of population due to the university and other education facilities, industries, and improvement of infrastructure. For efficiency, there is need to synchronize all the water supply schemes and enhance the capacity to meet the current and future demand.
- **Water Supply to Sondu:** sondu is a strategic town due to transport network and its centrality shared by our counties. It is also the proposed terminus for the SGR to Kisumu.
- **Water Supply to Kipsitet and Proposed Industrial Park urban area; Koru dam:** Kipsitet is a transit town and expected to be a dormitory town for the upcoming industrial park. The proposed industrial park is projected to have more than 30 industries.
- **Itare Dam:** Provide offtake to supply Chepsir, Chepseon, Kedowa and Londiani Junction water
- **Enhance investments and ownership for sustainable access to water in the rural areas**
 - **Strengthen Management of Water Supply Projects:** The County in consultation with other stakeholders shall consider increasing the capacity of the water user committees involved in water supply management.
 - **Water Supply to marginalized and isolated areas:** In the short term, the county shall consider doing borehole explorations and drilling in areas currently underserved particularly in the low lands. Kericho county is to consider the use of solar water pumping to ensure sustainable cost of pumping.

- Encourage household water harvesting measures through use of tanks to promote sustainable water supply.
- **Expand and increase sustainability of sewerage systems and solid waste management**
 - **Sewerage Services in urban areas:** The county government will expand sewerage system in Kericho urban area. This will entail upgrading and construction of connection of reticulation infrastructure in a bid to enhance utilization of existing treatment plants and service provision.
 - On the same note the county government will also plan and construct wastewater management facilities in major urban areas (Londiani, Kabianga, Litein and Kapkatet)
 - **Solid Waste Management:** Develop a solid waste management plan, with possibility of one plant and holding areas in major towns.

iii) Energy

Policy Statement

Enhance exploitation, harnessing and utilization of various forms of energy

- Encourage utilization of renewable energy including biogas from septic tanks which is the most common liquid waste disposal method in Kericho as well as from farms using bio-digesters.
- The county will promote new developments like housing, street lighting, among others to install with renewable energy source infrastructure such as solar panels.
- Encourage the use of energy saving cooking stoves in households and institutions.
- Training of alternative energy artisans.
- Establishment of energy resources development section.
- Encourage the residents to establish woodlots in their farms to provide firewood.



Map 54: Transport and Infrastructure Development Strategy

14.3.5. Proper Planning and Management of Human Settlements

The county is experiencing unprecedented growth with various development activities competing for space attributed to the fast growth of urban centres such as Kericho, Litein, Chepseon, Kipsitet and the proposed Soin industrial park. For the last ten years, the urban population has increased leading to horizontal expansion of urban areas. In rural areas, there is also demand for proper housing and sanitation. The plan overall goal is “*enhancing systematic and ordered human settlements through proper land-use planning*”. This will enhance balanced development, service delivery and provide better systems for governance. The objectives of the plan for this sector are:

- To encourage balanced and controlled development through land use planning and allocation of resources.
- Provide framework for implementation of urban and rural development projects
- To guide sustainable land-use development

Policy Statement

1) Creation of human Settlement hierarchy

In order to promote equal development and service delivery, the county government shall invest in strategic human settlement centres. The hierarchy is set to support development in the sectors of housing, employment creation, and social and physical infrastructure provision. Investment in these sectors will be streamlined to ensure there is a maximum economic return without compromising environmental sustainability.

To promote sustainable and balanced human settlement development, the following hierarchy structure will be adopted. A total of 87 settlements were evaluated and 15 of them have been identified as centres of strategic interests. The settlements are listed in *Table 54 and Map 56*.

Role of growth centre 1 and 2

These settlements have a key function as mainly administrative and shall play a key role in stimulating economy and supporting commercial activities. Kericho and Litein municipalities functions includes administration and also offers a wide range of commercial services such as banking, insurance and retail. Sub-county headquarters also serve administrative and commercial functions.

Role of growth centre 3

Growth centres in hierarchy 3 shall be promoted and developed for the purpose of regional balance. Value addition agro-based industries will be located here to provide employment opportunities and also act as a catalyst for attracting other investments such housing and retail related development. For instance in Kapsorok, the proposed Kapsorok university and proposed upgrade of Sondu-Kapsorok-Kipsitet road are expected to spur development.

To manage human settlements, the county must ensure sustainable expansion of urban centres. Conversion of agricultural areas into urban related activities shall be monitored

and controlled. Towns will not be allowed to spill over into environmentally sensitive areas such as wetlands, hilly areas or conservation zones. Development applications shall conform to development standards to be set by the county government to ensure conservation of land for food production and promotion of compact development for ease of service provision.

Table 54: Proposed Hierarchy of Settlements

| Growth Centre 1 Municipal Headquarters | Growth Centre 2: Sub-County Headquarters and Major Towns | | Growth Centre 3 | Others (Market & Rural Centres) | | |
|--|--|------------|-----------------|---------------------------------|-------------------|-----------------|
| Kericho | Ainamoi | Londiani, | Kapsorok | Tegat | Lemotit | Sosit |
| Litein | Sosiot | Chepseon | Mtaragon | Cheborge | Gwitu | Chemoiwa |
| | Kabianga | Kipkelion | | Torsogek | Sachang'wan | Cheboin |
| | Litein | Fort Tenan | | Simbi | Simboiyon | Cheplanget |
| | Kapkatet, | Kipsitet | | Iraa | Miti Tatu | Kipsolu |
| | Roret | Sigowet | | Kalyongwet | Londi-ani-Farmers | Kimugul |
| | Sondu | | | Soliat | Chepcholiet | Tepkutwet |
| | | | | Maili-Nne | Kiptewit | Kaylet |
| | | | | Tuiyobei | Bagoiyot | Kajeliba |
| | | | | Cheptuiyet | Kibugat | Cherara |
| | | | | Mindililwet | Kipsirichet | Kapkelek |
| | | | | Kapsaos | Kokwet | Chepngetuny |
| | | | | Tendwet | Chebirbei | Taplotin |
| | | | | Buchenge | Chepkemel | Kapcheban-goror |
| | | | | Kapseger | Kiplalmat | Kaitui |
| | | | | Kaptenet | Lelu | Kamaget |
| | | | | Jagoror | Mtaragon | Murao |
| | | | | Akwai | Kebeneti | Ndubusat |
| | | | | Kapcheplanga | Seretut | Nyairobi |

2) Planning and implementation of Urban Development Plans

In promoting sustainable human settlements, the county must implement the existing plans including the Kericho Municipality ISUD and Local Physical Development Plans prepared for Londiani, Litein, Kabianga and Sondu. Development control as stipulated in the physical development plans must be enforced. Other listed strategic towns need

urgent planning and will be part of development programs priority list. While planning these strategic human settlements, the plans will be accompanied by zoning guidelines and implementation mechanism. The new plans shall propose measures to control ribbon/linear development (discourage development along roads etc.)

3) Provision of key physical Infrastructure

For robust human settlement, provision of key physical and social infrastructure facilities is essential. The County must ensure that in all strategic human settlements, there is provision of critical services including waste management, emergency services, urban infrastructure, quality water supply, reliable energy supply and coordinated transport systems. Capital investment will be done in all towns.

4) Promotion of better urban governance

The county shall ensure that there is public participation in the management and daily running of urban development. The county will therefore fast-track the process of formation and operationalisation of various urban management boards/committee in all urban centres with priority given to selected strategic human settlement centres.

5) Promotion and provision of affordable housing

The Government of Kenya prioritises the need to provide housing to its citizens with an annual target of 138,000 units. A number of housing challenges face Kericho residents including high costs of buildings and lack of access to development funds. In recognising the need for the residents to access affordable and quality housing, the county government will work closely with the national government to realise this goal.

Priority housing projects shall be undertaken at all sub-county headquarters. Additionally, special attention shall be given to the other urban nodes in order of priority.

To achieve this goal, the following measures shall be put in place:

- **Zoning: Preparation of development plans shall ensure that special zones are set aside to cater for residential needs.** Various mixed-use developments will be introduced to ensure that people are accommodated close to place of work hence reducing travelling demands and the growth of informal settlements. In areas zoned for residential purposes, services shall be provided including social and physical infrastructure to ensure they are attractive and sustainable.
- **Affordable housing scheme:** To improve the number of units, the county government will foster a working relationship with the various sectors both private and public through:
 - i) Encouraging adoption of affordable and new building technologies
 - ii) House-pooling and
 - iii) Public-private partnership

- **Development of design schemes/prototypes for various housing zones**
 - i) Site and service scheme
 - ii) Prototype building designs
- **Informal settlement renewal and re-generation**
 - i) Creation of policies on minimum housing development standards.
 - ii) Slum upgrading schemes

14.3.6. Sustainable Utilization and Conservation of the Natural Environment

Environment and natural resources are valuable assets that must be sustainably utilized by the current and future generations. The natural resources include forests, surface and ground water, air, sunlight, and minerals while the environment is the totality of the surrounding including the physical features. The status of the environment in the county is threatened by unsustainable land uses and drastic effects of climate change. Nonetheless, the environment and natural resources offer a wide range of benefits and opportunities for the county and national economic development.

Tree cover and wetlands contribute significantly to environmental conservation. Kenya's forest cover is estimated at 7% (Kenya Natural Resources Alliance, 2017), natural and planted forests in Kericho covers about 23% of its land mass (Geo Maestro 2017). It is majorly contributed by the Mau and Tinderet Forests which are largely natural forests with selected areas reserved for woodlots. Planted forests exist in small pockets within tea plantations and private land. Other land uses included are conservancies e.g. Chebulu in Soim and other areas where land has been conserved in its natural state. These conserved areas are mainly covered by bushes.

Environmental degradation is more pronounced in the Nyando basin in comparison part of the county. This and other environmental challenges are dominant mainly due to lack of awareness and how they affect the quality of life. Farmers need sensitization and support for environmental conservation measures e.g. agroforestry, terracing and protection of riparian areas. The environment, natural resource and conservation goal of Kericho county is *“to promote for sustainability through proper utilization of the available natural resources and ensure a clean and safe environment for all”*.

Towards attainment of the goal, the following specific objectives were identified as drivers;

- i) Enhance enforcement of the existing Environmental policies;
- ii) Formulate environmental policies and domesticate national environmental policies;
- iii) Promote proper solid and liquid waste management systems;
- iv) Conduct regular spatial inventory of environmental resources to enhance protection and conservation;

- v) Promote environmental and conservation awareness

The proposed implementation policies and programs advocate for active participation of stakeholders at all levels. In this regard, a number of strategic actions will guide the implementation of this strategy.

Policy Statement

- 1) **Sustainable use, protection and conservation of natural environment.**

- **Proper coordination in implementation of environmental action plans**

Despite the Fact that development projects bring out positive socio-economic growth, there have been cases of negative environmental impacts. These have been brought about by projects failing to implement environmental management plans or lacking altogether. To mitigate environmental impacts, the county government shall take up an active role. Through the existing County Environment Committees, the county shall ensure there is a coordinated effort in overseeing implementation of environmental management plans committed by developers in the EIA study reports through county environmental committees.

Areas in need of urgent action include quarries in Kipkelion East and West, Bureti and Soin/Sigowet sub-counties, road projects and high-rise buildings.

- **Periodic Natural Resource Inventory**

To achieve sustainable resource utilization, the county government shall develop an inventory of its natural resources to take stock, evaluate and manage these resources. These shall be achieved through: -

- Establishment of a resource centre: The County will establish a one-stop environment and natural resource data and information centre. This centre will have a management system charged with collecting, collation, profiling, and analysing forms of natural resource data found in the County.
- Establishment of a database which will act as a baseline for further interventions, improvements, monitoring, and evaluation of strategies implemented to safeguard environmental resources.

- **Protection of Environmentally sensitive areas**

Environmentally sensitive areas within the county include rivers, swamps, forests, hilltops, cliffs, gorges and steep slopes. These areas when subjected to unsuitable land use will lead to environmental degradation whose effects to the general environment might be dire and hence require special protection. To protect these areas, the County will deploy sustainable land use mechanism including limited/ controlled land uses on hilltops and riparian areas.

- **Demarcation and Conservation of Water towers**

Kericho county is endowed with water towers that give rise to major rivers that drain to Lake Victoria. All these rivers among them Sondu, Kipchorian, and Nyando contribute

to water resources in other parts of the country thus enhancing the national efforts of making water secure when conserved. The county already has running programs in selected riparian areas where demarcation has been done and trees planted e.g. along Nyando river near Kipkelion town. Wetlands which are threatened shall be identified and conservation measures undertaken.

- **Establishment of Resource Management Plans**

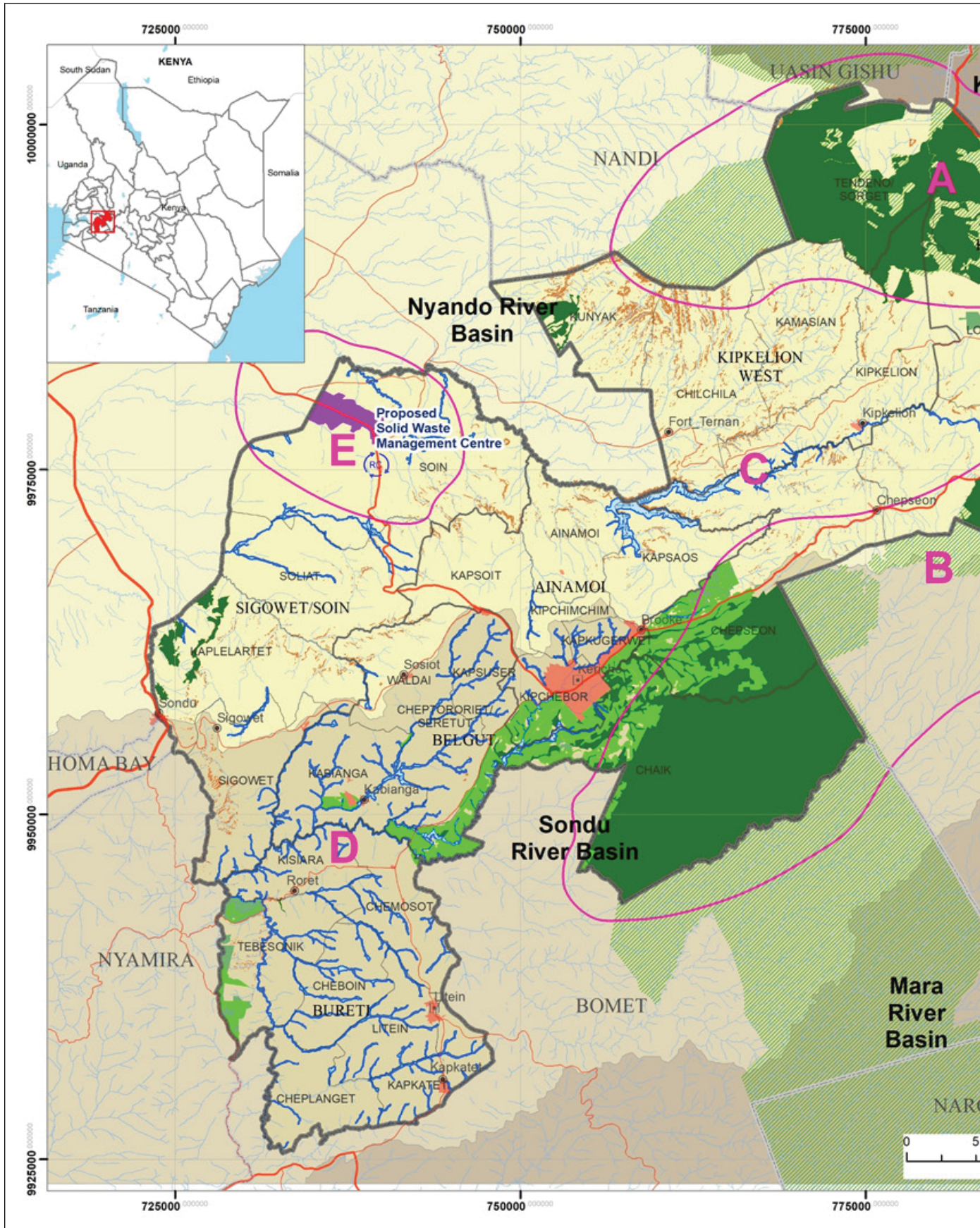
County Government shall prepare resource-based management plans to promote sustainable utilization of its resources. The plans will cover: -

- **Water Resource Master Plans:** The county government will call all other state actors in the water sector to develop a strategic water resources master plans so as to ensure equitable and sustainable utilisation of water resources. These includes identify water sources for current demands and future demands including acquisition and protection of strategic areas for development.
 - **Management of Catchment areas:** A multi-sectoral approach to bring together different departments whose functions and operations affect water resources in view of coordinating all their activities to ensure catchment protection, soil conservation measures and waste management. Priority shall be given to Nyando and Sondu catchment areas.
 - **Management of Solid Waste Disposal Sites:** Further consultations need to be undertaken to identify a strategic solid waste disposal site in Kipsitet considering the opportunity costs on land and subsequent costs relating to environmental, technical, social and economic impacts. Optimization of solid waste disposal shall include segregation at source, recycling and conversion to energy by the operator. Further, establish transfer stations in all towns.
 - **Trans-County Resources:** Natural resources cut across counties and require a coordinated approach in their management. Therefore, the county government of Kericho will coordinate and consult all the stakeholders including LVBDA, LVSWSB, WRA, WTA and neighbouring counties.
- **Public Participation on Environmental Utilization and Conservation**

Nyando basin is experiencing accelerated degradation due to the rapidly changing land uses. Residents take environmental issues seriously and the county need to take an active role to sensitize them more on environmental protection. Coordination of this strategy by Water, Energy, Environment, Forestry and Natural Resources ministry with Ministry of Agriculture and Livestock agricultural extension services is noble, given that a big percentage of the population are farmers.

- **Establishment of Tree Planting Program**

The County has seven gazetted forests comprising of the South Western Mau Forest Reserve that occupies a total area of 32,700 Ha, Makutano Forest covers 5,474 Ha, Tendeno Forest 723 Ha, Kuresoi Forest 7,366 Ha, Londiani Forest 9,015 Ha, Malagat Forest Station 3,137 Ha and Sorget Forest Station 6,856 Ha. Private



Map 57: Environmental Development Strategy

forests within the county are majorly owned by James Finlay Tea and Unilever Tea. The forests are situated in Londiani and within the tea estates. The county's forest cover is about 23% coverage with gazetted forests accounting for over 90% of forested areas. To improve forest cover to at least 10% of the county land, there is need to start afforestation and re-forestation programs especially in the farms. The county shall establish tree nurseries of suitable indigenous tree species in all the primary schools and county facilities. The trees will be supplied to the community to plant in their farms (woodlots).

- **Establish a Monthly Environmental Day**

Environmental clean-up in urban and environmentally sensitive areas shall be established and conducted monthly henceforth. This can be done in partnership with institutions and firms where a pool of resources both human and financial can be achieved. This program will create awareness on the need for a clean environment and instil environmental management consciousness to the locals.

- **Provide Government incentives on environmental conservation efforts**

The county government needs to further legislate on environmental laws which are county-specific and give incentives such as tax relief to entities that make specific efforts to incorporate environmental protection in their operations.



Implementation Matrix and Capital Investment Plan

The chapter outlines pragmatic implementation criteria for specific programmes and projects to actualize the county spatial plan. Further, it presents the capital investment plan on key projects as well as monitoring & evaluation criteria



15.1. Implementation Matrix

This section highlights strategies towards implementing the proposed interventions within Kericho county. It culminates framework for projects' implementation through a detailed matrix clearly showing different programs and concerned actors divided into various implementation timelines.

15.1.1. Agriculture

| Agriculture | | | Project phasing | | | Cost Estimates | Actors |
|--|--|--|------------------------|-------------------------|------------------------|----------------|--|
| Policy/Program | Projects | Program Description | Short term (1-2 years) | Medium term (3-5 years) | Long term (6-10 years) | Total Cost | |
| Safeguard agricultural lands against fragmentation/ land sub-division and urbanization | Map and delineate high and medium potential agricultural zones of the county. | Map and delineate the high and medium potential agricultural zones to enhance protection from encroachment of incompatible, unregulated and uncoordinated land uses. | | | | 6,000,000.00 | Ministry of Agriculture Livestock and Fisheries, KALRO, County Government of Kericho department of agriculture Livestock and Fisheries, NGO's & Public-Private-Partnerships. |
| | Review and revise county agriculture development policy | Review and revise the policy to outline the standards, recommendations and guidelines to be adhered to in the different agriculture potential zones. | | | | Internal * | |
| Promote Sustainable Agricultural Intensification | Adopt the proposed agriculture potential production zones based on the competitive advantage distinct to sub-counties | Establish a committee to oversee specialization agriculture Enforce area specific agriculture | | | | * | |
| | Introduction of drought resistant crops in the medium potential zone i.e. Soim area to boost food security and enhance productivity. | Introduction of drought-resistant crops or crop varieties. Promote growing of sweet potatoes, sorghum and millet by providing seedling to farmers at subsidized cost. | | | | * | |

| | | | | | | | |
|--|---|---|--|--|--|---|--|
| Promote Sustainable Agricultural Intensification | Develop irrigation schemes amongst farmers in the lower areas of Buchenge and Soin (proposed irrigation potential zones) for the county to boost productivity of high value crops such as horticulture. | Promotion of small holder irrigation techniques or the irrigation scheme approach to increase cropping intensities in lower areas of Buchenge and Soin | | | | * | Ministry of Agriculture Livestock and Fisheries, KALRO, County Government of Kericho department of agriculture Livestock and Fisheries, NGO's & Public-Private-Partnerships. |
| | Enhance County fish production program; where farmer sensitization will continue, provision of fingerling and related extension services to targeted farmers. | Investment support for fish farming. Enhance production and marketing of fish by recruiting and training on production and market access. Supporting fingerlings and fish feed supply through either initial subsidy and/ or development of necessary infrastructure. Promotion of fish production and consumption through field days, demonstrations and educational campaigns and facilitate fish farmers to organize themselves into farming and marketing groups for ease of market access and | | | | * | |
| | Construct new, renovate and operationalize the existing cattle dips especially in Kipkelion East/ West and lower parts of Soin/ Sigowet sub-counties. | Conduct baseline survey on livestock Provision of acaricides and establishment of Cattle to control ticks in parasites in the tick-infested areas | | | | * | |

| | | | | | | | |
|--|---|--|--|--|--|---|--|
| Promote Sustainable Agricultural Intensification | Establish fodder fields for the county in Kipkelion East and lower parts of Soin/ Sigowet due to land availability amongst farmers to promote fodder development hence sustainable livestock keeping. | Incentivize establishment of fodder fields among farmer groups Supply seeds at subsidized cost to farmers Provide extension services, baling machinery for hay. | | | | * | Ministry of Agriculture Livestock and Fisheries, KALRO, County Government of Kericho department of agriculture Livestock and Fisheries, NGO's & Public-Private-Partnerships. |
| | Continue the established program of AI to dairy farmers across the county for breed improvement towards better production. | Pluralize the AI program and service provision to dairy farmers for breed improvement | | | | * | |
| | Promote and enhance the apiculture program by providing standard beehives, extension services | Government to provide beehives, technology and assist farmers in marketing honey and products. | | | | * | |
| | Promote poultry farming across the county | County government to roll out incubator provision initiative. | | | | * | |
| | Promote and enhance county horticulture program/ initiative for high value crops across the county. | Supply of inputs to farmers by extension services Water supply to group farms Partnership with NGOs such as AMIRAN, ONE ACRE FUND etc for capacity building initiatives. | | | | * | |
| | | | | | | | |

| | | | | | | | | |
|---|---|---|--|--|--|----|--|----|
| Delivery of research, innovations, extension and advisory services. | Annual strategic/targeted/objective farmer trainings and seminars across all sub-counties on global best practices in agriculture to improve production, value addition etc. | | | | | ** | Ministry of Agriculture Livestock and Fisheries, KALRO, County Government of Kericho department of agriculture Livestock and Fisheries, NGO's & Public-Private-Partnerships. | |
| | Develop and equip functional information centres across all sub-counties to provide relevant information relating to agriculture such as market prices and enterprise specific manuals. Liaise with other departments to have one information centre at every sub-county office/headquarters. | Sensitization on the use of internet for research and building relevant knowledge base Establishing information centres to improve efficiency and effectiveness of limited extension service providers | | | | | | ** |
| | Complete and operationalize Soin Agriculture Training Institute by completing its construction and equipping it with necessary facilities | Construction works Capacity building initiatives. | | | | | | * |
| | Sensitize the annual Kericho Agricultural Show to all farmers across the county | Organize agricultural shows to create a venue where farmers market produces to suppliers and companies and learn new farming techniques. | | | | | | * |

| | | | | | | | |
|---|--|---|--|--|--|----|--|
| Delivery of research, innovations, extension and advisory services. | Partner with Kabianga University, Kenya Forest Service, Tea Research Institute and any other relevant institution to enhance research and innovations in agriculture sector. | Partnership with agricultural institutions to enhance research and innovation for enhanced production | | | | * | Ministry of Agriculture Livestock and Fisheries, KALRO, County Government of Kericho department of agriculture Livestock and Fisheries, NGO's & Public-Private-Partnerships. |
| | Support farmer cooperatives by enhancing cooperative fund to revive collapsed cooperatives, enhance existing ones and to offer training to members. | Revitalize Agricultural cooperatives to enhance collection, processing, storage and sale of produce. Securing credit, fertilisers, seeds and farm machinery | | | | * | |
| | Set up a fund to sensitize and empower the youth groups and women groups in agriculture, and to sponsor them to agribusiness ventures. | Advocating for implementation of youth women relevant policies Self-reliance skills to strengthen capacity of women and youth Trainings on small enterprise development for orphans and other vulnerable groups programs Sexual reproductive health and HIV/ AIDs, ICT training, vocational training and youth skills development. | | | | ** | |

| | | | | | | | |
|---|---|---|--|--|--|----|--|
| Delivery of research, innovations, extension and advisory services. | Develop the 50-acre Londiani demonstration farm that will be used for potatoes and pyrethrum, for seed multiplication, research and demonstration to farmers. | To boost production, there is need to promote potato and pyrethrum crops and popularize the same amongst the small holder farmers Demonstration cum multiplication farm for capacity building & propagation of enough quality and clean materials for farmers. | | | | * | Ministry of Agriculture Livestock and Fisheries, KALRO, County Government of Kericho department of agriculture Livestock and Fisheries, NGO's & Public-Private-Partnerships. |
| | Enhance the sugarcane demonstration and seed research farms at Soko Huru in Soliat to improve the quality of sugarcane variety in partnership with KALRO | -Capacity building of the farmer on the best agronomic and post harvesting practices. -Setting up sustainable demo farms targeting specific enterprises offers to boost local agricultural production | | | | * | |
| | Set up livestock, coffee and sugarcane demonstration farms in collaboration/ liaising with KALRO at Norman Brooke's farm located in Kunyak area | | | | | * | |
| Promotion of soil and water conservation (Proper integration of farming with the Environment) | Construction of pans within strategic locations. Roof-harvesting mechanism i.e. underground tanks | Construct water pans in Kipkelion west and Lowlands of Soin/Sigowet areas to boost water harvesting and storage. | | | | ** | |
| | Encourage mulching, infiltration ditches, terraces, strips | | | | | * | |

15.1.2. Economy and markets

| Economy and Markets | | | Project phasing | | | Cost Estimates | Actors | |
|--|---|--|--|-------------------------|------------------------|----------------|---|---------------|
| Policy/Program | Projects | Project Description | Short term (1-2 years) | Medium term (3-5 years) | Long term (6-10 years) | Total Cost | | |
| Promote economic prosperity through sustainable sector developments and enhancing market system. | Value addition farm extension services | Development of a mobile based database to record each farmer, farm acreage, GPS location of farm, LR number, agricultural produce and contact of the farmer. | | | | 15,000,000.00 | Ministry of Industrialization, Treasury, County Government of Kericho, NGO's, CDF | |
| | | Training of farm extension officers to include market information toolkits to farmers. Pluralistic approach (private and government officers) to enhance service provision | | | | 360,000.00 | | |
| | | Pilot market information mobile platforms (form of 2KUZE, Farm Crowdy or NAMPYA) to connect farmers with real-time information on food hub prices | | | | 1,800,000.00 | | |
| | Set up of a central farmers' markets food hubs | Conduct a market situational analysis in Kapkaret, Sondu, Kipkelion, Sosiot, Chepseon and Fort Ternan sites to establish market demographics and geography, market trends, market infrastructure and market SWOT | | | | 2,250,000.00 | | |
| | | Strategic joint venture between land owners, county government of Kericho and market vendors of Chepseon & Londiani Junction informal markets to build a community food hub with the title used as collateral and market stall rents collected through the county administration and paid to title holders | | | | ** | | |
| | | Organize farmers into targeted production level SME's based on the farmer data base to leverage on big 4 - food and nutrition security | | | | 1,000,000.00 | | |
| | Construct and improve market infrastructure in all the agricultural markets in the county with modern handling facilities | Establish agriculture produce market at Fort Ternan and Chepseon. | | | | * | | |
| | | Plan and construct usage areas to include; shades, handling, storage, washing areas in the entire agriculture produce markets in the county. | | | | | | |
| | Promote Kericho county competitiveness, productivity and entrepreneurship. | Designation of three (food basket, cash crop and industrial) Strategic Economic Planning Areas (SEPAs) | Designing of SEPA policies, land regularization and licensing | | | | | 1,000,000.00 |
| | | | Design the SEPA integrated plan in line with regional economies. | | | | | 30,000,000.00 |
| Community and investor summits to pitch SEPAs plan | | | | | | 9,000,000.00 | | |
| Regional Economic hubs | | Develop logistical hubs at Kericho, Sondu and Kipkelion | | | | * | | |
| Promote social inclusion and broad participation in the county's economy | Regularization of extractive industry | Survey and identification of plot titles regularization and infrastructure development within Kedowa, Roret quarries and borrow pits. | | | | 10,000,000.00 | | |
| | | Award of lease title to developers of light industry natural stone and sand harvesting with special condition | | | | - | | |
| | Build capacity for marketing of agricultural produce | Branding of extractive industry products eg. Kedowa stones, Roret sand. | | | | 6,000,000.00 | | |
| | | Set up a milk processing plant for the county at Kipkelion town | | | | 77,910,000.00 | | |
| | Improvement of agro-processing | Pack house for fruits at Ainamoi town. | | | | 10,000,000.00 | | |

15.1.3. Human Settlement

| Human Settlements | | | Project phasing | | | Cost Estimates | Actors |
|--|--|---|------------------------|-------------------------|------------------------|----------------|---|
| Policy/ Program | Projects | Project Description | Short term (1-2 years) | Medium term (3-5 years) | Long term (6-10 years) | Total Costs | |
| Development Control | Preparation of urban area plans | Brooke/Kapkugerwet, Kapsoit, Kapsorok Sosit Gilimori Mtaragon Cheborgei Kipchimchim Cheplanget | | | | 100,000,000 | County Government of Kericho, NGOs, Public-Private partnerships, KENSUP KUSUP |
| | Revision of urban area Plans | Kapkatet, Chepseon/ Chesinende, Kapsurer, Sosiot, Roret | | | | 30,000,000.00 | |
| | Finalization and approval of development plans | Completion of Ainamoi urban area plan | | | | *** | |
| | | Completion of Iraa market centre urban area plan | | | | | |
| | | Approval of Sondu urban area plan | | | | | |
| | | Approval of Londiani urban area plan | | | | *** | |
| | Develop a Land Information Management System (LIMS) | Approval of Kabianga urban area plan | | | | | |
| | | Approval of ISUDP for Kericho municipality | | | | | |
| | | Develop a land information database | | | | 10,000,000.00 | |
| | | GIS application development to execute land processes. | | | | | |
| | Enforce zoning standards/ guidelines and other implementation mechanisms | Search, registration and approval, revenue collection | | | | 10,000,000.00 | |
| | | To manage, update survey records (RIMS, Survey plans) | | | | | |
| Enforce zoning standards/ guidelines and other implementation mechanisms | Recruit enforcement officers | | | | * | | |
| | Empower the enforcement team | | | | * | | |
| Promotion of better governance | Intra-regional planning units to oversee plan implementation | Establish three planning units to further devolution of service; at Kipkelion, Kericho and Litein to serve two sub-counties each and reporting to County Planning Office. | | | | *** | |
| | Facilitate creation of urban management boards. | Recruitment of personnel for the municipal board for Litein and Kericho | | | | * | |
| Develop and promote affordable housing | Establish demonstration centres for affordable building practices. | Avail cheaper building technologies; soil stabilizing, interlocking blocks technology in Kericho, Litein, Sondu and Kipkelion at affordable cost to reduce construction costs | | | | * | |
| | Foster public-private partnership in providing affordable housing scheme for the residents. | Stakeholder engagement with housing and financing institutions in the case of Kericho, Kipkelion, Litein and Sondu. | | | | | |
| | | Establish housing schemes for low, medium and high-income groups for above mentioned towns. | | | | * | |
| | | Establish a committee to oversee/ monitor implementation of housing scheme projects. | | | | | |
| Land Banking | Securing land for housing, utilities and social infrastructure as proposed in the Kericho municipal IUSDP. | | | | | | |
| Carry out informal settlement renewal and regeneration. | Develop and enhance slum upgrading programs. | Completion, implementation and monitoring of KENSUP in Kericho municipality (i.e. Nyagacho, Majengo, Swahili village) | | | | 62,500,000.00 | |
| | | Develop low cost housing schemes in Litein, Londiani and Sondu as priority and all other urban centres to mitigate informal settlement | | | | * | |

15.1.4. Physical Infrastructure

| Physical Infrastructure | | | Project phasing | | | Cost Estimates | Actors | |
|--|--|--|---|-------------------------|-----------------------|----------------|---------------|--|
| Policy/ Program | Projects | Program Description | Short term (1-2 years) | Medium term (3-5 years) | Long term (6-10years) | Total Costs | | |
| Transport | Conduct assessment of road accessibility levels and circulation of modal traffic alongside the current road design and infrastructural provisions. | Opening up of high traffic roads, i.e., along B1 highway at Brooke Stage, Parkmart and Kisumu Junction in Kericho, Kapsoit market to open them up for road expansion and paving. | | | | * | | |
| | To enhance traffic separation on modal basis. Improve road design in a bid to separate motorized and non-motorized traffic on urban roads | Review and revise the policy to outline the standards, recommendations and guidelines to be adhered to in the different agriculture potential zones. | | | | * | | |
| | | Roll out a program to improve road design and install relevant road infrastructure at Litein and Kericho municipalities, Londiani Junction, Hill tee and Kapsoit | Construct foot bridge across the B1 highway at the Hospital road junction in Kericho town | | | | 20,000,000.00 | |
| | | Erect relevant traffic signage along the major highways B1, C23, C24, C35, C21, and C22. | Erect traffic lights at the roundabouts intersecting Isaac Salaat road- John Kerich road, Kenyatta/Temple road. | | | | * | |
| To improve linkages, accessibility, critical infrastructure and circulation of traffic. Redevelopment of key link roads that are in poor condition as well as relevant road infrastructure | Develop a database on all roads and identify roads with dis-links and poor surface condition within the county | Upgrade Sondu-Kapsorok-Kipsitet road to bitumen standard | | | | 677,500,000.00 | | |
| | | Upgrade Kipkelion-Hill Tee through Nandi county road to bitumen standard | | | | 125,000,000.00 | | |
| | | Upgrade Kipkelion-Kasheen-Kamasian-Lelu-Mtaragon- Kebeneti road to bitumen standard | | | | *** | KERRA | |
| | | Upgrade Kapsoit-Kenegut-Kipsitet road to bitumen standard | | | | 350,000,000.00 | KURA | |
| | | Upgrade Sitotwet-Torsogek-Kapkawa to bitumen standard | | | | 81,000,000.00 | | |
| | | Upgrade Buchenge-Masomborik to bitumen standard | | | | 36,000,000.00 | CGK | |
| | | Upgrade Fort tenan-Kokwet to bitumen standard | | | | 343,750,000.00 | | |
| | | Upgrade Barsielle-Tinga farm-Kamasian to bitumen standard | | | | 245,000,000.00 | | |
| | | Upgrade Kebeneti-Ndubusat-Chebamus-Chepkechei-Fort tenan road to bitumen standard | | | | 307,500,000.00 | | |
| | | Upgrade Soim Sugar-Chemaluk- Soliat-Soko Huru road to bitumen standard | | | | * | | |
| | | Upgrade/maintain Chepkemel-Kiptere road to murrum standard | | | | * | | |
| | | Upgrade/maintain Kapsorok-Soim sugar road to murrum | | | | * | | |
| | | Upgrade/maintain Sigowet-Chepkemel-Kapsorok-Simbi-Kipsitet road to murrum | | | | * | | |
| | | Upgrade/maintain Songoronik-Iraa-Soim sugar factory road to murrum | | | | * | | |
| | | Upgrade/maintain Kiptere-Kimoro-Soim sugar factory road to murrum | | | | * | | |
| | | Upgrade/maintain Ngoino-Kebeneti-Pefa-Chemosit to murrum | | | | * | | |
| | Upgrade/maintain Kusumek-Kiptui road to murrum | | | | * | | | |
| | Upgrade/maintain Kamanamsim-Samngat-Litein road to murrum | | | | * | | | |
| | Upgrade/maintain Chemosot-Kiptorogo-Kelelewa road to murrum | | | | * | | | |
| | Upgrade/maintain Cheboin-Tepkulwet-Kabsuiende road to murrum | | | | 152,500,000.00 | | | |
| Open up ring roads to ease circulation in Kericho municipality | Kaptesbeswet - Kiphimchim -Brooke, | | | | | * | Unilever | |
| | Kaptesbeswet -Tegat | Sosiot -Tegat- Kapsuser Kericho golf-course - Tea estates - Kapsuser Brooke-Kimugu -TRF-Saosa-James Finlays-Kapsuser | | | | * | CGK | |
| Construction of bridges on some road sections | Kipkelion AIC, Kunyak-Chilchila area, near Kongasis educational centre | | | | 10,000,000.00 | KERRA | | |
| Storm-water drainage upgrade and maintenance Kericho and Litein. | Siltation, solid waste disposal hazards which require frequent maintenance | | | | * | KURA CGK | | |

| | | | | | | | |
|--|---|---|---|--|--|----------------|--|
| Promote inter-modality for purposes of efficient travels and institute a system on local public transit and circulation. | Plan, construct and expand terminal facilities | Expansion and re-planning of bus terminus in Kericho, Kipkelion, Sondu, Londiani, | | | | * | CGK KENHA |
| | Prepare infrastructural development plan for the proposed Ring road due to safety of market vendors | Acquisition of land for construction of terminuses at Kapsait, Litein | | | | * | |
| | | Construct and operationalize local circuits in Hill Tee, Londiani Junction, and Kipsitet | | | | * | |
| | Policy enforcement & Enhancement of safety and security is a key issue for abutting land uses. | | Floodlights to be erected along major urban roads within the central business districts of urban centres Kericho Litein Sondu Londiani Chepseon | | | | |
| Local advertisement to communicate awareness on safety on roads to locals in urban areas Strategic engagements between traffic officer to drivers and pedestrians | | | | | | *** | |
| Improve access, boost commercialization and infrastructure development for Air transit | Upgrade Kerenga Airstrip infrastructure and operationalization | Stakeholder engagements to be initiated between KAA and the CGK on commercializing flights. | | | | 100,000,000.00 | KAA CGK |
| | | Installation of prerequisite infrastructure and implementation of recommended layouts to be conducted at Kerenga. | | | | | |
| Regional railway transit, be operationalized for both the existing and proposed SGR railway system for economic prospects | Renovate and reconstruct railway infrastructure within Lake Basin Economic Block | Refurbishment of existing railway lines (Kipkelion-Fort Ternan-Kisumu line, Kipkelion-Nakuru line) | | | | | CGK (Kisumu, Kericho, Nakuru) Kenya Railways Corporation |
| | | Reconstruction and re-design of terminuses at Kisumu, Fort Ternan, Kipkelion and Nakuru | | | | * | |
| | Purchase and placement of coaches in connection | | | | | | |
| | Lobby for location of an SGR Terminus at Sondu | Improve transport & urban infrastructure and services at Sondu to incentivize location | | | | | Kenya Railways Corporation |
| | Encourage use of railway services by offering incentives and advertising locational advantage to local industrialists | Subsidizing levies on goods being transported via the proposed infrastructure | | | | * | |
| | | | Lay out provisions for intermodal exchange at the terminal facilities mentioned above as well as the proposed Sondu SGR | | | | |
| | | | | | | | |
| Energy | Use of solar panel systems for street lighting | All major towns and municipalities | | | | | CGK |
| | Establish regulations to require new developments like housing, street lighting, among others to be accompanied with solar panels | All major towns and municipalities i.e. Litein and Kericho | | | | * | |
| Enhance exploitation, harnessing and utilization of various forms of energy in the spirit of resourcefulness, efficiency and sustainability | Incentivize households and institutions to utilize renewable energy sources and establish woodlots for fuel. | Training artisans on installations of biogas, solar power utilities etc. | | | | 3,000,000.00 | Kenya Power |
| | | Deploy enforcement team in the department of physical planning and urban development to ensure adherence to policy implementation | | | | * | KENGEN |
| Research and development to upgrade or modernize old infrastructure and systems | Modernization and refurbishment of electric supply utilities in the county | Renovate the power substation at Chemosit | | | | * | |
| | Conduct power resource potential research for the rivers. | Allocate fiscal and technical resources for research and exploration of the resource potential in Chemosit, Sondu-Itare rivers | | | | * | |

* Detailed Study and Assessment required to objectively cost project

** Multi-Sectoral Projects. Detailed Study and Assessment required to objectively cost project

*** Ongoing projects

15.1.5. Water Supply

| Water Supply | | | Project phasing | | | Cost estimates | Actors |
|--|---|--|---------------------------------|-------------------------------|---------------------------------|----------------|--|
| Policy/ Programs | Project | Program Description | Short term (1-2 years) | Medium term (3-5 years) | Long term (6-10 years) | Total Costs | |
| Supply of sustainable water to all residents through a county integrated master plan | Kapkatet | Litein is a municipality and Kapkatet is an important strategic market for the region with many institutions. The two settlements are approx. 5km apart and would be viable to establish on water supply system for the two. | | | | 49,750,000.00 | KEWASCO, County Government of Kericho, LVSWSB, National Government, Private Sector, Development Partners |
| | Litein | | | | | 861,345,000.00 | |
| | Kipkelion | The settlements fall on the same basin close to Kipchorian river and can take advantage of gravity to supply to Kipkelion and Fort Ternan from the ongoing Masaita dam in Londiani. | | | | 512,280,000.00 | |
| | Londiani | Additional consideration for water harvesting and storage for the system to cater for irrigation in these lowlands of Buchenge, Fort Ternan etc. | | | | 509,755,000.00 | |
| | Fort Ternan | Masaita dam is already in the national water master plan. | | | | 71,625,000.00 | |
| | Kabianga | The settlement is currently receiving an influx of population due to the university and other education facilities, industries, and improvement of infrastructure. | | | | 80,205,000.00 | |
| | Sondu | Is a strategic town due to transport network, the centre is a cosmopolitan as it is shared by four counties | | | | 143,660,000.00 | |
| | Kipsitet and the Proposed industrial park. | Kipsitet is a transit town and expected to be a dormitory town for the upcoming industrial park. The proposed industrial park is projected to have more than 30 industries. | | | | 72,690,000.00 | |
| | Chepsir, Chepseon, Kedowa | Utilize the Itare Project Proposed offtake at Chepsir to supply Chepsir, Chepseon and Kedowa (County to lobby for it) | | | | * | |
| Sustainable water access in rural areas | Densification of rural water schemes across the county and management through water user committees | | | | | ** | |
| | Encourage household water harvesting measures through use of tanks to promote sustainable water supply. | | | | | *** | |

* Detailed Study and Assessment required to objectively cost project

** County integrated water master plan to identify abstraction points and their viability.

*** Community sensitization

15.1.6. Social Infrastructure

| Social Infrastructure | | | Project phasing | | | Cost Estimates | Actors |
|--|---|---|------------------------|-------------------------|------------------------|----------------|---|
| Policy/Program | Projects | Project Description | Short term (1-2 years) | Medium term (3-5 years) | Long term (6-10 years) | Total Cost | |
| Education Promote access to basic education | Educational Facilities Inventory (GIS based schools database) | Prepare an inventory including geographical location of all the educational facilities (ECD Centres, Primary Schools and Secondary Schools) and carry out an assessment of their status in terms of location, physical infrastructure, staffing and enrolment. | | | | 10,000,000.00 | Ministry of Education, County Government of Kericho, NGO's, CDF |
| | Schools physical infrastructure improvement. (Implement the projects based on assessment above) | Renovate/improve ECD centres and construct sanitation facilities suitable for young children | | | | *** | |
| | | Liaise with the National Government and other stakeholders e.g. CDF to streamline improvement of physical infrastructure in primary and secondary schools. | | | | * | |
| | Promote access to education for people living with disabilities | Support integrated schools (e.g.Tendeno Primary School, Charera ECD and Primary School,Lelach Primary School and Kabokyek Adventist Secondary School) and equip them where required in liaison with Kenya Integrated Education Program through construction of ramps, provision of wheelchairs, hearing aid, braille etc. | | | | *** | |
| Improve institutional transition from primary to tertiary educational facilities | Support the needy students pursuing tertiary education | Empower needy students seeking enrolment in tertiary institutions and vocational training centres by providing funding support. County Scholarship Program to complement CDF and HELB | | | | *** | |
| Enhance quality of education | Develop or adopt standardized quality education programs | Adopt standardized ECD Curriculum from KICD | | | | *** | |
| | | Supply all the ECD centres with books and required teaching materials | | | | * | |
| | | Support Implementation of Digital Literacy, PREIDE and TUSOME programs in schools. | | | | *** | |
| | Improve staffing and management of educational facilities. | Employ qualified ECD teachers and provide incentives for motivation | | | | * | |
| | | Develop and Implement Training Curriculum for ECD Teachers in collaboration with TSC through Trainings during holidays | | | | * | |
| | | Implement an inspection program with specific timelines and structured feedback in all the schools | | | | * | |
| | | Carry out assessment on enrolment and staffing for primary and secondary schools and provide support where required | | | | * | |
| Secure land for educational facilities | Secure land for educational facilities | Survey, plan and acquire title deeds for (Approximately 350) Educational institutions that don't have. | | | | 35,000,000.00 | |
| Promote skills development | Strengthen Vocational Training and Polytechnics | Kapsorok University | | | | *** | |
| | | Establish internship programs to support and provide work experience to graduates from various institutions. | | | | ** | |
| | | Equip Ainamoi,Chebwagan and Tebesonik polytechnics with the relevant tools and equipment and hire qualified staff and tutors. | | | | 30,000,000.00 | |

| | | | | | | | | |
|---|--|--|--|--|--|---------------|---|---------------|
| Health Provide access to quality health care services. | Health facilities inventory (GIS based health facility database) | Prepare an inventory of all health facilities including their geographical location and carry out assessment on their physical status, staffing and utilization. | | | | 10,000,000.00 | Ministry of Health, County Government of Kericho, NGOs, KEMSA | |
| | Health facilities physical infrastructure improvement | Improve physical infrastructure of the health facilities and connect all the health facilities with electricity and water, sanitation facilities. | | | | * | | |
| | Address staffing levels through review of staffing needs and capacity requirements in all health facilities | Upgrade, staff and equip health facilities where needed based on assessment of population and Distribution | | | | | | |
| | | (a) Upgrade to Level IV 5 facilities (Kipsitet, Mugu-moini, Kamasega, Kabianga, Cheborge) | | | | | | * |
| | | (b) Upgrade to Level III 15 facilities (Tebe-sonik, Chepkunyuk, Chepsir, Kaitui, Kimugul, Kipsegi, Koitabuot, Manyoror, Seretut, Chebirir-bei, Kapsoit, Kamwingi, Segetet, Burutu, Litein | | | | | | * |
| | (c) Confirm working status and operationalize Level II 11 facilities (Chepkosilen, Kasheen Kapsegut, Nyalilbuch, Sitian, Kapsenda, Gwitu, Kimologit, Kelunet Keben, Butiik Dispensaries) | | | | | | | |
| | Enhance consistent supply of medical supplies such as drugs and consumables. | Enhance drug supply system with KEMSA, to ensure essential medicines are available at all times | | | | | | *** |
| Enhance provision of emergency services | Equip Roret, Kapkatet, Londiani, Kipkelion, Fort Ternan and Sigowet with an ambulance | | | | | 60,000,000.00 | | |
| Strengthen leadership, coordination and health financing | Sensitize community to sign up to National Health Insurance Fund (NHIF) through the network of health facilities across the county | | | | | | *** | |
| | Enrol the elderly (above 65) and PWD to NHIF Program by paying monthly contribution. | | | | | | * | |
| Enhance public health and sanitation | Promote public health and sanitation | Initiate health education programs to the public and strengthen enforcement of public health regulations. | | | | | ** | |
| | | Provide appropriate health facilities in public areas such as smoking zones and ablution blocks | | | | | *** | |
| | | Set aside land for cemetery in all subcounty headquarters (Londiani, Kipkelion, Sosiot, Litein, Kipsitet, Ainamoi) and maintain Kericho and Kapkatet Cemeteries which are full and poorly maintained | | | | | | * |
| Promote unity and cohesion | Enhancement of peace building initiatives through public participation. | Organize activities to promote coexistence like UWIANO and Nyumba Kumi* | | | | | ** | |
| Improve access to government services | Improve and equip infrastructure relating to public administration such as security centres and government offices | Carry out assessment of physical infrastructure in sub counties and wards and support areas with critical gaps | | | | | * | |
| Enhance devolution | County government to liaise with relevant national government institutions to ensure seamless decentralised services to the people | Set up a police station in Kabianga | | | | | 10,000,000.00 | |
| | | Set up police posts in Kipwastuiyo, Sigowet, Sokohuru, Kenegut, Kasheen and Gilimori | | | | | | 12,000,000.00 |
| | | Review to harmonize administrative units for the two levels of government within the county | | | | | | ** |

| | | | | | | | |
|---|--|---|--|--|--|---------------|---|
| Develop community centres | Improve participation of local community in social and economic development. | Establish 50 community development centres across the county to entail social halls, community libraries, recreation facilities, ICT centres, PWD and the aged facilities and county administrative offices within 5km reach. | | | | 60,000,000.00 | Ministry of Labour Ministry of Interior and Coordination of National Government, Ministry of Devolution and Planning, County Government of Kericho. |
| | | Provide support to registered self-help groups through financial grants and where possible support management. | | | | *** | |
| Enhance social inclusion of all persons | Improve the social wellbeing of the vulnerable in the county | Reach out to and register persons living with disabilities and the elderly (above 65 years) | | | | 30,000,000.00 | |
| | | Enhance support programs eg Inua Jamii and proposed NHIF support program. | | | | *** | |
| | | Revive Kericho Rehabilitation Centre and Seek Public Private Partnership to run the facility | | | | * | |
| Promote recreation | Development of a sustainable and diverse sport and recreation industry. | Improve recreation parks and spaces in Kericho (uhuru garden, moi garden and chelimo) and other public spaces in other major urban centres | | | | * | |
| Promote talent development | Develop and nurture talents such as athletics | Establish a formal process in the identification and registration of talent from school sporting events | | | | * | |
| | | Establish two comprehensive sports complex centre in the county (Expand and Equip Kapkatet and Kericho Stadium) | | | | 20,000,000.00 | |
| | | County Government initiate development of a sports facility within Proposed Kapsorok University. | | | | * | |

| | | | | | | |
|---|---|--|--|--|---------------|--|
| Plan, develop and invest on cultural and tourism sites | Construct and equip various tourist and cultural sites. | Fort-Ternan Pre-historic site: Construct a decent structure for the prehistoric site, develop a gallery, bring back the fossils preserved in Kisumu to the site, provide access road, put a signpost to show the location of the site, encourage education tours and market it in conjunction with National Museums of Kenya | | | 2,000,000.00 | Ministry of Tourism, Ministry of Sports and Culture, County Government of Kericho, KWS, KFS, KTB |
| | | Chebulu Conservancy: Demarcate the conservancy, plan and develop nature trails, provide access and market it in conjunction with KWS. | | | 1,000,000.00 | |
| | | Tulwap Kipsigis Cultural Site: demarcate the site, set up a gallery on the site, provide access road, put a sign post to show the location and market it. | | | 2,000,000.00 | |
| | | Chagaik arboretum, Chelimo arboretum, Tagabi Monkey Sanctuary; Support maintenance of the sites, provide access, put a sign post to show the location and market it in liaison with Kenya Tourist board | | | 1,000,000.00 | |
| | | Mau Forest: Provide access to Mau forest and develop a circuit between Mau forest and tea plantations. | | | * | |
| | | Kapkatet museum: Construct a new structure in a more prominent location, organize and develop a better and more spacious gallery for the artefacts, provide access and put a signpost to show the location of the site. | | | 2,000,000.00 | |
| | | Telkom Satellite Station at Samburet: Construct a resort, provide access and put a signpost to show the location of the site. | | | 2,000,000.00 | |
| Improve access to identified sites and provide reliable transport services. | | Construct, maintain all the access roads leading to various tourist sites and provide adequate signage for proper directions | | | * | |
| | | Organize and facilitate regular transport to various sites | | | ** | |
| Develop package and promote unique tourism products | Promote agro-tourism by developing nature trails and tourism circuits especially along rivers, forests and the tea-zones. | Develop Chelimo, Tagabi, Saosa, Tea Research, Chagaik as tourist circuit. | | | * | |
| | | Develop and implement strategic online and print adverts that appeal to various markets e.g. People interested in nature, adventure and relaxation. | | | * | |
| Develop and nurture performing arts talent and music | Establish a centre for performing arts and music as a cultural element | Incorporate a performing arts and music within Kericho Convention Centre | | | 20,000,000.00 | |
| | | Organise concerts and cultural events such as marathons to showcase the rich cultural heritage. | | | * | |

* Detailed Study and Assessment required to objectively cost project

** Multi-Sectoral Projects. Detailed Study and Assessment required to objectively cost project

*** Ongoing projects

15.1.7. Environment and Natural Resource

| Environment and Natural Resource | | | Project phasing | | | Coat Estimates | Actors |
|---|--|---|----------------------|-----------------------|---------------------|----------------|-----------------------------|
| Policy/Programs | Project | Project Description | Short Term (1-2 yrs) | Medium Term (3-5 yrs) | Long Term (6-10yrs) | | |
| Coordination of environmental matters and capacity building | Establishment and equip environment department | There is need for department to have capacity to monitor and manage the environmental issues effectively | | | | 50,000,000.00 | CGK NLC NEMA WARMA |
| Protection of Environmentally sensitive areas | Promote enforcement of environmental laws and policies. | The county government to ban washing of vehicles in rivers, investors to rehabilitate and reclaim borrow pits and quarries. | | | | 8,000,000.00 | CGK NEMA |
| Creation of environmental and conservation awareness | Public sensitization on the role of stakeholders on natural resource protection. | Collaborate with agriculture sector to train farmers on riparian conservation and emphasize on conservation agriculture | | | | 80,000,000.00 | CGK NEMA |
| Periodic Natural Resource Inventory | Establish environmental resource inventory | Carry out periodic inventory on environmental resources and establishment an information centre such as a GIS based database. | | | | 50,000,000.00 | NLC NEMA WARMA |
| Protection of Environmentally sensitive areas | Demarcate sensitive environmental areas | Sensitive areas include riparian corridors, steep slopes (above 25% slope) hills and forests. Riparian areas are under immense pressure from farming and urbanization. Protection of these areas through environmental conservation activities was identified as priority | | | | 2,500,000.00 | KFS NLC NEMA |
| Establishment of resource management plans | Establishment of Nyando Basin environmental regeneration plan | Regeneration plan will encompass planting of indigenous trees e.g. bamboo along the riparian corridors. Sensitization of conservation agriculture. | | | | * | NEMA WARMA |
| Creation of environmental and conservation awareness | Establishment of tree planting nurseries across all sub counties | Awareness creation on the need and methods for environmental protection such as tree planting programmes. Provide information on tree species and their suitability for conservation agriculture. | | | | 64,000,000.00 | KFS NLC NEMA |
| Creation of environmental and conservation awareness | County Environment day | The County can adopt world environmental day and organise activities in every sub-county. It will entail environmental cleaning, tree planting and public awareness | | | | * | KFS NLC NEMA |

| | | | | | | | |
|--|--|--|--|--|--|----|--------------------|
| Creation of environmental and conservation awareness | Encourage farm-based woodlots at household level to curb haphazard cutting of trees for fuel | Construction works | | | | * | KFS NLC NEMA |
| Establishment of resource management plans | Develop and operationalize proposed land-fill in Kipsitet | Enhance community sensitization and initiate CSR programmes | | | | * | KFS NLC NEMA |
| | Develop a management plan for quarries and borrow pits | Open quarries and borrow pits to be fenced by investors and where possible refilling to protect human | | | | * | NEMA |
| Establishment of resource management plans | Rehabilitation of the degraded dams and water pans of Barotion and Kipsigori dams. | It will entail demarcation, plantation of suitable vegetation buffer and desilting | | | | ** | NEMA |
| Creation of environmental and conservation awareness | Greening of Litein, Sosiot, Chepseon, Londiani, Kipkelion, Kipsitet, Ainamoi, Forttorman and Kericho urban areas | Planting of trees in open public spaces to curb urban heat island. Established tree nurseries and environmental days will play key role in this project. | | | | * | WARMA NLC |

* Detailed Study and Assessment required to objectively cost project

** Multi-Sectoral Projects. Detailed Study and Assessment required to objectively cost project

*** Ongoing projects

15.2. Capital Investment Plan

The Capital Investment Plan entails multi-year fiscal management metrics to be committed on an annual basis towards the proposed critical public infrastructure and investment projects. This plan is set to promote effective management of public capital assets to be used to implement county projects. Further, the county is able to outsource funding from relevant actors to make up for shortfalls in order to realize effective project implementation. The fiscal resources to finance these key projects may include general county budgetary allocation, project-specific grants from external sources among others. Quick win projects have been phased as to be implemented within 3years while the larger-scale initiatives are phased for implementation within the 10-year window period. CSP is a ten-year plan and therefore the projects have been phased out as follows; short term (2018/2019-2019/2020) budget years, medium term (2020/2021-2023/2024) budget years and long term (2024/2025-2027/2028) budget years.

15.2.1. Agriculture

| Policy/ Programs | Project | Project Description | Project phasing | | | 10-year Planning Cost estimates | Actors |
|--|---|--|-----------------------------|--------------------------------------|--------------------------------|---------------------------------------|--|
| | | | Short Term (1-2 yrs.) | Me- dium Term (3-5 yrs.) | Long Term (6- 10yrs.) | | |
| Strengthening agro-pro- cessing and val- ue-chain develop- ment. | Facilitate comple- tion and operation- alisation of Roret Pineapple Processing Industry | <p>Equipping of the industry with machinery and storage facilities.</p> <p>Completion of construction of waste disposal site.</p> <p>Capacity build the local farmers on pineapple farming to ensure steady supply of pineapples and other fruits.</p> | | | | 10,000,000.00 | Department of Agriculture (CGK) |
| | Construction of a county Poultry Slaughter House to be used by poultry farmers. | <p>Acquisition of land within the municipality to set up the slaughter facilities.</p> <p>In-depth feasibility assessment to be conducted to establish the actual cost of constructing a modern slaughter facility for poultry.</p> | | | | 5,000,000.00 | Department of Agriculture to take lead (CGK) |

| | | | | | | | |
|---|--|--|--|--|--|----------------------|---|
| <p>Deliv- ery of research, innova- tions, exten- sion and advisory services.</p> | <p>Completion and operationalisation of Soin Agricultural Training Institute</p> | <p>Completion of actual construction of blocks such as the Kitchen block.</p> <p>Staffing of the institute and student enrolment.</p> | | | | <p>12,000,000.00</p> | <p>Department of Agriculture, Department of Education (CGK)</p> |
| <p>Deliv- ery of research, innova- tions, exten- sion and advisory services.</p> | <p>Establishment of Agriculture Information centres at every sub-County agriculture department (ICT-Based)</p> | <p>Setting up of a sub-county farmer' database framework that will be used to collect, collate, manipulate and store farmer information.</p> <p>Building the capacity of sub-county agriculture officers to handle digital transfer of information to farmers.</p> <p>Setting up of central market information that will be used to provide market prices and other information.</p> | | | | <p>16,000,000.00</p> | <p>Department of Agriculture. (CGK)</p> |
| <p>Deliv- ery of research, innova- tions, exten- sion and advisory services.</p> | <p>Construction of Chelimo Agricultural Show Ground</p> | <p>Secure through land demarcation of the land to establish Feasibility assessment to be conducted to establish the extent of work.</p> | | | | <p>7,000,000.00</p> | <p>Department of Agriculture (CGK) Agriculture Society of Kenya.</p> |

| | | | | | | | |
|--|---|---|--|--|--|---------------|--|
| Promote Sustainable Agricultural Intensification | Enhancement of the established 'One Ward One Crop' initiative | Farmer training and capacity building to ensure adoption of the policy. Setting up of pilot projects i.e. setting up of demonstration farms. Introduction of specific high value crop to be promoted per ward. Enhancing of value chain systems to ensure sustainability of the program. | | | | 12,000,000.00 | Department of Agriculture, Crop Production Unit & Department of Trade. (CGK) |
| | Sustainable Dairy Development | Establish fodder fields for sustainable dairy farming | | | | | |

15.2.2. Economy

| Policy/Programs | Project | Project Description | Project Description | | | 10-year Planning Cost estimates | Actors |
|---|--|--|-----------------------|------------------------|----------------------|---------------------------------|---|
| | | | Short Term (1-2 yrs.) | Medium Term (3-5 yrs.) | Long Term (6-10yrs.) | | |
| Promote Kericho county competitiveness, productivity and entrepreneurship | Designation of three (food basket, cash crop and industrial) Strategic Economic Planning Areas (SEPAs) | Design the SEPA integrated plan in line with regional economies | | | | 30,000,000.00 | Department of Trade, Cooperative (CGK) |
| | Sondu Special Economic Zone | Integrated master-plan for terminal facility. Develop Industrial and commercial zones | | | | 20,000,000.00 | |
| Promote economic prosperity through sustainable sector developments and enhancing market system | Improvement of agro-processing | Set up a milk processing plant for the County at Kaptenet in Kipkelion area. | | | | 77,910,000.00 | Ministry of Industrialization, Treasury, County Government of Kericho, NGO's, CDF. (NG) |
| | Value addition farm extension services | Development of the County farmers' database using mobile phone-based data collection. The database will capture: farmers' demographics, farm size, Geo-point of farm, LR number, agricultural enterprises and contact of the farmer. | | | | 15,000,000.00 | |

15.2.3. Human Settlement

| Policy/ Pro-grams | Project | Project Description | Project phasing | | | 10-year Planning Cost estimates | Actors |
|--|---|--|--------------------------------|---------------------------------|--------------------------------|---------------------------------------|---|
| | | | Short Term (1-2 yrs.) | Medium Term (3-5 yrs.) | Long Term (6- 10yrs.) | | |
| De- vel- op- ment Con- trol | Preparation of Urban area plans and demarcation of urban extents. | Prepare a town plan for Kipsitet town including an action plan for the proposed Soin industrial park. | | | | 15,000,000.00 | County Government of Kericho, NGOs, Public-Private partnership, |
| | Develop a land information management system (LIMs) | Develop a land information database. GIS application development to execute land processes including search, registration and approval, revenue collection To manage, update survey records (RIMS, Survey plans) | | | | 25,000,000.00 | |
| | Equip building technology centres within all polytechnics. | Avail cheaper building technologies; soil stabilizing, interlocking blocks technology in all sub-counties at affordable cost to reduce construction costs | | | | * | |
| Pro- vision of key infra- struc- ture and afford- able hous- ing | Land Banking | Securing land for housing, utilities and social infrastructure as proposed in the Kericho municipal IUSDP. | | | | * | |

* Detailed Study and Assessment required to objectively cost project.

15.2.4. Transport, Infrastructure and Water

| Policy/Programs | Project | Project Description | Project phasing | | | 10-year Planning Cost estimates | Actors |
|---|--|--|-----------------------|------------------------|----------------------|---------------------------------|--|
| | | | Short Term (1-2 yrs.) | Medium Term (3-5 yrs.) | Long Term (6-10yrs.) | | |
| To improve linkages, accessibility, critical infrastructure and circulation of traffic. | Upgrade surface condition of key link roads | Upgrade Sondu-Kapsorok-Kipsitet road to bitumen standards | | | | 677,500,000.00 | CGK |
| | | Upgrade Fort tenan-Kokwet to bitumen standard | | | | 343,750,000.00 | CGK |
| | Open up ring roads for tourism and to ease circulation in Kericho municipality | Kericho golf-course - Tea estates - Kapsuser (Public access) | | | | * | CGK |
| | | Brooke--Earth station-TRF-Saosa-James Finlays-Kapsuser | | | | | |
| Upgrade Kerenga Airstrip | Installation of prerequisite infrastructure at Kerenga | | | | 10,000,000 | CGK KAA | |
| Re-plan-ning Sondu around proposed SGR terminus | Improve transport & urban infrastructure in Sondu to incentivize location | Re-view Sondu town plan to integrate location of industrial and commercial development as well as growth of the town around the proposed terminal facility | | | | 15,000,000.00 | CGK |
| Harness renewable energy | Jumpstart sustainable practices for harnessing solar energy and utilization | Public industrial and commercial developments to integrate solar systems for heating and lighting as part of approval requirements | | | | * | Investors CGK |
| County Integrated Water Masterplan | Enhance water supply to Kericho Municipality | Assess reticulation pipes and renovate them to combat leakages and curb water loss through illegal connections. | | | | 974,445,000.00 | KEWASCo. CGK, LVSWBS, National Government, Development Partners |
| | Improve water supply to Kabianga, as well as sewer system | Boost water supply volumes and improve reticulation infrastructure and sewer utilities | | | | 80,205,000.00 | |
| | Enhance water supply to Kipsitet urban area & proposed industrial park | Feasibility studies to be undertaken to utilize Koru dam as a water resource for proposed developments in Kipsitet | | | | 72,690,000.00 | |
| | Rural Water Supply | Densification of rural water schemes across the county and management through water user committees Community sensitization on rain water harvesting measures | | | | * | |

* Detailed Study and Assessment required to objectively cost project

15.2.5. Social Infrastructure

| Policy/Programs | Project | Project Description | Project phasing | | | 10-year Planning Cost estimates | Actors |
|---|--|---|-----------------------|------------------------|----------------------|---------------------------------|---------------------------------------|
| | | | Short Term (1-2 yrs.) | Medium Term (3-5 yrs.) | Long Term (6-10yrs.) | | |
| Health Provide access to quality health care services | Kipsitet health center to be upgraded to sub-county hospital | Construct other buildings to enhance capacity of the hospital. | | | | * | Dept. of Health services |
| | | Improve staffing and equipping in the facility to recommended standards. | | | | * | |
| Education Improve education access | Promote physical access to education institutions in Kunyak | Prioritize upgrade of roads to educational institutions in Kunyak area | | | | (Roads) | CGK, Natl. Government |
| | Enhance transition from secondary to tertiary institutions in Kunyak | Concentrate funds through County Scholarship Program, and CDF to assist students enrol in tertiary institutions | | | | * | |
| Tourism Promote tourism activities in collaboration with investors | Develop Chelimo, Tagabi, Saosa, Tea Research, Chagaik as tourist circuit including a nature road trail bordering Mau forest and tea estates. | Develop a convention centre preferably at the Satellite station in Kericho. | | | | 20,000,000.00 | Dept. of Tradec cooperative & Tourism |
| | | Provide road easement through Unilever and James Finlays Tea Estate for public access. | | | | * | |
| Social Facilities Develop community centres | Improve participation of local community in social and economic development. | Establish 50 community development centres across the county to entail social halls, community libraries, recreation facilities, ICT centres, PWD and the aged facilities and county administrative offices within 5km reach. | | | | * | CGK |

* Detailed Study and Assessment required to objectively cost project

15.2.6. Environment

| Policy/Programs | Project | Project Description | Project phasing | | | 10-year Planning Cost estimates | Actors |
|--|---|--|-----------------------|------------------------|----------------------|---------------------------------|--|
| | | | Short Term (1-2 yrs.) | Medium Term (3-5 yrs.) | Long Term (6-10yrs.) | | |
| Protection of Environmentally sensitive areas | Make an inventory, delineate and Reclaim environmentally sensitive areas | Identification, surveying and establishing extends of environmentally sensitive areas Reclamation of degraded areas | | | | 18,000,000.00 | Department of environment and natural resources. |
| Creation of environmental and conservation awareness | Trainings, campaigns and sensitization Establishment of tree planting nurseries across all sub counties | Train the public on environmental protection and their roles. Collaborate with agriculture sector to train farmers on riparian conservation and emphasize on conservation agriculture. | | | | 180,000,000.00 | |
| Annual Natural Resource Inventory | Establish environmental resource inventory | Carry out periodic inventory on environmental resources and establishment an information centre such as a GIS based database. | | | | 50,000,000.00 | |
| Prepare resource management plans | Establishment of Nyando and Sondu Basin environmental regeneration plan | Regeneration plan will encompass planting of indigenous trees e.g. bamboo along the riparian corridors. Sensitization of conservation agriculture. | | | | 20,000,000.00 | |
| Establishment of waste management plans | Develop and operationalize waste management plans for all urban centres and a strategic landfill for the County | Provide waste bins in all markets and urban centres Establish waste collection points in all towns and acquire a designated optimal land fill site at Kipsitet | | | | 50,000,000.00 | |

15.3. Community Participation

This entails integrating views of all interested parties (stakeholders) throughout the project planning and implementation processes. Public participation is key in decision-making with an aim of creating openness and dialogue. Benefits of community participation includes;

- Increases level of stakeholder commitments in decision making.
- Improves community/public understanding of development projects, their objectives and impacts on social, economic and environmental.
- Improves a sense of social responsibility among the community towards development projects.
- Increases equity within the society.
- Increases the effectiveness of project design and implementation to meet the target needs.

- Improves on project sustainability.
- Increases government credibility and legitimacy through transparent decision-making.

Different levels of community participation in a project include;

1) **Consultation**

Involves discussion, interviews, forums, debates, dialogue among others aimed at seeking advice and getting views from different stakeholders.

2) **Participation**

This involves the act of taking part in the project life cycle from inception until closure. Stakeholders participating in the project form part of the project team.

3) **Consensus**

Entails showing concurrence on matters relating to a project or different phases of a project. Gives way to the next project phase and ensures project rolls out in one accord and harmony.

4) **Empowerment**

This involves community capacity building through developing and strengthening people's skills, abilities and resources that need to survive and thrive over a longer period of time towards achieving high standards of life.

15.4. Monitoring and Evaluation

Monitoring and evaluation mechanisms ensure orderly development of Kericho County through promoting adherence to guidelines and regulations for efficiency in service delivery, economic prospects and creating harmony on both the social and environmental fabric of the County. The strong commitment to implementation will definitely launch the county forward towards *"A sustainable Agro-industrialized county fostering equitable socio-economic growth and environmental values"*. The CSP proposes the following tools for monitoring and evaluation.

15.4.1. Enforcement

Enforcement is a development control measure in ensuring that developments are in line with the approved planning policy guidelines towards ensuring sustainable built environment practices. It involves adherence to development guidelines and standards for various development types which include residential, commercial, industrial, transport and recreational facilities.

Land subdivision schemes, change of use, Extension of lease or user, building development plans and other developments plans within Kericho County shall be submitted for approval at the ministry of lands and physical planning.

15.4.2. Levies and development contributions

Levies relating to development control include application fees to development application permission (application made on PPA 1 forms) as well as approval fees. Other contributions arising from the built environment as a result of ordered development control include levies from land lease, advertisements, hiring of public parks, car parking, business permits among others.

15.4.3. Environmental Impact Assessment (EIA)

- EIA ensures that the projects to be undertaken are environmentally sustainable. Major projects within Kericho County shall be subject to EIA detailing the impact of the projects on the environment. The impacts should be investigated fully before undertaking the development works. Factors to consider for the EIA include:
- Influence on the ecology including effects of pollution and preservation of flora and fauna.
- Means of overcoming any identified challenges/ Problems.

Examples of projects to be subjected to EIA include establishment of the industries, establishment of recreational areas, development on major roads and creation of waste disposal sites such as the waste treatment works.

15.4.4. Social Impact Assessment (SIA)

SIA includes analysis, monitoring and management of social consequences arising from interventions which cause change in the social fabric of the human environment. All major developments undergoing EIA within Kericho shall be subjected to SIA. This is to ensure that the projects do not adversely affect the County dwellers.

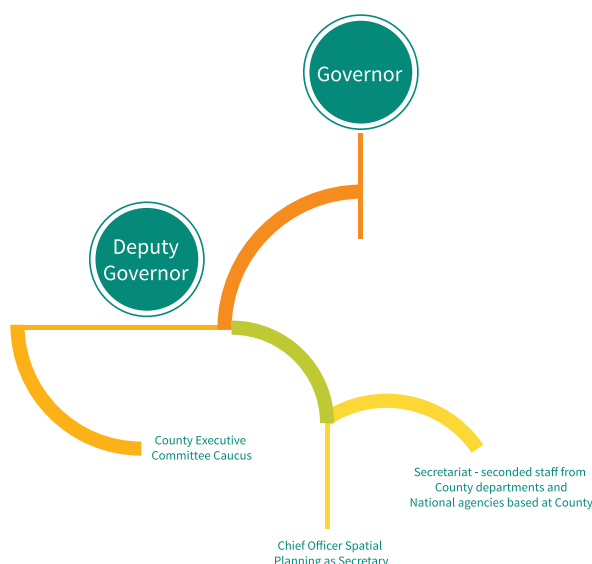
15.4.5. Digitized planning applications

One of the main deliverables of the Kericho CSP is the provision of a digital GIS-based database. The database is an essential tool towards ensuring an efficient mode of County management, especially on matters relating land management.

To promote efficiency in the development control, development plans for approval will be submitted in soft copy for easy integration within the database system. Minimum features for the plan will include development type, plot registration number and the owner.

15.4.6. Management, Monitoring and Evaluation Framework

Attainment of this vision wholly depends on implementation of policies, programs and projects. A committee is proposed through secondment of staff to spearhead this process as shown below. The committee will be guided by delivery indicators tabulated in the monitoring and evaluation framework below



| SECTOR PROJECT/PROGRAM | | MONITORING INSTITUTION(S) | DELIVERY INDICATORS | |
|------------------------|--|--|--|--|
| | | | EXPECTED OUTPUT | INDICATORS/RESULTS (of success) |
| AGRICULTURE | Safeguard agricultural lands against fragmentation/ land sub-division and urbanization | Department of Agriculture, Livestock and Fisheries | <ul style="list-style-type: none"> County agriculture development policies Mapped and delineated high and medium potential agricultural zones within the county | Better standards, recommendations and guidelines for agriculture potential zones Protected agricultural land from encroachment, incompatible and unregulated land uses |
| | Promote Sustainable Agricultural Intensification | | <ul style="list-style-type: none"> Implementation of agriculture potential production zones and area specific agriculture Irrigation schemes established in lower areas of Buchenge and Soin for better production Established fish production program. Construct new, renovate and operationalize existing cattle dips (Kipkelion East/West and lower parts of Soin/Sigowet sub counties) Establishment of fodder fields for the county in Kipkelion East lower parts of Soin/Sigowet sub counties due to land availability More dairy farmers across the county reached by AI program. Improved poultry farming across the county Established horticulture programs/initiative | Synergetic agricultural development and enhanced productivity Sustainable and technologically aided agricultural practices and production Reduced food production costs Boost food security (diverse food options) Boost production of high value crops such as horticulture Easy access to farming and extension services and products Improved livestock keeping methods |
| | Promotion of soil and water conservation | | <ul style="list-style-type: none"> Water pans constructed at strategic areas in Kipkelion West and lowlands of Soin/Sigowet Use of infiltration ditches, terraces strips, mulching etc. in farms. | Increased water harvesting and storage for irrigation Reduced soil erosion and degradation |

| SECTOR PROJECT/PROGRAM | | MONITORING INSTITUTION(S) | DELIVERY INDICATORS | |
|------------------------|--|--|--|---|
| | | | EXPECTED OUTPUT | INDICATORS/RESULTS (of success) |
| | Delivery of research, innovations, extension and advisory services | | <ul style="list-style-type: none"> Adequately trained farmers on global best practices Developed and equipped functional agricultural information centres across all sub counties A functional Soim Agricultural Training Institute Annual Kericho Agricultural Show Partnership between the county and Kabianga University, Kenya Forest Service, Tea Research Institute in research and innovation. 50-acre Londiani demonstration farm for potatoes and pyrethrum, seed multiplication, research and demonstration to farmers Partnership with KALRO for sugarcane demonstration and seed research farms at Soko Huru in Soliat Livestock, coffee and sugarcane demonstration farms in collaboration/liaising with KALRO at Norman Brooke's farm located in Kunyak area | <p>Improved agricultural production.</p> <p>Adoption of new technologies in agriculture sector</p> |
| ECONOMY & MARKETS | Promote economic prosperity through sustainable sector developments and enhancing market systems | Department of Trade, Cooperative and tourism, Department of Agriculture. | <ul style="list-style-type: none"> Mobile-based database with records of each farmer's farm acreage, GPS location of farm, LR number, agricultural produce and contact. Trained extension officers on market information toolkits to aid farmers market their produce. Pluralized approach on service delivery Established Central farmers' markets food hubs within urban areas Constructed and improved market infrastructure in all the agricultural markets within the county with modern handling facilities | <p>Increased competitiveness and value addition on agricultural produce.</p> <p>Better market systems for agriculture produce</p> |
| | Promote Kericho County's competitiveness, productivity and entrepreneurship | | <ul style="list-style-type: none"> County Integrated Strategic Economic Planning Areas (SEPA's) Integrated masterplan for terminal facility and develop Industrial and commercial zones at Sondu town. | <p>Specialized production zones.</p> <p>Special Economic Zones</p> |
| | Strengthening of agro-processing and value chain development. | | <ul style="list-style-type: none"> Extractive industry regularized through established laws i.e. developers of light industry, natural stone and sand harvesting with special condition Branded products from extractive industries e.g. Kedowa Stones, Roret Sand Improvement of agro-processing within all levels of the value chain i.e. A milk processing plant for the county at Kipkelion town, fruits Pack house for at Ainamoi town | <p>More agro-based industries established within strategic zones.</p> <p>Employment opportunities.</p> |
| HUMAN SETTLEMENT | Development Control | Department of Lands, Housing and Physical Planning | <ul style="list-style-type: none"> Physical development plans for 9 towns Revision of LPDP's for 5 towns Land Information Management System Enforced policy through trained enforcement officers. | <p>Enhanced capacities for trunk utilities and services</p> <p>Improved decision making for urban areas</p> <p>Efficient and fair record keeping & querying</p> <p>Improved revenue collection & generation</p> |
| | Promotion of better governance | | <ul style="list-style-type: none"> County Planning units at Kipkelion, Kericho and Litein Functional urban management boards Litein, Londiani, Kabianga, Sondu | Improved planning processes and decision making |
| | Develop and promote affordable housing | | <ul style="list-style-type: none"> Building technology demonstration centres in Kericho, Litein, Sondu, Kipkelion Housing Schemes by NHC and relevant financial institutions | Improved living standards and quality livable neighborhoods |
| | Land Banking | | <ul style="list-style-type: none"> Land acquired for housing and public utilities within Kericho municipality | Amount of land acquired. |

| SECTOR PROJECT/PROGRAM | | MONITORING INSTITUTION(S) | DELIVERY INDICATORS | |
|-------------------------|---|---|--|---|
| | | | EXPECTED OUTPUT | INDICATORS/RESULTS (of success) |
| | Carry out informal settlement renewal and regeneration | | <ul style="list-style-type: none"> Monitoring KENSUP projects in Nyagacho, Majengo, Swahili Village Low costing housing pilot projects in Litein, Londiani and Sondu | Urban neighborhood renewal with improved living standards |
| PHYSICAL INFRASTRUCTURE | Redevelopment of key link roads that are in poor condition and improvement of linkages, accessibility, critical infrastructure and circulation of traffic | Department of Roads, Public works and infrastructure | <ul style="list-style-type: none"> 198.4km of additional Bitumen roads and 63.6km of additional gravel roads Local transit ring roads in Kericho and Litein municipalities and other towns Bridges in Kipkelion, Chilchila and Kunyak areas Routine maintenance of rural roads | <p>Economic boom in Kipkelion and Soin areas through agro-industrial networks, tourism and urbanization</p> <p>Improved public transport and traffic circulation</p> <p>Improved living standards</p> |
| | To enhance traffic separation on modal basis and improvement of road design to separate motorized and non-motorized traffic on urban roads | | <ul style="list-style-type: none"> Paved high traffic roads, signages & traffic lights at roundabouts Footbridge across B1 highway at the Hospital Road junction | Improved road safety |
| | Promote inter-modality for purposes of efficient travels and institute a system on local public transit and circulation | | <ul style="list-style-type: none"> Functional Bus terminals (6) Road safety awareness campaigns | |
| | Improve access, boost commercialization and infrastructure development for air transit | | <ul style="list-style-type: none"> Commercial flights from Kerenga Airstrip | Tourism and trade economic boom |
| | Operationalization of regional railway transit for the existing and proposed SGR system | | <ul style="list-style-type: none"> Functional railway systems from the terminuses in Kipkelion, Fort tenan, Nakuru and Eldoret, Kisumu. Intermodal terminal facilities at the mentioned areas as well as the proposed Sondu SGR terminus | Increased business and trade |
| | Enhance exploitation, harnessing and utilization of various forms of energy for resourcefulness, efficiency and sustainability | | <ul style="list-style-type: none"> Solar panel systems for street lighting in all major towns and municipalities Biogas harnessing and consumption as a reliable energy alternative | Sustainable energy options and use |
| | Research and development to upgrade or modernize old infrastructure and systems | | <ul style="list-style-type: none"> Renovation of the power substation at Chemosit Hydro-power assessment report for Chemosit and Sondu-Itare rivers | Local processing plants and home craft centers |
| ENERGY | Harness renewable sources of energy | | <ul style="list-style-type: none"> Adoption of renewable energy sources such as solar power, biogas etc. Established woodlots within rural household level | <p>Usage of green sources of energy.</p> <p>Woodlots planted at household level</p> |
| WATER SUPPLY | Sustainable Water Provision through county integrated water and sanitation master plan | Department of Water Environment and Natural Resources | <ul style="list-style-type: none"> Water supply and waste water management systems for 2 municipalities, 6 urban areas, proposed industrial park and the surrounding areas. | Improved access to clean and safe water to all residents in the county |
| | | | <ul style="list-style-type: none"> Functional and densified rural water schemes, improved management of water schemes and household rain water harvesting | Improved hygienic conditions in human settlements |
| | | | <ul style="list-style-type: none"> Conserved natural resources i.e. water springs and rivers. | Sustainable agriculture development |
| SOCIAL INFRASTRUCTURE | Educational Facilities Inventory | Department of Education, Social Services, Youth and Culture | <ul style="list-style-type: none"> A GIS database of all education facilities. Education facilities information system | <p>Easy access to education information</p> <p>Tracking of student transition rates</p> |
| | Physical infrastructure improvement | | <ul style="list-style-type: none"> Adequate and well-equipped education facilities | <p>Increase in school enrolment</p> <p>Standard facilities.</p> |

| SECTOR PROJECT/PROGRAM | | MONITORING INSTITUTION(S) | DELIVERY INDICATORS | |
|------------------------------|---|--|--|--|
| | | | EXPECTED OUTPUT | INDICATORS/RESULTS (of success) |
| SOCIAL INFRASTRUCTURE | Promote access to education for people living with disabilities | Department of Education, Social Services, Youth and Culture | <ul style="list-style-type: none"> Provision of PWD friendly infrastructure Expansion of integrated schools | More PWD enrolled in education institutions. |
| | Support the needy students pursuing tertiary education | | <ul style="list-style-type: none"> Enhanced county bursary/loan application system for students. | Increase in transition and access to tertiary education |
| | Develop or adopt standardized quality education programs | | <ul style="list-style-type: none"> Standardized ECDE Curriculum from KICD Functional Digital Literacy, PREIDE and TUSOME programs in schools | Better proficiency in ICT knowledge |
| | Improve staffing and management of educational facilities | | <ul style="list-style-type: none"> Management system of education facilities Improved teacher: student ratio | Quality of education Management of schools |
| | Secure land for educational facilities | | <ul style="list-style-type: none"> Survey, plan and acquire title deeds for educational institutions | Issuance of title deeds |
| | Establish community development centres within 5km reach. | | <ul style="list-style-type: none"> 50 functional community development centres across the county. | More trained residents on technical skills Impart entrepreneurial skills. |
| | Health facilities' inventory | Department of Health Services | <ul style="list-style-type: none"> A GIS database of all health facilities. Health facilities information system | Easy access to health information. Database detailing the facility, management, ailments etc. |
| | Improvement of physical infrastructure of Health facilities' | | <ul style="list-style-type: none"> Health facilities connected with electricity, water and sanitation facilities Improved the physical infrastructure of health facilities (including PWD) | Standard health facilities. Easy access by PWD |
| | Review capacity requirements and staffing levels in all health facilities | | <ul style="list-style-type: none"> Adequate staffing, upgraded, and equip health facilities based on assessment of population and distribution Functional health facilities across the county. | Improved quality of healthcare Better access to healthcare |
| | Enhance consistent supply medical supplies e.g. drugs and consumables | | <ul style="list-style-type: none"> Constant availability of essential medicines through a drug supply system in conjunction with KEMSA. | Available drugs Reduced cases of loss of life |
| | Enhance provision of emergency services | | <ul style="list-style-type: none"> Health facilities equipped with ambulances and other emergency services | Reduced number of loss of lives during emergency instances |
| | Strengthen leadership, coordination and health financing | | <ul style="list-style-type: none"> Residents including PWDs and the elderly enrolled in National Hospital Insurance Fund (NHIF) | Increased number of residents under NHIF cover. |
| | Promote public health and sanitation | | <ul style="list-style-type: none"> Initiate health education programs to the public Strengthen enforcement of public health regulations | Reduced cases of disease spread Improved public health |
| | Enhancement of peace building initiatives through public participation | | Department of Social Service/ Ministry of interior coordination/ Ministry of devolution and planning | <ul style="list-style-type: none"> Organize activities to promote coexistence like UWIANO and Nyumba Kumi |
| | Improve and equip infrastructure relating to public administration | <ul style="list-style-type: none"> Improved security and administrative facilities | | Improved access to government services Improved security and crime fighting |
| | Decentralization of services by the County Government in liaison with relevant National Government institutions | <ul style="list-style-type: none"> Police station at Kabianga, 6 police post at strategic areas within the county. Review to harmonize administrative units for the two levels of government within the county | | Distribution of facilities across the county Better service delivery to residents |

| SECTOR PROJECT/PROGRAM | | MONITORING INSTITUTION(S) | DELIVERY INDICATORS | |
|--|--|---|---|---|
| | | | EXPECTED OUTPUT | INDICATORS/RESULTS (of success) |
| SOCIAL INFRASTRUCTURE | Development of a sustainable and diverse sport and recreation industry | Department of culture, youth and sports | <ul style="list-style-type: none"> Improved recreation parks and public spaces Establish a formal process in the identification and registration of talent from school sporting events Establish 2 comprehensive sports complex centres in the county Equip the existing Kapkatet and Kericho stadiums Develop a sports facility in the proposed Kapsorok University | <p>Increased number of residents engaging in recreation activities.</p> <p>Identified talents such as athletics</p> |
| | Construct and equip various tourist and cultural sites | | <ul style="list-style-type: none"> Improved infrastructure within the various tourist sites in the county | <p>Improved tourism (increase in number of local and foreign)</p> <p>Improved economic potential and development</p> |
| | Improve access to identified sites and provide reliable transport services | | <ul style="list-style-type: none"> Construct, maintain all the access roads leading to various tourist sites Provide adequate signage on roads Organize and facilitate regular transport to various sites | <p>Improved tourism (local and foreign)</p> <p>Improved economic potential and development</p> |
| | Promote agro-tourism | | <ul style="list-style-type: none"> Developing nature trails and tourism circuits especially along rivers, forests and the tea-zones Develop and implement strategic online and print adverts for various markets | <p>Improved tourism (local and foreign)</p> <p>Improved recreational activities</p> <p>Improved economic potential and development</p> |
| | Establish a centre for performing arts and music as a cultural element | | <ul style="list-style-type: none"> Incorporate performing arts and music within Kericho Convention Centre Organize concerts and cultural events such as marathons to showcase the rich cultural heritage | <p>Development and nurturing talents</p> <p>Improved tourism (local and foreign)</p> <p>Improved recreational activities</p> <p>Improved economic potential and development</p> |
| ENVIRONMENT & NATURAL RESOURCES | Establishment of an Environment Department for coordination of environmental matters and capacity building | Department of environment and natural resources, NEMA, Community | <ul style="list-style-type: none"> A functional department of environment and natural resources | Effective monitoring and management of environmental issues |
| | Promote enforcement of environmental laws and policies | | <ul style="list-style-type: none"> Environmental laws and policies Environmental enforcement team | Better management of environmental issues. |
| | Establishment of an environmental (natural) resource inventory | | <ul style="list-style-type: none"> Periodic inventory on environmental resources An information centre i.e. a GIS database to take count of environmental resources | <p>Protection of the environment</p> <p>Improved decision making on utilization and preservation of natural resources</p> |
| | Establishment of the Nyando Basin environmental regeneration plan | | <ul style="list-style-type: none"> Planting of indigenous trees e.g. bamboo along riparian corridors Sensitization of conservation agriculture | <p>Increased riparian cover</p> <p>Improved agriculture practices</p> |
| | County Environment Day | | <ul style="list-style-type: none"> Adoption of the world environmental day through activities such as environmental cleaning, tree planting and public awareness in every sub county Establishing tree nurseries | Increase in tree cover |
| Establishment of resource management plans | <ul style="list-style-type: none"> A functional landfill in Kipsitet and transfer stations in all towns. A management plan for quarries and borrow pits Rehabilitated degraded dams and water pans of Barotion and Kipsigori dams | <p>Protection and conservation of the environment</p> <p>Prevention of quarry related accidents</p> <p>Prevention of spread of diseases</p> <p>Economic development</p> | | |

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Annexes

Annex A: Kericho County Population Per Ward

Population Size Per Wards. Source, KNBS 2009.

| Ward name | Male | Female | Total population | Population density |
|---------------------|-------|--------|------------------|--------------------|
| Ainamoi | 8641 | 8730 | 17371 | 327 |
| Chaik | 11205 | 8692 | 19897 | 81 |
| Cheboin | 11161 | 11510 | 22671 | 504 |
| Chemosot | 13190 | 13120 | 26310 | 517 |
| Cheplanget | 13188 | 13614 | 26802 | 674 |
| Chepseon | 18335 | 17491 | 35826 | 198 |
| Cheptorriet/Seretut | 10261 | 10361 | 20622 | 542 |
| Chilchila | 15636 | 15428 | 31064 | 298 |
| Kabianga | 17332 | 17452 | 34784 | 512 |
| Kamasian | 10010 | 9969 | 19979 | 248 |
| Kapkatet | 10659 | 10919 | 21578 | 620 |
| Kapkugerwet | 13076 | 12802 | 25878 | 1586 |
| Kaplelartet | 15476 | 15675 | 31151 | 294 |
| Kapsoit | 13657 | 13887 | 27544 | 472 |
| Kapsuser | 9753 | 9515 | 19268 | 599 |
| Kedowa/Kimugul | 17748 | 18085 | 35833 | 149 |
| Kipchebor | 13975 | 12664 | 26639 | 716 |
| Kipchimchim | 5990 | 5680 | 11670 | 642 |
| Kipkelion | 12535 | 12811 | 25346 | 240 |
| Kisiara | 10361 | 10871 | 21232 | 554 |
| Kunyak | 11080 | 10585 | 21665 | 322 |
| Litein | 12672 | 12838 | 25510 | 557 |
| Londiani | 11966 | 12361 | 24327 | 273 |
| Sigowet | 17760 | 18123 | 35883 | 495 |
| Soliat | 8052 | 7963 | 16015 | 163 |
| Tebesonik | 10502 | 10302 | 20804 | 320 |
| Tendeno/Sorget | 5545 | 5341 | 10886 | 47 |
| Waldai | 16108 | 16708 | 32816 | 578 |
| Soin | 10638 | 10379 | 21017 | 109 |
| Kapsaos | 14521 | 14520 | 29041 | 513 |

Annex B: Health Facilities Inventory Questionnaire

Kericho County Spatial Plan: Health Facilities Inventory Questionnaire.

Introduction

Questionnaire No.Name of respondent.....
Occupation.....Ward.....Gender.....Name of
the Facility.....Name of interviewer.....Date of
interview.....

Part A: About the Physical Infrastructure

- 1) Year the facility was opened
- 2) Status of the Facility
 - a) Functional
 - b) Non-Functional
 - c) Under Construction
- 4) Building/Structure Condition
 - a) Roof
 - i) Good
 - ii) Fair
 - iii) Poor
 - iv) Very poor
 - b) Floor
 - i) Good
 - ii) Fair
 - iii) Poor
 - iv) Very poor
 - c) Walls
 - i) Good
 - ii) Fair
 - iii) Poor
 - iv) Very poor

4) Equipment Facility: On a scale of

| Equipment | Availability | Remarks |
|--|--------------|---------|
| Ambulance | Y/N | |
| Lab equipment | Y/N | |
| Storage Facility (Fridge) | Y/N | |
| Bed(s) | Y/N | |
| Washroom | Y/N | |
| Waste Disposal Facilities (incinerators, bins) | Y/N | |

5) Water

- a) Adequate
- b) Fair
- c) Inadequate
- d) No supply

6) Electricity

- a) Adequate
- b) Fair
- c) Inadequate
- d) No supply

Part B: Human Resources

Personnel

| Designation | Number | Remarks |
|----------------------|--------|---------|
| Doctors | | |
| Clinical Officers | | |
| Nurses | | |
| Records Officers | | |
| Specialist (Specify) | | |
| Support Staff | | |

Part D: Operations/Services

- 7) Average Number of Patients over the last 12 months
- 8) Common Ailments handled by the centre [Provide the top 5] (e.g. Malaria, Typhoid, Common Cold, cancer, diabetes etc.)
- 9) Availability of Maternity (Yes, No)
- 10) Availability of Prenatal services, (Yes, No)
- 11) Availability of Postnatal Services, (Yes, No)
- 12) Frequency of essential Medical Supplies (...syringes, gloves, detergents etc.)
 - a) Adequate
 - b) Fair
 - c) Inadequate
 - d) No supply
- 13) Frequency of essential Drug Supply
 - a) Adequate
 - b) Fair
 - c) Inadequate
 - d) No supply

NB: Primary Health Care Services Mandate

Comprise all dispensaries (level 2) and health centres (level 3)

- Disease prevention and health promotion services.
- Basic outpatient diagnostic, medical surgical & rehabilitative services.
- Ambulance services.
- Inpatient services for emergency clients awaiting referral, clients for observation, and normal delivery services.
- Facilitate referral of clients from communities and to referral facilities.

Annex C: Household Questionnaire

Kericho County Spatial Plan: Household Survey Questionnaire 2017

Introduction/Respondent's Information:

Questionnaire No. Name of Respondent.....

Occupation.....Ward.....sub-county.....Gender.....

Household Size..... Name of interviewer.....Date of interview.....

- i) Which type of housing is the household living in?
- a) Mud with grass thatched roof b) Mud with iron sheet roof c) Stone house with iron sheet roof d) Wooden house with iron sheet roof

We are surveying people about their household conditions and the services available in Kericho County. Findings from the survey will be incorporated in the County Spatial Plan and will be used by the County Government of Kericho in planning for development of the county for 10-year period 2017 – 2027. All information you provide will be kept confidential and will not be shared with anyone other than members of our survey team.

Part A: Household Socio-Economic Characteristics

- 1) What is your most regular source of income payments during a typical month?
- a) Farming b) Trading/Business c) Casual work d) Construction work e) Professional work e.g. lawyer, nurse f) Teaching g) Government work (Employed by GoK or CG) h) Artisan Work (jua kali, welding, carpenter) i) Other: _____ Approximately how much do you receive per month from the income source(s)?
- b) Below 3000 b. 3001-5000 c. 5001-10000 d. 10001-20000 e. 20001-30000 f. 30001-40000 g. 40001-50000 h. Above 50000 _____
- 2) Where do you earn this income from?
- a) Within my ward, within my subcounty b) Outside my ward, within my subcounty c) Outside my subcounty, within Kericho county d) Outside Kericho County: _____ (indicate)
- 3) Household Average monthly expenditure on:

Food

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

School Fees

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

Farm Input

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

Clothing

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

Medical/Health

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

Transport

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

Housing Rent

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

Electricity

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

Cooking Fuel

- a. Below 500 b) 501-1000 c) 1001-2000 d) 2001-3000 e) 3001-4000 f) 4001-5000 g) 5001-10000 h) Above 10000

4) Main source of drinking-water for members of your household?

{Tick one which is main}

- b. Piped water into dwelling b) Tube-well/borehole c) dug well d) Spring e) Rainwater collection f) Water vendor g) Surface water (river, dam, lake, pond, stream, canal, irrigation channels) h) Bottled water i) Other

5) Main source of Domestic water i.e. cooking and hand washing?

{Tick one which is main}

- a) Piped water into dwelling b) Tube-well/borehole c) dug well d) Spring e) Rainwater collection f) Water vendor g) Surface water (river, dam, lake, pond, stream, canal, irrigation channels) h) Bottled water i) Other

6) Main Source of water for watering livestock

{Tick one which is main}

- a) Piped water into dwelling b) Tube-well/borehole c) dug well d) Spring e) Rainwater collection f) Water vendor g) Surface water (river, dam, lake, pond, stream, canal, irrigation channels) h) Bottled water i) Other

Challenges on access to water (list 3)

.....

Which 3 immediate concerns do you wish the plan to address in this sector (in order of priority)? (list 3)

- 7) Main Source of cooking fuel
- {Tick one which is main}*
- a) Firewood b) Gas c) Charcoal d) Electricity e) Biogas f) Other: _____
- 8) Main Source of lighting
- {Tick one which is main}*
- a) Solar b) Wind c) Electricity d) Paraffin e) Gas f) Other: _____
- Challenges on access to energy

- Which 3 immediate projects do you wish the plan to address in this sector (in order of priority)? (list 3)
- 9) Sanitation method used by the household (Tick one)
- a) Pit Latrine b) Flush WC to Septic tank c) Flush WC to sewer system d) VIP Latrine
 e) Other.....
- 10) Means of solid waste disposal method used by the household (Tick one)
- a) Composite pit b) Indiscriminate dumping c) Burning d) Collected by county Government
 b) Collected by private garbage collectors
- Challenges on sanitation (list 3)

- Which 3 immediate projects do you wish the plan to address in this sector (in order of priority)? (list 3)

Part B: Land Ownership/Tenure system

- 11) Nature of home occupancy (Tick one)
- a) Owned b) Rented c) Squatting
- 12) Nature of land ownership/tenure (Tick one)
- a) Freehold/private b) Leasehold c) Community land d) Squatting
- 13) Approximate size of land (in acres) (Allow decimals)

- 14) Documents of land ownership (Tick one)
- a) Title Deed b) Agreement c) Allotment letter d) None
- 15) Main Activity carried out on this parcel of land (Tick one)
- a) Commercial b) Residential c) Agriculture d) Industrial e) Other..... (specify)
- 16) Duration lived on current residence (Tick one)
- a) 0-5 years b) 5-10 years c) Over 10 years
- Challenges facing land (list 3)

.....
 Which 3 immediate projects do you wish the plan to address in this sector (in order of priority)? (list 3)

Part C: Transport

17) Mostly used mode of transport? (Tick one)

- a) Cycling b) Motorcycle (Bodaboda) c) Private Car d) PSV e) Other..... (Specify)

18) Mode of transport to: (tick appropriately)

| | Walking | Cycling | Motor cycle | Private car | PSV | Other(specify) e.g. school bus |
|-----------------------|---------|---------|-------------|-------------|-----|-----------------------------------|
| School | | | | | | |
| Market | | | | | | |
| Health Centre | | | | | | |
| Work | | | | | | |
| Shopping | | | | | | |
| Other (specify where) | | | | | | |

19) Distance travelled to the following service areas (allow decimals)

| Service Area | Distance (in km) |
|--|------------------|
| Nursery school | |
| Primary school | |
| Secondary School | |
| Village Polytechnic | |
| Primary Shopping Centre i.e. corner shop | |
| Secondary Shopping centre i.e. supermarket | |
| Dispensary/Health Centre | |
| Hospital with in-patient facilities | |
| Administrative/civic offices | |
| Bus/Matatu stop | |
| Cattle dip | |
| Tea buying centre | |
| Milk collection centre/coolers | |

Challenges on Transport (list 3)

.....
 Which 3 immediate projects do you wish the plan to address in this sector (in order of priority)? (list 3)

Part D: Agriculture and market

- 20) Purpose of farming engaged in. (*Tick one*)
- a) Subsistence b) Commercial c) Both
- 21) Main agricultural activity engaged in (*Tick one*)
- a) Crop farming i.e. tea, coffee, maize, sugarcane etc.
 - b) Livestock farming i.e. dairy, beef
 - c) Aquaculture (Fish Farming)
 - d) Horticulture fruits, vegetables
 - e) Mixed farming
 - f) Apiculture (Bee Keeping)
- 22) Size of land under mentioned agricultural activity (*in acres*) (*allow decimals*)
.....
- 23) Main channel used to sell crop produce (*Tick one*)
- a) Individual b) Middleperson c) Cooperative d) NCPB e) Other (specify).....
- 24) Member of an agricultural cooperative (*Tick one*)
- a) Yes... b) No.... If yes, name of the cooperative.....
- 25) Challenges on crop farming (*list 3*)
.....
Which 3 immediate projects do you wish the plan to address in this sector (in order of priority)? (*list 3*)
.....
- 26) Main animals reared (*Tick one*)
- a) Dairy cattle b) Beef cattle c) Dual Purpose cattle d) Goats e) Sheep f) Pigs g) Poultry h) Bees
 - b) Fish
- 27) Main channel used to sell livestock produce (*Tick one*)
- a) Individual b) Middleperson c) Cooperative d) NCPB etc.) Other (specify).....
- 28) Challenges on livestock farming (*list 3*)
.....
Which 3 immediate projects do you wish the plan to address in this sector (in order of priority)? (*list 3*)
.....

Part E: Environment and natural resources

29) Environment and natural resources available in the area (*resource and name*)

| Natural Resource | Name |
|--------------------------------|------|
| River | |
| Forest | |
| Wetland e.g. swamp, dam | |
| Tourist attraction site | |
| Hill, Valley, cliff, fall etc. | |
| Mining, Quarrying | |

30) How does the community benefit from the above resources? (*list 3*)

.....

Challenges on environment (list3)

.....

Which 3 immediate projects do you wish the plan to address in this sector (in order of priority)? (list 3)

Part F: Civic/ Public Services

Please provide the following information pertaining to the following.

| Institutions | Availability 1. Yes 2. No | Distance covered from dwelling unit. |
|---------------------------------------|---------------------------------|--------------------------------------|
| 1. Local Administration (chiefs camp) | | |
| 2. AP Camp/ Police station | | |
| 3. Market | | |
| 4. Post Office | | |
| 5. Community centre/social hall | | |
| 6. Firefighting facility | | |
| 7. Public Library | | |

Part G: CONFLICT RESOLUTION

31) Which institution assists you in settling disputes locally?

32) Chief/sub-chief 2. Elders 3. Police 4. Community Policing 5. Others.....

33) Do they carry out their responsibility effectively?

1. Yes... 2. No ...Give 3 reasons:.....

Part F: Miscellaneous

34) Ongoing projects in the community (*list3*)

.....

35) Proposed projects in the community (*list3*)

.....

Any other comment (list 3)

Annex D: Notice of Intention to Plan

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF KERICHO

P.O BOX 112-20200, KERICHO.

(Cap 286)

FORM P.P.A 1

r.3. (3)

NOTICE OF INTENTION TO PLAN -KERICHO COUNTY SPATIAL PLAN (2017 – 2027)

Notice is hereby given to residents and all stakeholders of Kericho County and its environs, that pursuant to the Constitution, Physical Planning Act, Urban Areas and Cities Act (2011) and County Government Act (2012), The County Government of Kericho is the process of preparing a County Spatial Plan that will guide the growth of Kericho County and its environs for a period of 10 years.

The Plan will cover approximately 2400 Km² , being the extent of the County of Kericho. The purpose is to prepare a framework that will promote integrated physical and socio-economic development of the county. The plan will endeavour to organise and allocate sufficient space for all land uses.

The Plan Preparation will be participatory and we are pleased to invite all stakeholders to the planning process. Stakeholders who wish to make comments or suggestions may do so in writing to the undersigned within 30days of publication of this notice.

22nd February 2017

SYLVIA INZIANI

COUNTY PHYSICAL PLANNING OFFICER

Annex E: Notice of Completion

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF KERICHO

P.O BOX 112-20200, KERICHO.

(Cap 286)

FORM P.P.A 3

r.3. (3)

NOTICE OF COMPLETION OF KERICHO COUNTY SPATIAL PLAN

PLAN REF. NO.KCO/CSP/01/2018

Notice is hereby given that Kericho County Spatial Plan was completed on 31st July 2018. The plan has been prepared as per Articles 6, 60, 66, 67, 184, 186 and the Fourth Schedule of the Constitution of Kenya 2010, The County Government Act 2012, The Urban Areas and Cities Act 2011, The National Land Commission Act 2012, The Physical Planning Act Cap 286 and other enabling legislations.

The Plan covers 2569km² of land situated within Kericho County. Copies of the County Spatial Plan have been deposited for public inspection at each of the Six Sub-County Administrator's Offices and the County Physical Planning Officer's office, Public Works Building, Ground Floor, Kericho Town.

The copies so deposited are available for inspection free of charge by all persons interested at the above-mentioned address between the hours of 8.00 am to 5.00 pm, Monday to Friday.

Any interested person(s) who wishes to make any representation in connection with or objection to the above-named County Spatial Plan may send such representations or objections in writing to be received by the County Physical Planning Officer, P.O Box 112- 20200 Kericho, within sixty (60) days from the date of publication of this notice and such representation or objection shall state the grounds on which it is made.

31st July 2018

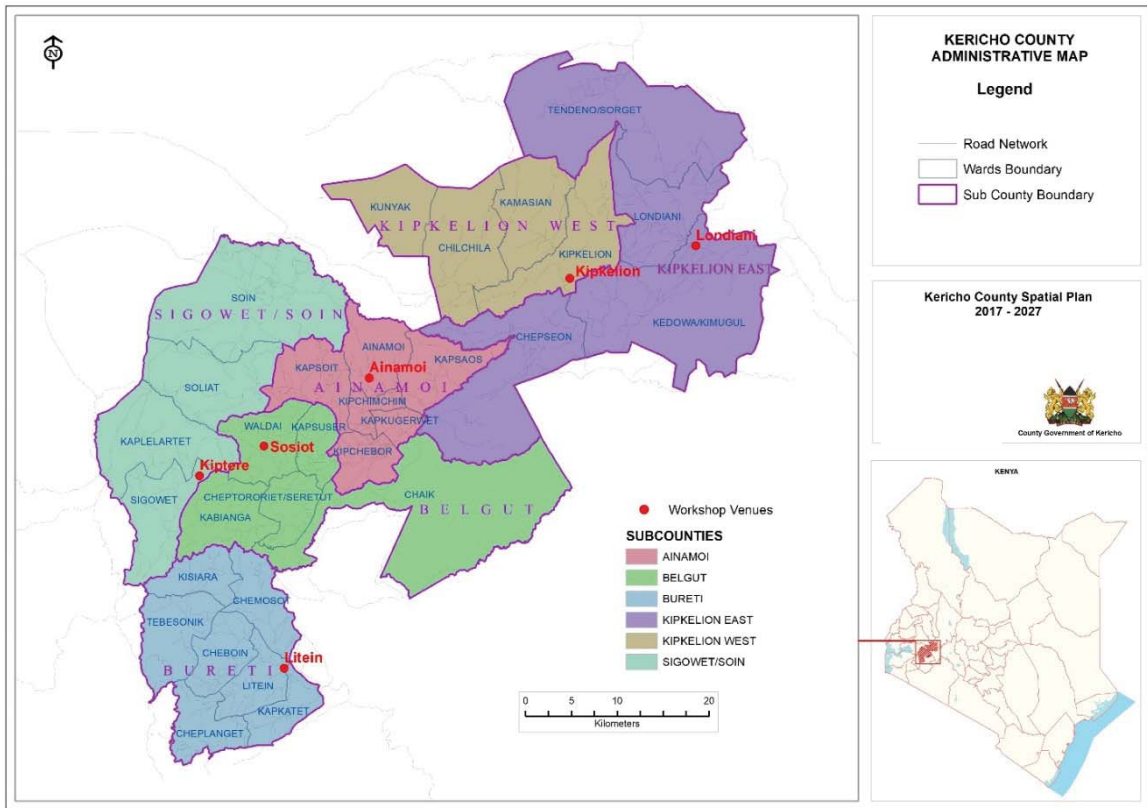
SYLVIA INZIANI

COUNTY PHYSICAL PLANNING OFFICER

Annex F: Stakeholder Engagement Workshops/Meetings

Table 53: Stakeholder Engagement Workshops

| Item | Sub- County | Date of Meeting | Venue | No. of Stakeholders Invited | No. of Stakeholders In attendance | % Attendance | % Ward Representation | Time of Meeting |
|--------------|----------------|-----------------|---|-----------------------------|-----------------------------------|--------------|-----------------------|-----------------|
| 1 | Belgut | 04.04.2017 | Sosiot DCs Office | 60 | 36 | 60% | 100% | 1000-1600Hrs |
| 2 | Ainamoi | 05.04.2017 | AIC Ainamoi | 45 | 24 | 53% | 100% | 1100-1800Hrs |
| 3 | Kipkelion East | 06.04.2017 | Sub-County Administrative Office, Londiani | 52 | 22 | 42% | 100% | 1030-1730Hrs |
| 4 | Bureti | 04.04.2017 | Sub-County Administrative Office, Litein | 60 | 52 | 87% | 100% | 1000-1700Hrs |
| 5 | Soin/Sigowet | 05.04.2017 | Kiptere Technical Institute | 53 | 34 | 64% | 100% | 1000-1730Hrs |
| 6 | Kipkelion West | 06.04.2017 | Sub-County Administrative Office, Kipkelion | 37 | 36 | 97% | 100% | 1000-1600Hrs |
| TOTAL | | | | 307 | 204 | 66% | 100% | |



Map 58: Location of Venues for Stakeholder Engagement Workshops



Figure 31: Belgut Stakeholder Workshops



Figure 32: Kipkelion West Stakeholder Engagement Workshops



Figure 33: Kipkelion East Stakeholder Engagement Workshops



Figure 34: Bureti Stakeholder Engagement Workshops

Figure 35: Soin/Sigowet Stakeholder Engagement Workshops



Figure 36: Ainamoi Stakeholder Engagement Workshops



Figure 37: County Executive Committee Draft Plan Presentation



Figure 38: MCA Draft Plan Presentation



Figure 39: Training on Application of GIS in Planning

Figure 40: Technical Consultation at ACK