



COUNTY GOVERNMENT OF VIHIGA

VOLUME II

INTEGRATED STRATEGIC URBAN DEVELOPMENT PLANS FOR URBAN CENTRES IN VIHIGA COUNTY (2012-2030)

Final Plan

Prepared By

Syagga & Associates Ltd
Jadala place 2nd Floor, Ngong Road
P.O. Box 26060 - 00504
Nairobi
Office: +254 20 2424604
Cell: +254 722 777 598
Email: info@syagga.com

October 2014

PLAN APPROVAL

This Plan has been prepared, publicized and circulated as per the requirements of the Physical Planning Act Cap 286 of the Laws of Kenya. The plan has fulfilled all the statutory requirements and is hereby approved.

CERTIFIED

County Director of Physical Planning

Date

APPROVED

County Executive Committee Member for Lands, Housing, Urban and Physical Planning

Date.....

Approved Development Plan NO.

PROJECT TEAM MEMBERS

This plan was prepared by a team of professionals from **Syagga and Associates Ltd.** The names of the team members include:-

Prof. Washington H.A. Olima	-	Project Coordinator
Prof. Grephas P. Opata	-	Project Director
Mr. Isaac Mamboh Nyamweno	-	Project Planner
Mr. Maurice Lishenga	-	Project Surveyor
Prof. Grace Mbagaya	-	Sociologist
Dr. Andrew Kiplagat	-	Environmental Planner
Prof. Paul Syagga	-	Housing/Informal Settlement Expert
Eng. Dr. Tom Opiyo Odago	-	Transport Expert
Mr. Jimmy Sichangi	-	Digital Mapping Expert
Mr. George Omondi Otieno	-	Planning Assistant
Mr. Chepkwony Titus Kipkoech	-	GIS Expert

LIST OF ABBREVIATIONS AND ACRONYMS

CBOs	-	Community Based Organizations
CDF	-	Constituency Development Fund
ECD	-	Early Childhood Development
EMCA	-	Environmental Management and Coordination Act
FBOs	-	Faith Based Organizations
GoK	-	Government of Kenya
HH	-	Households
KIHBS	-	Kenya Integrated Household Budget Survey
LAs	-	Local Authorities
MoH	-	Ministry of Health
MTP	-	Medium Term Plan
NEMA	-	National Environment Management Authority
NGO	-	Non-Governmental Organization
NHC	-	National Housing Corporation
NMT	-	Non-Motorized Transport
PSV	-	Public Saving Vehicle
RHTC	-	Rural Health Training Centre
SMEs	-	Small and Medium Enterprises
SMS	-	Subject Matter Specialists
SoE	-	State of Environment
SPSS	-	Statistical Programme for Social Sciences
TOR	-	Terms of Reference
UN	-	United Nations

ACKNOWLEDGEMENT

Preparation of the Integrated Strategic Regional Development Plan for Vihiga County would not have been possible without the cooperation and support of many people. First, the Governor of Vihiga County Moses Akaranga (Rev) provided overwhelming support and an enabling political environment for plan preparation. He made himself available whenever the planning team sought his views and called upon all public officers in the county to provide necessary support through sharing of data/information. The Governor participated in planning workshops and inspired all participants through his speeches. He took it upon himself to invite Hon Members of Parliament and other dignitaries to planning workshops. The Executive Committee Member in Charge of Lands, Housing and Urban Development has demonstrated her total commitment to the planning of the county and has kept the planning team on its toes. The planning team received overwhelming support from primary, secondary and tertiary stakeholders throughout the planning process. The client (Ministry of Lands, Housing and Urban Development) financed the project and provided very able professionals that kept the planning team on their toes through well deserved monitoring and evaluation and positive issue-based critique. The team of experts from the ministry (Department of Physical Planning) ensured that every step in the planning process was followed and high standards maintained.

National and County Government officials exhibited very high level of professionalism and provided the much needed data and participated actively in planning workshops. The Provincial Administration did not only guarantee security for the team and research assistants but the presence of village elders during household data collection made it possible for households to have confidence and pour out their feelings on a wide range of planning issues. The stakeholders who participated during the planning workshops helped to develop and shared vision for the county and provided invaluable data/information. The planning team is also greatly indebted to the subject matter specialist (SMSs) and opinion leaders who not only shared their insights with the team but also made themselves available out of their busy schedules. The team would like to thank all the drivers who demonstrated their professionalism while driving the team to various parts of the county since no single incident was experienced. **Ashante Sana**

FOREWARD

Kenya, like most developing countries has witnessed rapid urbanization over the last six decades, a phenomenon that has led to the proportion of Kenyans living in the urban areas rising from 5.1 % in 1948 to an estimated 39 % in 2009. By 2009, there were about 15.2 million Kenyans residing in urban areas. This high rate of urbanization is projected to continue in the coming years.

Recent studies (GoK, 2008) show that only 30% of towns in Kenya are planned. This implies that physical development in 70% of the towns takes place without any framework for coordinated development. This explains why most towns in Kenya are in chaotic situation (proliferation of informal settlements, environmental degradation, inefficient transport systems, scarce employment opportunities, land use conflicts, spiraling urban poverty and insecurity, energy poverty, food insecurity; among others).

The level of urbanization in Vihiga County is low. However, the county is rapidly urbanizing due to migration of people from rural to urban areas, physical expansion of urban areas and arrival of more people posted or transferred to the county to offer services in both public and private sector. The level of urbanization is currently placed at 32%.

Preparation of Integrated Strategic Urban Development Plans (ISUDPs) for all urban areas in Vihiga County is consistent with Kenya Vision 2030 and provisions of the County Government Act (2012), Urban Areas and Cities Act (2011), the Physical Planning Act Cap 286, among others. This is a deliberate effort by Vihiga County Government to achieve sustainable development through well planned and coordinated urban development. Urban areas are focal points for socio-economic development.

It is my hope that these plans will lead to sustainable urban development in Vihiga County.

Director, Syagga and Associates.

EXECUTIVE SUMMARY

This volume contains Integrated Strategic Urban Development Plans for thirteen urban areas in Vihiga County. These include: Mbale, Chavakali, Majengo-Vihiga, Mudete, Luanda, Kima-Emuhaya, Gambogi, Hamisi, Serem, Shamakhokho, Mago, Sabatia and Kaimosi-Jeptulu. Selection of these towns was informed by a clear criteria including resident population threshold of 2000, functional criteria such as being County or Sub-county headquarters. Those which did not meet the population threshold but served as Sub-County headquarters were included because of their strategic roles and potential to grow fast.

Planning for urban areas in Vihiga County is a noble undertaking and a deliberate attempt to provide a spatial framework to guide the growth of urban human settlements to the year 2030. All the towns have been growing without any approved plans, a recipe for total anarchy. Control of development has also been a problem due to weak structures and lack of proper coordination among relevant public sector agencies.

These are statutory plans prepared in accordance with provisions of the Physical Planning Act Cap 286, Urban Areas and Cities Act of 2011, County Government Act of 2012, among others. Preparation of the plans contained herein adopted a participatory approach right from the beginning to the end. Stakeholders were drawn from the civil society, local community, public and private sector.

The planning team relied on data/information from both primary and secondary sources. Primary data was collected with the aid of various field instruments and techniques including household questionnaire, observation, interviews and in-depth discussions with relevant resource persons, measurement, Traffic County, stakeholders' workshops, among others. Secondary data was obtained from existing records in public offices.

The planning issues identified across all the urban areas can broadly be categorized into four settings including: environmental, economic, social and institutional. Urban environmental

issues articulated by stakeholders include: Inadequate provision or total lack of environmental infrastructure such as water and sanitation, storm water management; Inadequate or total lack of green infrastructure, environmental pollution (air, soil/land, surface water, noise). Social planning issues identified include: inadequate housing, insecurity, poverty, inadequate community facilities such as social halls, poor health services, play fields and recreational facilities. Economic issues of concern include: limited employment opportunities for the youth, lack of planned and well designed marketplaces, limited industrial activities, weak revenue base. Institutional issues on the other hand include: poor control of development by relevant public sector agencies, poor urban governance, among others.

Planning is an intervention to solve the society's problems and therefore a number of proposals were arrived at by the planning team working closely with all stakeholders. In order to solve urban environmental issues, the proposals made include: provision of conventional sewerage system and supply of water in all urban areas, proper management of solid waste, proper management of storm water, provision of green infrastructure. Covered and open air markets were proposed in Mbale Town. Public transport challenges such as lack of bus parks and parking for personal vehicles were addressed. Bus Parks complete with other support infrastructure facilities were proposed at Mbale and Majengo, Jeptulu, Gamogi and Shamakhokho since these are the worst.

The zoning plans for each of the thirteen towns indicate areas zoned for various activities: residential, industrial, educational, public purpose, public utilities, transportation, urban and peri-urban agriculture and recreational areas.

It is worthwhile observing that all the proposals made can only be implemented if there is good urban governance and commitment among all stakeholders and development partners.

Table of Contents

Plan Approval	iii
Project Team Members	iv
List of Abbreviations And Acronyms.....	v
ACKNOWLEDGEMENT	vi
FOREWARD.....	vii
EXECUTIVE SUMMARY.....	viii
CHAPTER ONE: INTRODUCTION.....	1
2.1 Former Vihiga Municipality: Mbale, Chavakali, Majengo-Vihiga, and Mudete.....	12
2.1.1 Location	12
2.1.2 Planning Area Characteristics.....	13
2.1.3 Location and Historical Development of the Urban Centres	15
2.1.4 Existing Spatial Structure	17
2.1.5 Emerging planning Issues	19
2.1.6 Integrated Strategic Urban Development Plan for Former Vihiga Municipality: Mbale, Chavakali, Majengo-Vihiga, and Mudete.....	21
2.1.7 Proposed Plan Interventions/Strategies	22
2.2 Kaimosi-Jeptulu.....	34
2.2.1 Location	34
2.2.2 Historical Background of the Town	34
2.2.3 Statement of the Problem.....	34
2.2.4 Existing Spatial Structure	35
2.2.5 Emerging Planning Issues.....	35
2.2.6 Integrated Strategic Urban Development Plan for Kaimosi-Jeptulu Urban Centre	35
2.2.7 Proposed Planning Interventions	36
2.3: Serem Town	39
2.3.1 Location and Historical Background	39
2.3.2 Planning Area Characteristics;.....	40
2.3.3 Problem Statement.....	40
2.3.4 Existing Spatial Structure	40
2.3.5 Integrated Strategic Urban Development Plan for Serem Urban Centre	41
2.3.6 Proposed Planning Interventions	42
2.4: Hamisi Town	45
2.4.1 Location and Historical Background	45
2.4.2 Planning Area Characteristics.....	46
2.4.3 Problem Statement.....	46

2.4.4 Existing Spatial Structure	46
2.4.5 Emerging Planning Issues	46
2.4.6 Integrated Strategic Urban Development Plan for Hamisi Urban Centre	47
2.4.7 Proposed Planning Interventions	47
2.5: Gambogi Town	50
2.5.1 Location and Historical Background	50
2.5.2 Study area characteristics;	51
2.5.3 Problem Statement	51
2.5.4 Existing Spatial Structure	52
2.5.5 Emerging Planning Issues	53
2.5.6 Integrated Strategic Urban Development Plan for Gambogi Urban Centre	54
2.5.7 Proposed Planning Interventions	55
2.6: Luanda Town	57
2.6.1 Location and Historical Background	57
2.6.2 Study Area Characteristics	59
2.6.3 Problem Statement	65
2.6.4 Existing Spatial Structure	66
2.6.5 Emerging Planning Issues	68
2.6.6 Integrated Strategic Urban Development Plan for Luanda Urban Centre	69
2.6.7 Proposed Planned Interventions/Strategies	80
2.7: Mago/Shamakhokho Urban Centres	87
2.7.1 Location and Historical Background	87
2.7.2 Study area characteristics;	88
2.7.3 Problem Statement	89
2.7.4 Existing Spatial Structure	89
2.7.5 Emerging Planning Issues	89
2.7.6 Integrated Strategic Urban Development Plan for Shamakhokho-Mago Urban Centre 90	
2.7.7 Proposed Planned Interventions/Strategies	97
2.8: Emuhaya/Kima Urban Centres	103
2.8.1 Location and Historical Background	103
2.8.2 Problem Statement	104
2.8.3 Existing Spatial Structure	104
2.8.4 Emerging Planning Issues	105
2.8.5 Integrated Strategic Urban Development Plan for Emuhaya-Kima Urban Centre ...	105
2.8.6 Proposed Planned Interventions/Strategies	106
2.9: Sabatia (Wodanga) Urban Centre	112

2.9.1	Location.....	112
2.9.2	Historical Background of the town.....	112
2.9.3	Study area characteristics	114
2.9.4	Statement of the Problem	114
2.9.5	Existing Spatial Structure	115
2.9.6	Emerging Planning Issues.....	116
2.9.7	Integrated Strategic Urban Development Plan for Sabatia (Wodanga) Urban Centre 116	
2.9.8	Proposed Planned Interventions/Strategies.....	121
	2.10 Planning Standards	126
	References.....	127

CHAPTER ONE: INTRODUCTION

1.1 Urbanization in Kenya

Developing countries are among the least urbanized in the world but are currently experiencing the highest rate of urbanization. Rapid urbanization in developing countries is provoking profound socio-economic change and posing serious environmental challenges. This is particularly true in Eastern Africa generally and Kenya in particular. Kenya has witnessed rapid urbanization over the last six decades, a phenomenon that has led to the proportion of Kenyans living in the urban areas rising from 5.1 % in 1948 to an estimated 39 % in 2009. By 2009, there were about 15.2 million Kenyans residing in urban areas. This high rate of urbanization is projected to continue at a rapid pace. Kenya's five largest cities (Nairobi, Mombasa, Kisumu, Eldoret, and Nakuru) are home to about 34 % of the urban population.

It is important to observe that these cities are home to the highest population of slum dwellers. A case in point is Nairobi City where 60 % of the residents dwell in slums and only occupy about 5% of the city's total land mass. The inability of local authorities and governmental agencies to cope with unprecedented housing needs of the urban dwellers has resulted into development and proliferation of urban slums and informal settlements with appalling living conditions and lacking even the most basic social infrastructure and public facilities required for human health and survival for instance potable water, sanitation, education and transport. It is estimated that urban areas will account for 54% of population or 23.6 million people by 2030.

Urbanization in Vihiga County

The level of urbanization in Vihiga County is low. However, the county is rapidly urbanizing due to migration of people from rural to urban areas, physical expansion of urban areas and arrival of more people posted or transferred to the county to offer services in both public and private sector. The level of urbanization is currently placed at 32%. The major urban areas in the county include: Mbale, Majengo-Vihiga, Chavakali, Mudete, Luanda, Serem, Kaimosi-Jeptulu,

Gambogi, Shamakhokho, Mago, Emuhaya-Kima, Sabatia and Hamisi. Table 3.1 below shows urbanization trends in Vihiga County.

1.2 Rationale for Urban Planning

Recent studies by the Ministry of Local Government (GoK, 2008) revealed that only 30% of towns in Kenya are planned. This implies that physical development in 70% of the towns takes place without any framework for coordinated development. This explains why most towns in Kenya are in chaotic situation (proliferation of informal settlements, environmental degradation, inefficient transport systems, scarce employment opportunities, land use conflicts, spiraling urban poverty and insecurity, energy poverty, food insecurity; among others).

Preparation of Integrated Strategic Urban Development Plans (ISUDPs) for all urban areas in Vihiga County is consistent with Kenya Vision 2030 and provisions of the County Government Act (2012), Urban Areas and Cities Act (2011), the Physical Planning Act Cap 286, among others. This is a deliberate effort by Vihiga County Government to achieve sustainable development through well planned and coordinated urban development. Urban areas are focal points for socio-economic development.

Currently, there is no urban centre in Vihiga County with an existing spatial plan hence preparation of these plans is long overdue. These urban centres have no basis for approving development applications. The desire to have the centres planned was expressed way back by the former local authorities this could not be done due to lack of resources.

In addition, the areas covered in the ISUDP are more vibrant as far as economic pursuits are concerned. This is observable through high rates of sub-divisions, intensive building developments for both commercial and residential uses and their close proximity to major roads.

The plan endeavors to provide opportunities for wealth creation and employment by allocating space for socio-economic activities such as housing, small and medium scale enterprises (SMSEs), among others. To attract investors to the county, the county government has to urgently plan the urban centres and provide to investors serviced land. These plots are crucial for development as they can be used to construct stalls for small-scale jua-kali entrepreneurs as part of their poverty reduction strategies.

Preparation of ISUDPs for all urban areas benefited from new planning principles including: promotion of sustainability; participatory; multi-disciplinary approach; pro-poor and inclusivity; integrative; market responsiveness; and cultural diversity. Further, the interactive and iterative planning process was informed by a triple helix philosophy of *Green, Dense and Fair*. Densification is promoted in order to leave adequate space for agriculture and green infrastructure. Fairness is also promoted to ensure that the ranges of services provided are enjoyed by all including the marginalized and vulnerable groups.

The urban areas were objectively selected on basis of resident population (at least 2000 people) and major functions including county or sub-county headquarters. They include: Mbale, Majengo/Vihiga, Chavakali, Mudete, Luanda, Serem, Shamakhokho/Mago, Hamisi, Gambogi, Kima-Emuhaya and Kaimosi Complex/Jeptulu.

As noted in Table 3.1, the urban population is projected to rise from 217,596 at the beginning of the plan period (2012) to 264,995 in 2030. This means that the rate of urbanization will be 27% by the year 2030. This calls for strategic planning for critical urban infrastructures.

Table 3.1: Population Projection for Urban Centres from 2009-2030

Urban Centre	2009	2012	2017	2022	2027	2030
<i>Former Vihiga Municipality</i>	118,696	124,005	130,977	138,341	146,119	150,995
<i>Luanda Town</i>	49,346	51,553	54,452	57,513	60,747	62,774
<i>Shamakhokho/Mago</i>	7,072	7,388	7,804	8,242	8,706	8,996
<i>Serem</i>	6,789	7,093	7,491	7,913	8,358	8,636
<i>Jeptulu/Kaimosi</i>	5,644	5,896	6,228	6,578	6,948	7,180
<i>Hamisi</i>	7,307	7,634	8,063	8,516	8,995	9,295
<i>Sabatia</i>	4,646	4,854	5,127	5,415	5,719	5,910
<i>Gambogi</i>	3,419	3,572	3,773	3,985	4,209	4,349
<i>Emuhaya/Kima</i>	5,361	5,601	5,916	6,248	6,600	6,820
Total	208,280	217,596	229,831	242,751	256,401	264,955

Source: National Housing Population Census, 2009

1.3 Vision for urban Areas

Well governed, economically vibrant, socially inclusive, and liveable urban settlements

Planning Philosophy- *Green, dense and fair* urban human settlements

Guiding principles

Preparation of the integrated strategic urban development plans for Vihiga County benefited from the following principles:

- Promote sustainable development
- Achieve integrated planning
- Integration between plans and budgets
- Planning with partners and stakeholders
- Promote market responsiveness
- Ensure access to land
- Be pro-poor and inclusive
- Recognize cultural diversity
- Climate change responsive planning

1.4: Methodology

Phase I: Inception

- Meeting with the client and county officials
- Reconnaissance of the planning area
- Advertisement for the notice of intention to plan
- Preparation of Inception Report
- Stakeholder analysis
- Visioning and Objective Setting Workshop

Phase II: Situational Analysis

- Literature review
- Baseline survey/fieldwork
- Data analysis
- Preparation of a Situational Analysis Report
- Validation Workshop

Phase III: Preparation of Development Proposals

- Preparation of Structure plans for former Vihiga municipality and Luanda town
- Preparation of area action plans for other urban centres
- Preparation of development controls and planning standards
- Consultation workshop

Phase IV: Preparation of Final Integrated Strategic Urban Development Plans

- Preparation of Final Urban Plans
- Validation workshop

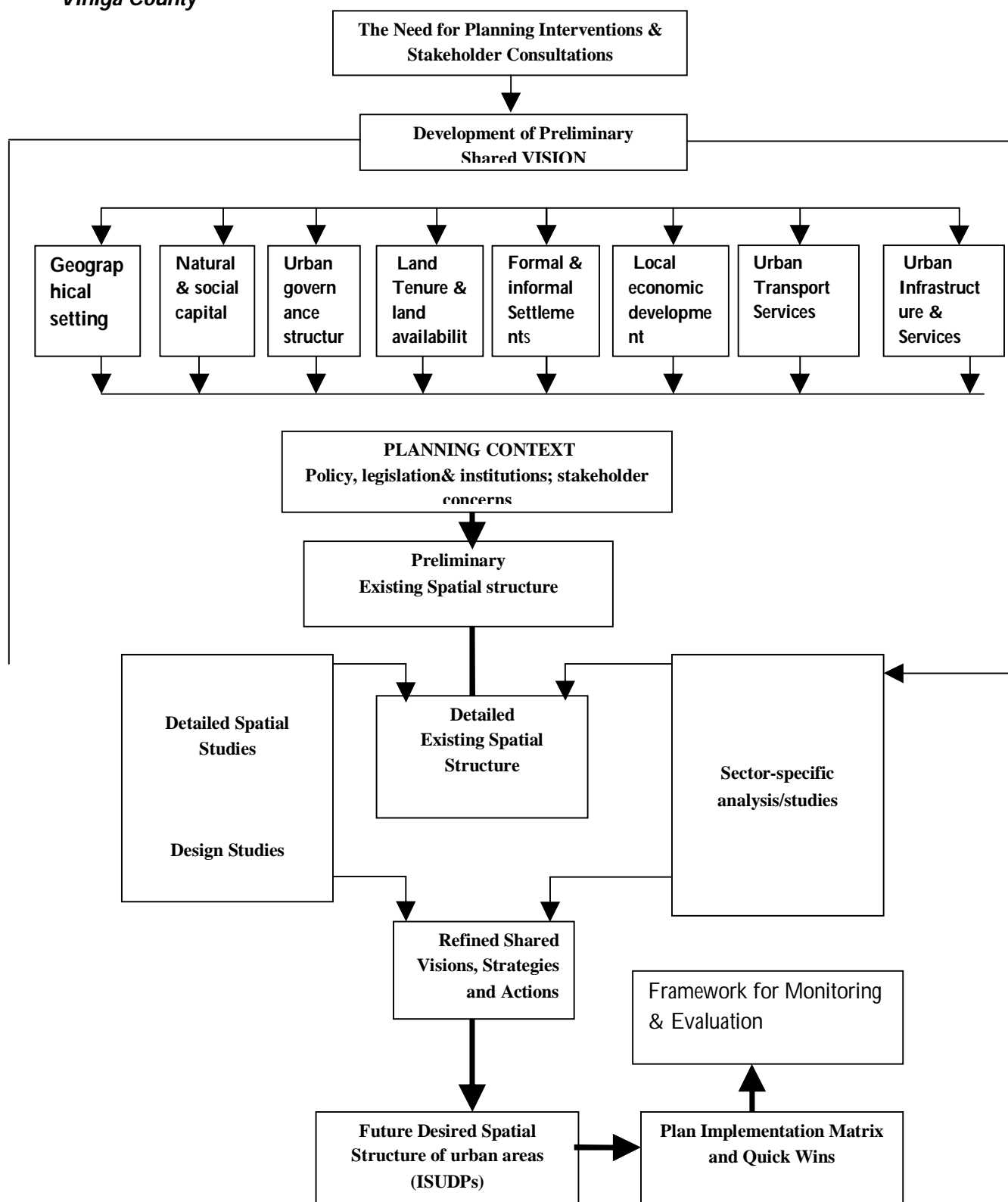
Phase V: Submission, Approval and Publication

- Submit to the county executive

- Forwarded to the county assembly for approval
- Submitted to the Director of Physical Planning for quality assurance and approval
- Advertisement for notice of completion of plan
- Approval, gazettment and publication by the Government Printer
- Public launch

Phase VI: Implementation, Monitoring and Evaluation

Fig Conceptual Framework for Preparation of Integrated strategic Urban Development plans in Vihiga County



Modeling Urban Development in Vihiga County

Preparation of Integrated Strategic Urban Development Plans for urban areas in Vihiga County is informed by both planning philosophy and modern planning principles as follows:

i) **Planning Philosophy-** *Green, dense and fair* urban human settlements

Sustainability is at the heart of any planning intervention. Urban human settlements in Vihiga County are relatively young and small in size. This provides opportunity to planning intervention that is aimed at promoting *dense, green and fair* urban areas.

Dense Urban Areas: compact urban form is preferred since this form reduces dependence on motorized transport. Motorized transport is associated with urban environmental pollution and climate change. Widespread use of fossil fuels (transport sector) especially those rich in sulphur and lead contribute to non-point environmental pollution. Dense urban form also ensures that Promotion of compact urban form calls for linkages and partnership among stakeholders in public and private sector.

Green Urban Areas- the concept of green cities or eco-cities is the in-thing in modern day planning. Planning intervention in Vihiga County aims to transform urban areas into green urban areas through promotion of green infrastructure, promotion of green energy use and solar-powered urban and peri-urban agriculture, promotion of rain water harvesting technology, conservation of ecologically fragile sections of urban settlements, urban retrofitting, and conservation of both natural and cultural heritage, among others.

Fair Urban Areas- Promotion of fair urban areas is consistent with modern day planning principles. This involves integrating needs of both the rich and the vulnerable and marginalized groups in urban areas. Both the vulnerable and marginalized groups are normally socially and economically excluded through insensitive planning. Fairness in this case also involves promotion of spatial equity in access to urban infrastructure and services. It is the poor and

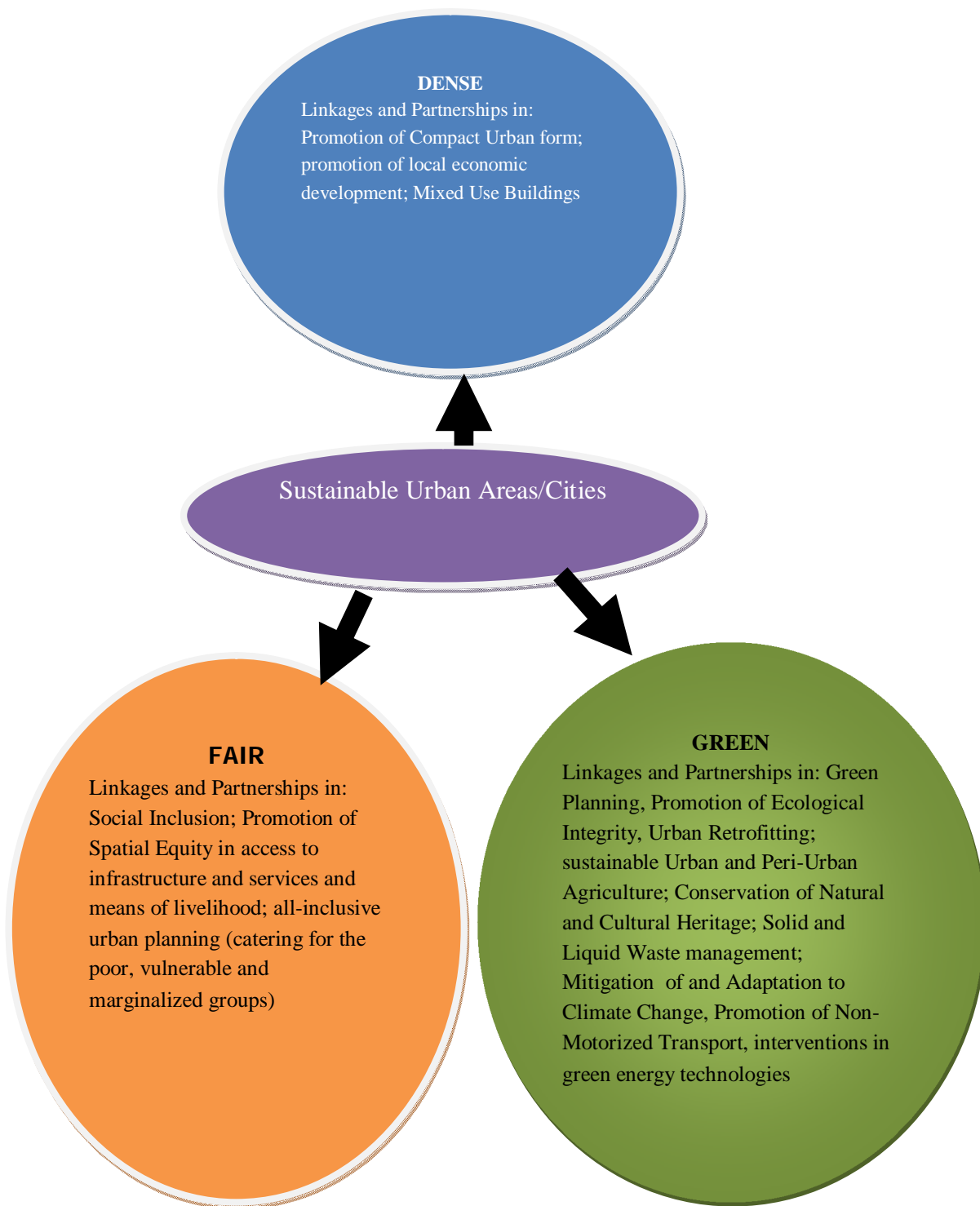
marginalized groups that are mostly disadvantaged when it comes to access to infrastructure and services but this plan correct such anomaly through proactive interventions.

ii) Modern Planning Principles

Preparation of the Integrated Strategic Urban Development Plans (ISUDP) for Vihiga County was informed by the following planning principles:

- Promote sustainable urban development
- Achieve integrated planning
- Integration between plans and budgets
- Planning with partners and stakeholders
- Promote market responsiveness
- Ensure access to land
- Be pro-poor and inclusive
- Recognize cultural diversity
- Climate change responsive planning

Fig: A Model that informed the Preparation of Integrated Strategic Urban Development Plans for Urban Areas in Vihiga County



Source: Authors' Construct 2012

Preferred Development Model

The preferred development model for urban areas in Vihiga County is one which leads to realization of sustainable development not only at the level of urban areas but at regional (county) level too. A model that stimulates socio-economic development while contributing to environmental sustainability is preferred. It is widely believed that with good policies in place, urban areas can serve as engines for rural/regional development.

CHAPTER TWO: URBAN AREAS IN VIHIGA COUNTY

Introduction

This chapter provides detailed analysis of all the thirteen urban areas, articulates planning issues identified with the aid of stakeholders and the suggested planning interventions with a view to ameliorating the existing undesired situation.

2.1 Former Vihiga Municipality: Mbale, Chavakali, Majengo-Vihiga, and Mudete

2.1.1 Location

Vihiga Township is located within Vihiga and Sabatia sub-counties in Vihiga County and is approximately 25km from Kisumu City to the south and 32km to the north from Kakamega town. Mbale town is about 381km from Nairobi City. The township has area coverage of 78km². Geographically it lies between 0° 03' and 0° 15' North, 34° 41' and 34° 48' East.

Vihiga Township (previously Vihiga Municipality) was one of the three local authorities found within the former Vihiga District. Currently, it is one among many municipalities which were lowered to townships by the recommendations of the Urban Areas and Cities Act, 2012. The Act stipulates that a municipality must have a population of at least 250,000 people. Vihiga County is one of the four counties that form the former Western Province. The A1 Kisumu-Kakamega highway divides the township into almost two equal parts.

Statement of the Problem

The area of jurisdiction of the former Municipal Council of Vihiga is experiencing rapid urbanization as more and more agricultural land is converted into urban and peri-urban land. More people are settling in urban areas with resultant pressure on infrastructure and services beyond the ability of the County Government to provide for. Urbanization has been taking place haphazardly without any approved Local Physical Development Plans. Further, most of the urban development activities are concentrated along the A1 Kisumu-Kakamega Road where

they exhibit leap-frog type of development. Land within the planning area is predominantly under private tenure system and therefore the County Government has limited tax base. It is also extremely challenging for the County Government to control development on private land. The purpose of this plan, therefore, is to provide a spatial framework that will guide future development.

2.1.2 Planning Area Characteristics

Vihiga Township is one of the most urbanized parts of Vihiga County. It is unique in the sense that urban human settlements have developed on leapfrog basis along the major roads and particularly the A1 Kisumu-Kakamega road and C39 Chavakali-Kakamega road. Ribbon kind of development has taken place along the Kisumu-Kakamega road. This works against effective provision of infrastructure and service by the county government.

The township has four major urban centres including Mbale, Majengo, Chavakali and Mudete. Mbale is the major town and is linked to other satellite towns namely: Majengo and Chavakali – along Kisumu – Kakamega road, Mudete on Chavakali –Kapsabet road. The township has other commercial nodes such as Manyatta, Chango, Kiritu, Kivagala, Bendera, Stand Kisa, Vihiga and Lunyerere.

There is a strong rural – urban linkage as people from the immediate interlined bring agricultural produce to sell in town while these towns serve as distribution points for farm inputs and other commodities. It is important to highlight the historical development of the four major towns. The old Kisumu-Kakamega road had several meanders (detours) due to difficult landscape comprising of hills and valleys. Some market centers were by-passed by the new A1 road due to alignment and they have since remained static while others have undergone decaying and those along the main road have continued to grow.

Topography and Drainage

The township lies at an altitude of between 1300-1640m above sea level. The terrain is made up of hills, valleys and spurs and most of the valleys have perennial rivers. In general, the landscape slopes from East to West and hence the direction of flow of rivers and it is slightly on the southern part compared to northern end. The planning area is well drained with permanent rivers/streams including R. Lunyerere, R. Ehedwe, and R. Walunyi, R. Lidumbu, and R. Dogogi, among others. The presence of valleys and hills pose serious challenges to provision of infrastructures especially the sewerage system.

Climate

Rainfall: The area receives bimodal rainfall regime with the long rains extending from March to June and short rains between September and November. The mean annual rainfall is 1800 – 2000mm with 66% reliability. The mean annual humidity is 64.0.

Temperature: The temperature ranges from 14°C – 32°C with a mean of 20.5°. This is because the township is closer to the Equator. The township falls within upper midland agro-ecological zone 1 (UMI) which also covers 95% of the County.

Soils: Soils in the township are mainly dystic Acrisols, and humic Nitisols. The soils are deep and well drained with a pH of 5.7. Soil fertility is low due to continuous cultivation, low organic matter, soil erosion and leaching.

Vegetation: There is no predominant vegetation cover since most of the land is under human settlement and agriculture. However, farmers prefer planting eucalyptus (blue gum) along the river valleys and consider it a cash crop. The whole area is generally green with trees/grass and shrubs.

2.1.3 Location and Historical Development of the Urban Centres

- a) **Mbale Town** in Vihiga Sub-County is located at 0°05'N 34°43'E. It is the headquarters of Vihiga County

The Town is named after the Maragoli warrior by the name Mbaale who was killed by an enemy's arrow at the present St. Clare' Maragoli Girls School next to the offices of the District Headquarters. He was buried at the same place.

In 1937, the Local Native Council built the first African court here to serve Southern Kakamega District. In 1940, the centre became headquarters of the Maragoli Location under the leadership of the famous **Paramount Chief Paul Agoi** and continued to be an important trading centre until 1981 when it was elevated to urban council status. It gained town council status in 1986 encompassing Chavakali, Majengo and Mudete. In 1990 boundary review, Solongo/Kisumu location was incorporated while Lugaga location was excluded leading to change reduction of areas to 78km². In 1994, the council gained municipal status with 11 wards. In the year 2002, the electoral wards were reduced to six (6). It holds the Vihiga County headquarters and the Vihiga sub-county headquarters.

a) **Majengo Urban Centre**

Majengo Town is located at 0° 03'N 34° 43'E along the Kisumu-Kakamega Road.

The original name of the town is Keveye but people of Arab origin who settled there in 1930s called it Majengo because of the housing structures which were built as people settled there to do business. The initial shops were developed near the present Vihiga Police Station where the road to Kisumu was passing. When the all-weather A1 Kakamega-Kisumu road was constructed, passing though Keveye, developers relocated from Vihiga down to the current location of the town. The first shop/tea kiosk was put up by Mzee Mbecha while other commercial activities used to take place under a huge tree at the present Total Petrol Station. Majengo is now

mainly a commercial-cum residential neighborhood. It is the busiest commercial centre in Vihiga Township.

b) Vihiga Divisional Headquarters

The origin of the name is 'Mahiga' which means the three (3) stones that make traditional cooking place and this was derived out of the 3 huge rocks opposite Vihiga High School positioned like a natural fire place. This started off as a British Missionary Centre established by Friends African Mission in 1902.

The mission was founded by Bishop Willis and was offering spiritual, educational and printing services – consider Vihiga High School and friends churches. Later the mission donated part of the land for establishment of administrative centre that is now the Division Headquarters. The Police Station was established there in 1952 during the state of emergency.

The centre now serves as an administrative, institutional, health, security, commercial and residential neighborhood (government houses) and is highly accessible.

c) Chavakali

Chavakali Town is located at 0°07'N 34°43'E along the Kisumu-Kakamega Road

Chavakali means "*place of women*" in local Lagooli dialect. It as named in honour of Maragoli women who defeated Nandi warriors without fighting with them. It was serving as a camp for Maragoli warriors and when the Nandi warriors attacked the camp in the absence of Maragoli worriors, women who were left behind in the camp quickly dressed in their husbands' clothes and to scared away their enemy. The urban centre has since developed as a commercial, educational, residential and grains depot for the National Cereals and Produce Board (NCPB).

d) Mudete Urban Centre

Mudete, an upcoming industrial area is located at 0°07'N 34°45'E. The centre has developed as an industrial-cum- commercial node with shops and open-air-market. The location of Mudete Tea

Factory there has provided impetus for its growth as speculators moved in to erect commercial premises and rental houses for casuals working in the tea factory. It has a rich agricultural hinterland and highly accessible.

e) Lunyerere

Lunyerere means, “narrow” in local Maragoli dialect. This is where river Idzava narrows. It was the fastest growing commercial node in 1930s because of Asian traders who were given 33 years lease period by the British government. After independence, the government did not renew their leases and Asians were only allowed to operate in major towns especially at the district headquarters. The centre has since decayed while Mbale, Majengo and others urban centres have become more vibrant. The township’s slaughter slab is located here. Lunyerere was earmarked for industrial development because of its nearness to the perennial river Idzava.

These towns were initially under the former Municipal Council of Vihiga which occupied a total land mass of 78Km². Majengo, Mbale, Lunyerere, Stendikisa and Chavakali exhibit leap-frog kind of development along the Kisumu-Kakamega Road. Due to their close proximity and the fact that they share some services such as road transport, solid waste management, cattle auction ring, educational and health facilities, among others; they are herein handled as one urbanized area with several commercial nodes (Multi-nuclei Model).

2.1.4 Existing Spatial Structure

- Urban structure and form
Mbale, Majengo-Vihiga, Chavakali are the major urban centres along the Kisumu-Kakamega Road while Mudete is located along the Chavakali-Kapsabet Road. Manyatta is a small commercial node between Mbale and Majengo which is also home to light industrial activities. Lunyerere is an old decaying commercial node at the lowest point between Stendikisa and Mbale. This spatial distribution of urban areas and commercial nodes pose major challenges to provision of infrastructure and services by the County Government. The main structuring elements include road network, valleys and rivers/streams, constraint areas such as the rocky hills and wetlands.

Maps 3.1, 3.2, 3.3 and 3.4 below show the spatial structure of Mbale, Chavakali, Majengo-Vihiga and Mudete respectively.

- **Transport Infrastructure and Services**

All urban areas in Vihiga County are served by road transport only. The Kisumu-Kakamega (A1) Road link Majengo Mbale and Chavakali. Mudete is served by Class C Road (Chavakali-Kapsabet) and class D road linking Mudete to Gisambai. The rest of the roads linking urban centres to their hinterland are made of murram and most of them do not meet planning standards in terms of road reserves. Field survey in 2012 revealed that only classified roads are served by public transport vehicles while the roads linking urban centres to their hinterland are mainly served by motorcycle mode of transport. Due to fairly dense urban form, majority of the urban dwellers walk to their workplaces, service centres and schools.

Housing

Mbale, Chavakali, Majengo and Mudete are characterized by formal housing by both public and private sector. Limited number of institutional houses exist at Mbale, Chavakali, Mudete and Vihiga Divisional headquarters. Private developers are the major providers of rental housing. However, there are not specific areas designated for low, medium and high density residential neighbourhoods. Lack of planned and serviced land is a major barrier to housing delivery.

Land Tenure System

Physical Planning is mainly about land use and therefore, existing land tenure systems are very important. There are three (3) types of land tenure systems;

- Community land – These are under community infrastructure and are fully allocated and developed.
- Government land – under Government (also fully allocated)

- Private Freehold land – Inherited, ancestrally acquired or acquired by way of buying/gift.

Freehold land occupies almost 90% land area and poses serious challenges to planning due to the fact that owners have absolute titles and therefore encourages uncontrolled development driven by the fact that the township lacks an approved spatial plan to guide development.

2.1.5 Emerging planning Issues

The planning issues identified by stakeholders and development partners include:

- Leap-frog type of development along the A1 Kisumu-Kakamega Road-difficult to provide infrastructure and services
- Lack of planned zones for various land uses
- Lack of well furnished County Assembly and offices
- Inadequate housing for low, medium and high income groups
- Encroachments on roads of access/completely blocked roads of access.
- Poor road connectivity in urban and peri-urban areas
- Narrow roads especially in peri-urban areas
- Inadequate land for public purposes/utilities.
- Environmental degradation due to garbage, discharge of untreated waste into surface water sources
- Pollution of underground water sources due to widespread use of pit latrines
- Poor disposal of liquid waste.
- Old and dilapidated buildings within the CBD
- Burying of Muslims in filled graveyards – Mjini Village.
- Lack of social amenities such as social halls, public library, stadium/play fields.
- Inadequate supply of potable water, inadequate coverage of piped scheme

- Lack of sewerage system, firefighting equipment, designated garbage disposal sites, open-air market, and public toilets.
- Over reliance on ordinary pit latrines
- Lack of facilities for human resource development
- Lack of Bus Park (consider Majengo, Mbale, Chavakali and Mudete).
- Pollution of surface water (consider car wash – river Ehedwe and Edzava)
- Inadequate supply of food staffs – food imported from Nandi.
- Lack of infrastructure for non-motorized transport (bicycle ways, pedestrian walk ways)
- Lack of well planned market (covered and open air market).
- Inadequate beds for in-patients.
- Currently there is a shortage of medical personnel of all cadres
- Lack of adequate land for expansion of schools
- Special schools to be expanded in schools
- Food insecurity
- Inadequate facilities for early childhood education and development
- Lack of talent academy and model school
- Lack of cultural centre for promotion of culture tourism
- Lack of street names
- Lack of designated sites for light industries
- Unprotected riparian reserves and wetland
- Lack of green spaces (Mbale, Majengo, Vihiga, Chavakali, Mudete)
- Inadequate land for expansion of health facilities-consider Vihiga Health Centre
- Hostile built environment for persons with disability
- High levels of insecurity
- Noise pollution associated with motorized transport
- Presence of mentally sick people in urban areas
- Lack of parking spaces for private cars
- Lack of public toilets
- Over reliance on water from protected and unprotected springs for domestic use

- Presence of old, dilapidated low-rise buildings within the CBD
- Limited employment opportunities for trained youth
- Lack of integration in development of infrastructure

2.1.6 Integrated Strategic Urban Development Plan for Former Vihiga Municipality: Mbale, Chavakali, Majengo-Vihiga, and Mudete

2.1.7 Proposed Plan Interventions/Strategies

Planning issue	Place (urban area) of occurrence	Proposed plan intervention(s)/Strategies	Actors
Unguided urbanization (leap-frog urban development)	Mbale, Chavakali, Majengo-Vihiga, Mudete	<ul style="list-style-type: none"> • Create barriers/buffer zones to avoid uncontrolled linear development and possible merger of the towns along Kisumu-Kakamega Road • Create incentives (e.g. infrastructure) to direct physical development away from the main Kisumu-Kakamega Road-decongest the highway • Encourage urban densification and avoid motor vehicle dependent travels 	County Government Ministry of Lands, Housing and Urban Development
Lack of conventional sewerage system Lack of public toilets Over reliance on ordinary pit latrines	Mbale, Chavakali, Majengo-Vihiga, Mudete	<ul style="list-style-type: none"> • Implement a3-phased sewerage system project <ul style="list-style-type: none"> ○ Phase 1-Mbale-Chavakali ○ Phase 2: Vihiga-Majengo-Gisambai ○ Phase 3: Mudete • Invest in privately operated public toilets at strategic locations • Improved human waste disposal facilities to be encouraged in low density areas (peri-urban) that are not likely to be served by sewerage system 	County Government with donor support Local Engineering firms Lake Victoria North Water and Sewerage Services Board Private entrepreneurs e.g youth groups Individual property owners

Inadequate piped water scheme coverage Intermittent supply of water from central treatment plant Over reliance on water from springs and rivers for domestic use	Mbale, Chavakali, Majengo-Vihiga, Mudete	Short term interventions <ul style="list-style-type: none"> Water from Nandi Expansion/augmentation of existing water supply schemes-Mbale, Vihiga, Exploitation of underground water sources Licensing of independent small scale water providers Long term interventions <ul style="list-style-type: none"> Sourcing water from Nandi County to flow by gravity to Vihiga County 	Lake Victoria North Water Services Board County Government of Vihiga (Ministry of Water, Environment and Natural Resources) Amatsi Water and Sewerage Company
High cost of water supply due to huge electricity bills		Identify and implement gravity-dependent water reticulation system	Lake Victoria North Water Services Board County Government of Vihiga (Ministry of Water, Environment and Natural Resources) Amatsi Water and Sewerage Company

Residential

Planning issue/Problem	Place (urban area) of occurrence	Proposed plan intervention/Strategies	Actors
Inadequate housing for low, medium and high income groups Lack of official residences for the Governor, Deputy Governor, Speaker, Deputy	Mbale, Chavakali, Majengo-Vihiga, Mudete	<ul style="list-style-type: none"> Implement formal housing project for low income groups Promote low cost appropriate housing technologies Innovative financing mechanism to enable low income groups to afford housing Provide serviced land for housing development Local investors to be encouraged to establish housing 	County Government (department of Housing), Independent real estate developers National Housing Corporation Homegrown Housing

Speaker and other senior County Government Officers		cooperative and develop rental houses <ul style="list-style-type: none"> • Institutions to invest in staff housing scheme especially Kenya Police, Prisons department, Ministry of Health • Land to be acquired for development of official residences for Governor, Deputy Governor, Speaker, Deputy Speaker and other Senior County Government officials. 	Cooperative Societies Financial institutions County Government
Poor control of development leading to anarchy	Mbale, Chavakali, Majengo-Vihiga, Mudete	Strengthen development control in urban and peri-urban areas	County Government in liaison with other relevant departments

Industrial

The only heavy industry (Mudete Tea Factory) operating under capacity	Mudete	<ul style="list-style-type: none"> • County leaders to encourage more farmers to put more land under tea farming • Stop poaching of tea leaves by George Williamson Tea Company 	Governor's Office, Members of Parliament, Vihiga Tea Farmers Cooperative, Ministry of Agriculture
Lack of designated area for light industrial activities	Majengo, Mbale, Chavakali, Mudete	<ul style="list-style-type: none"> • Acquire land for light industrial activities at Mudete, Chavakali, Majengo and Mbale • Lunyerere market (decaying) can be redeveloped into a light industrial area 	County Government, Kenya Industrial Estates, United Nations Industrial Development Organization, Ministry of Industrialization, Vihiga Jua Kali Association, Kenya Chamber of Commerce, Export Promotion Council
Low quality light industrial products	Mbale, Majengo, Chavakali and Mudete	Light industrial artisans to ensure high quality products for export market	Vihiga <i>Jua Kali</i> Association

Limited diversity of light industrial products	Mbale, Majengo, Chavakali and Mudete	To diversify light industrial products for domestic and export market	Export promotion Council, Vihiga <i>Jua Kali</i> Association UNIDO Kenya Industrial Federation (KIE), Ministry of Industrialization
--	--------------------------------------	---	---

Public purpose

Current County Assembly facility is inadequate, lack basic infrastructure, office spaces for MCAs and Chief Officers are lacking	Vihiga Headquarters	Divisional	New complex to be built to accommodate County Assembly and offices to be established at agreed site	County Government
Small and inappropriately site for GK Prisons	Mbale		A new and adequate site for GK prisons. Proposed site	County Government in liaison with National Government
lack of a County Library	Mbale		State of Art County Library to be established at Mbale	County Government/ Kenya National Library Services
Inadequate land for expansion of health facilities-consider Vihiga Health Centre	Vihiga Headquarters	Divisional	Additional land to be acquired from private land owners neighbouring the Health Centre	County Government
Poorly maintained public buildings	Vihiga Headquarters	Divisional	Upscale maintenance of public buildings	County Government

Commercial

<ul style="list-style-type: none"> Lack of planned open air market/Wholesale market for agricultural produce Lack of covered market 	Mbale		<ul style="list-style-type: none"> Acquire land for wholesale and retail market for agricultural produce Acquire land and construct covered market (proposed 	County Government, Kenya Chamber of Commerce
---	-------	--	--	--

		site shown on zoning plan for Mbale)	
Central Business District dominated by old and dilapidated low-rise commercial buildings (Indian Shops design) that were introduced in 1930s to 1940s	Mbale, Majengo, Chavakali and Mudete, Lunyerere	<ul style="list-style-type: none"> • Policy and standards for development within CBD • Modern high-rise commercial buildings to be encouraged especially within CBDs 	County Government to come up with policy Private property owners to implement the policy Kenya Chamber of Commerce
Lack of street lights within the Central Business District	Parts of Mbale, Majengo, Chavakali and Mudete	Provide street lighting to enhance security and enable business to continue late into the night	County Government, Kenya Chamber of Commerce

Educational

Lack of higher Educational institution (University)/University College	Environs of Mbale Town	Allocate land for development of University or University College to afford working class groups to further their education and	County Government Ministry of Education
Inadequate site for Medical Training College	Mbale	Acquire new site for Medical Training College	Ministry of Health, Ministry of Education, County Government
Inadequate facilities for Early Childhood Education and development	Mbale, Majengo, Chavakali, Mudete and their environs	Establish facilities for early childhood education and development	County Government, Private investors in early childhood education and development
Inadequate space/land for primary and secondary educational facilities save for Chavakali High School.. desperate cases include: Mbale High Schoool, St Clares Maragoli Girls, Inona Secondary, Idavaga Primary and Secondary, Mukuli	Mbale, Majengo, Chavakali, Mudete and their environs	Where possible, acquire additional land from private owners for expansion of educational facilities	Ministry of Education, BOG/PAT; CDF Committee,

Primary, Mukingi Primary and Secondary			
Lack of special schools (children with disabilities)	Mbale, Majengo, Chavakali, Mudete and their environs	Establish special school to cater for children with physical and mental disabilities; provide adequate support in terms of staffing, food supply, healthcare	Ministry of Education, County Government, Ministry of Health

Transport

Limited coverage by all weather roads, roads are narrow and in poor conditions	Mbale, Majengo, Chavakali, Mudete	<ul style="list-style-type: none"> • Improve roads to all weather roads • Widen roads to recommended standards 	County Government
Lack of planned Bus Park	Mbale, Majengo, Chavakali, Mudete	<ul style="list-style-type: none"> • Land to be acquired for development of Bus Park at Mbale, Majengo and Chavakali and Mudete (Capital Investment Plan) • Proposed sites are shown on GIS-generated Spatial plans 	County Government
Lack of Car Park	Mbale	The current Bus Park to be converted into car park	County Government
Lack of designated sites for motorized <i>boda boda</i> (motorbikes)	Majengo, Mbale and Chavakali	Designate specific sites for motorized <i>boda boda</i> (motorbikes)	County Government
Poorly regulated motorized <i>boda boda</i> (Motorbike) transport services	Majengo, Mbale and Chavakali, Mudete	Regulate motorized <i>boda boda</i> transport services to reduce insecurity and accidents in towns	County Government of Vihiga
Poor road connectivity	Urban and peri-urban areas of Mbale, Majengo and Chavakali	Enhance road connectivity by opening new roads and expanding existing ones	County Government

Road furniture	Interference with road furniture-posters, vandalism, stealing	Ensure safety of road furniture, ensure no posters mounted on road furniture	County Government, community
Non-motorized transport is not catered for-lack pedestrian and cyclist pathways	Majengo, Mbale and Chavakali, Mudete	Provide for NMT in all urban areas	County Government

Public Utilities

Lack of designated solid waste disposal site	Mbale, Majengo-Vihiga, Chavakali and Mudete	<ul style="list-style-type: none"> Acquire site and establish a resource recovery facility Facility will cater for all the urban areas 	County Government
Lack of public cemetery	Mbale, Majengo-Vihiga, Chavakali and Mudete	<ul style="list-style-type: none"> Public land in Maragoli South Location (near Enzaro Health Centre) to be used as public cemetery 	County Government
Lack of public toilets	Mbale, Majengo-Vihiga, Chavakali and Mudete	<ul style="list-style-type: none"> Establish public toilets in strategic locations-Bust Park, CBD ETC To be operated by private entrepreneurs or as SMEs 	County Government,

Urban and Peri-Urban Agriculture

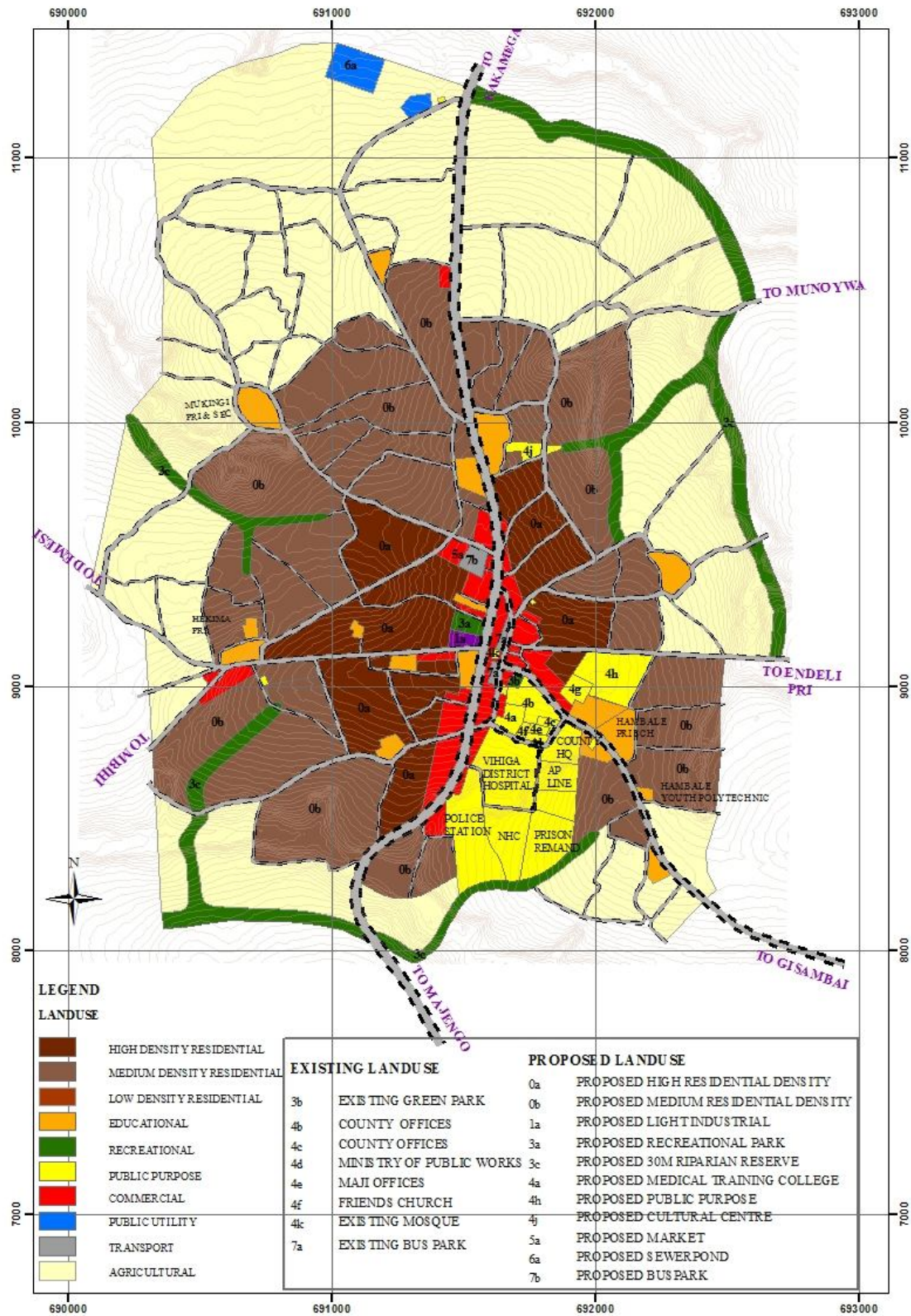
Poorly regulated urban and peri-urban agriculture-Agriculture in conflict with other land uses	Mbale, Majengo, Chavakali and Mudete and their environs	<ul style="list-style-type: none"> Promote and regulate agriculture in urban and peri-urban areas (intensive livestock production, vegetable farming, organic farming of mushrooms and horticulture etc) 	County Government, Ministry of Agriculture, Public Health department, Physical planning department
--	---	---	--

		<ul style="list-style-type: none"> • Zone areas for various agricultural activities, limit the number of livestock to be kept • Enact by-laws to govern agriculture 	
--	--	---	--

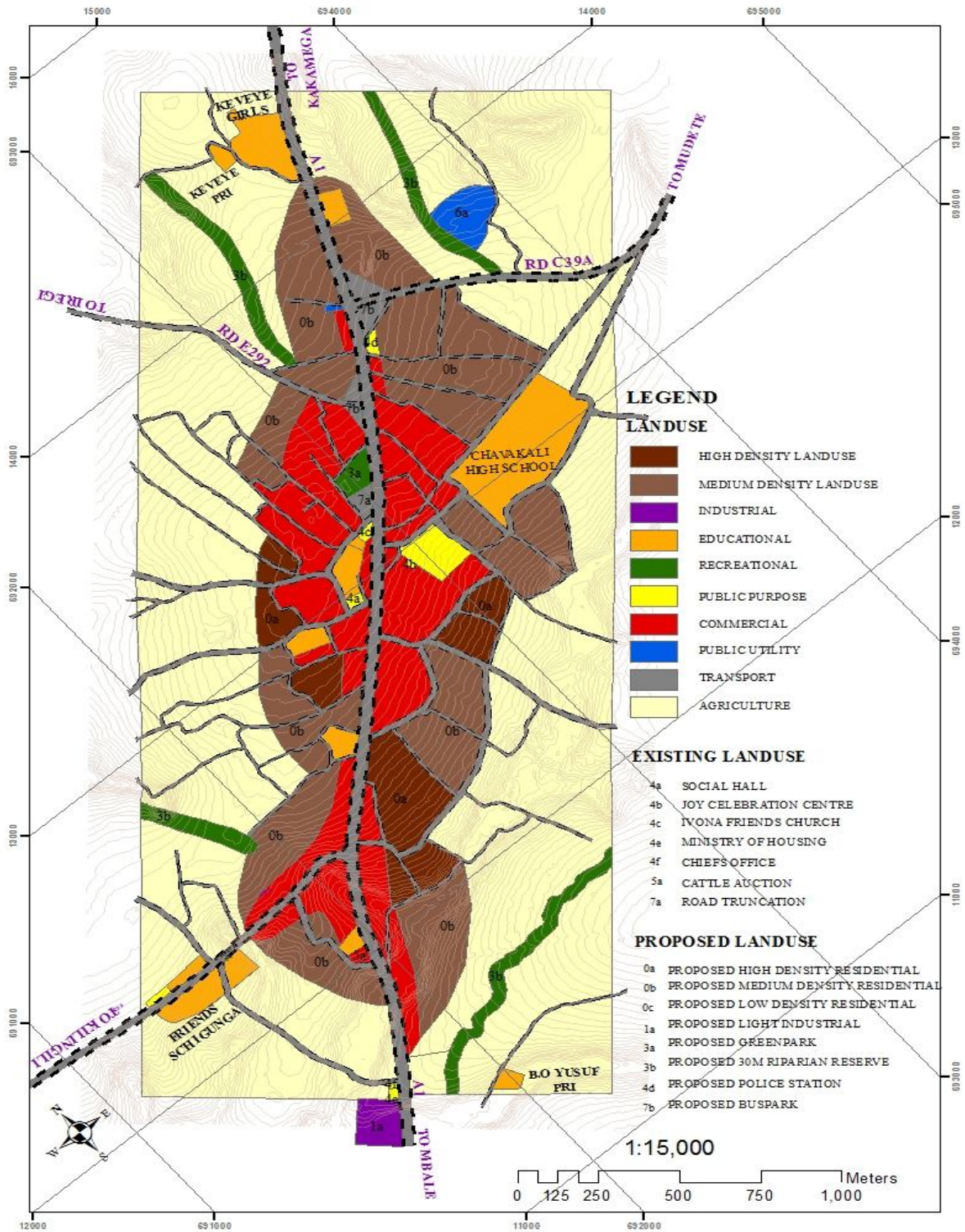
Recreation/Conservation

Lack of recreational facilities for children and adults	Mbale, Majengo, Chavakali, Mudete and their environs	Invest in recreational facilities for children and adults- nature parks/open spaces Entertainment centres	County Government private investors
Lack of stadium	Mbale, Majengo, Chavakali, Mudete and their environs	Invest in stadium at Solongo and play fields at Kidundu and Mbale	County Government, donor community, Ministry responsible for sports,
Lack of playfields at neighbourhood/community level	Mbale, Majengo, Chavakali, Mudete and their environs	Establish play fields in every neighbourhood	Ministry responsible for sports, neighbourhood associations etc
Lack of nature parks	Mbale, Majengo, Chavakali, Mudete and their environs	Establish nature parks, protect environmentally fragile areas	County Government, Ministry Water, Environment and Natural Resources
Encroachment on riparian reserves and wetlands	Along riparian reserves (Ehedwe River, Edzava River, Wakikuyu River)	Protect all wetlands and riparian reserves	County Government, WARMA, Community

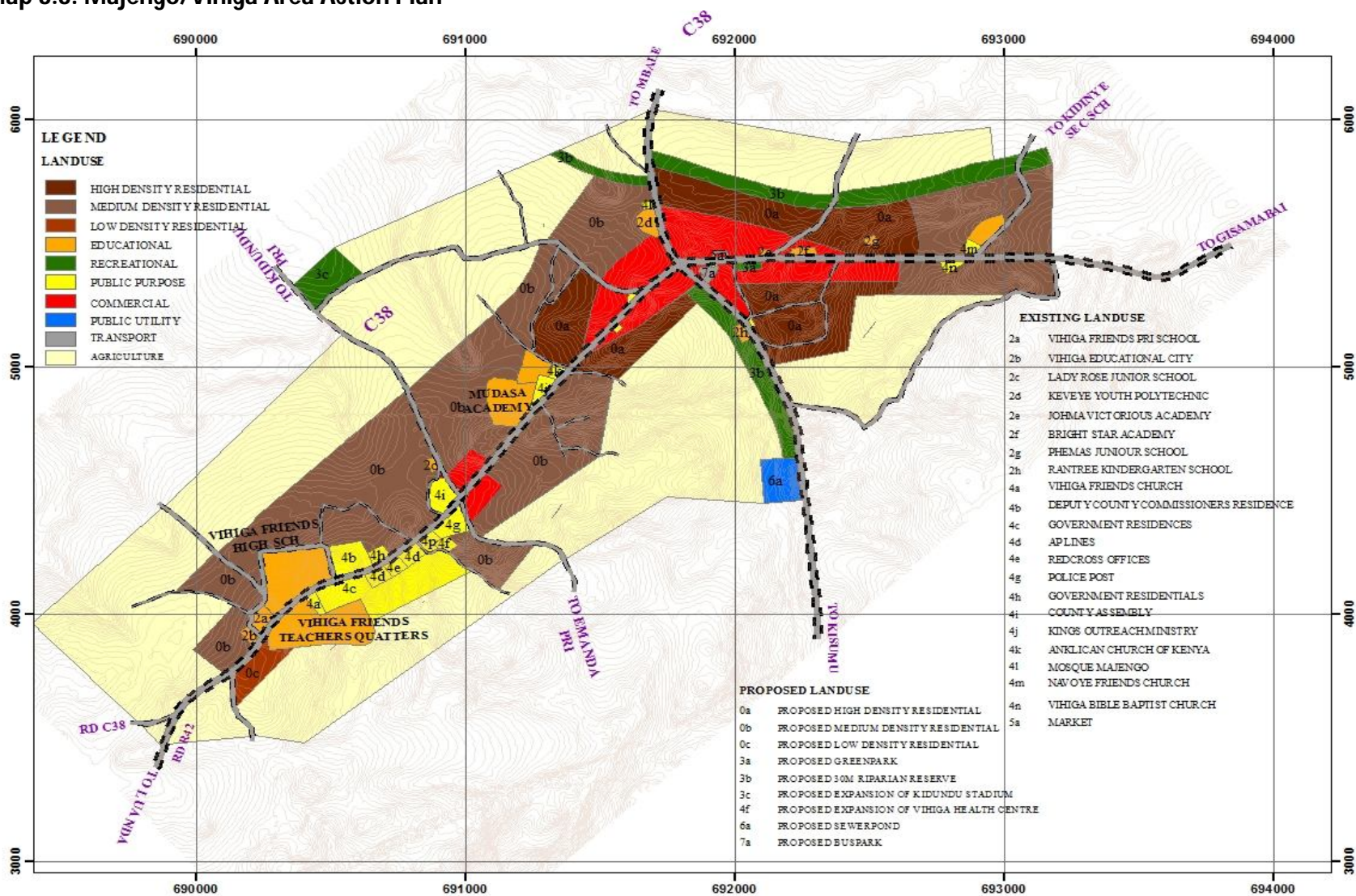
Map 3.1: Mbale Area Action Plan



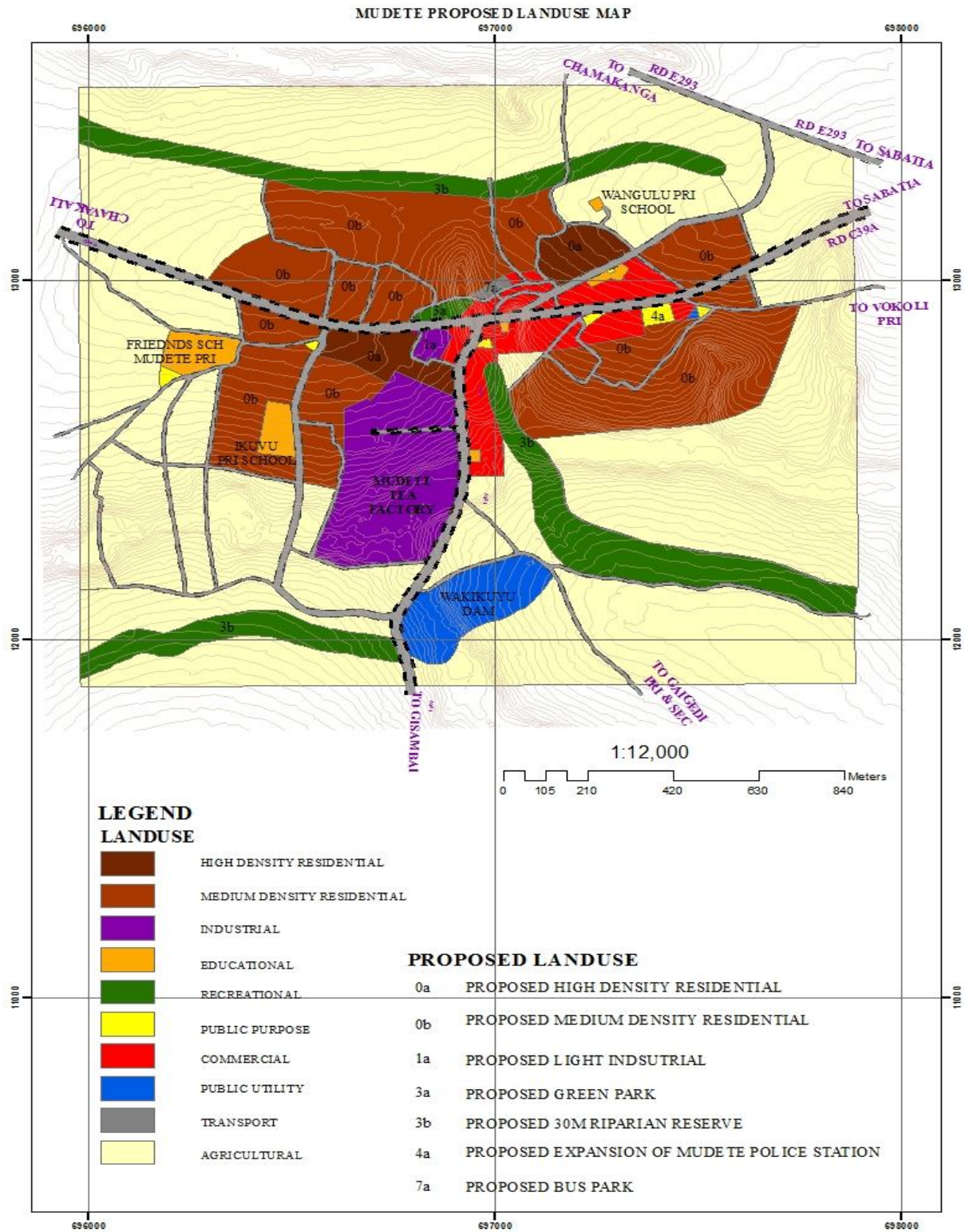
Map 3.2: Chavakali Area Action Plan



Map 3.3: Majengo/Vihiga Area Action Plan



3.4: Mudete Area Action Plan



2.2 Kaimosi-Jeptulu

2.2.1 Location

Kaimosi Complex and Jeptulu Town in Hamisi Sub-County are located at 0°07'N 34°50'E

Kaimosi Complex is home to several institutions including primary schools, secondary schools, technical college, theological college, Teachers' Training College and Hospital. On the other hand, Jeptulu is a marketplace with provision stores, open market, rental houses, among others

2.2.2 Historical Background of the Town

The name Kaimosi originated from the smoke-emitting stone (Stone is *Koita* in Terik dialect) located at Chapchilwaji Hill (Kaimosi) areas. The historical development of Kaimosi can be traced to the arrival of white Missionaries (the Quakers) in 1902. The missionaries settled there and established schools, health facility (Kaimosi Hospital), established a mini-hydro power plant on Garagoli River and established Kaimosi Dam to supply water to the institutions, established farms and protected indigenous forests. In order to ensure land security the missionaries took a 999 year land lease.

Kaimosi has since emerged as a complex home to various institutions sponsored by Yearly Meeting of Friends (The Quakers) while Jeptulu has emerged as a commercial area.

2.2.3 Statement of the Problem

Preparation of Integrated Strategic Urban Development Plans for all urban areas and Cities is consistent with the provisions of Urban Areas and Cities Act of 2011 (GoK, 2011) and the County Government Act of 2012. Kaimosi Complex and Jeptulu Area and their environs are rapidly urbanizing but there is no current spatial framework to guide such level of urbanization.

The County Government of Vihiga has proposed a number of development projects at Kaimosi-Jeptulu area including public university and Airstrip. These proposals are not contained in any approved plan and therefore may be overtaken by other proposals in the near future.

Preparation of Integrated Strategic Urban Development Plan for Kaimosi-Jeptulu area is a deliberate effort to contribute towards realization of sustainable development in the era of rapid urbanization.

2.2.4 Existing Spatial Structure

- Urban structure and form
- Transport features
- Terrain features
- Environmentally sensitive areas
- Land tenure system

2.2.5 Emerging Planning Issues

Planning issues in Kaimosi and Jeptulu include: lack of University/University College, lack of conventional sewerage system, inadequate/ poor coverage of piped water scheme, intermittent supply of piped water, inadequate housing for low and medium income groups, lack of solid waste disposal site, lack of designated site for light industrial activities, lack of cultural centre, poor road connectivity, narrow roads, lack of guest houses for domestic and international tourists, limited support for special schools (especially healthcare and food supply), insecurity, limited employment opportunities for trained.

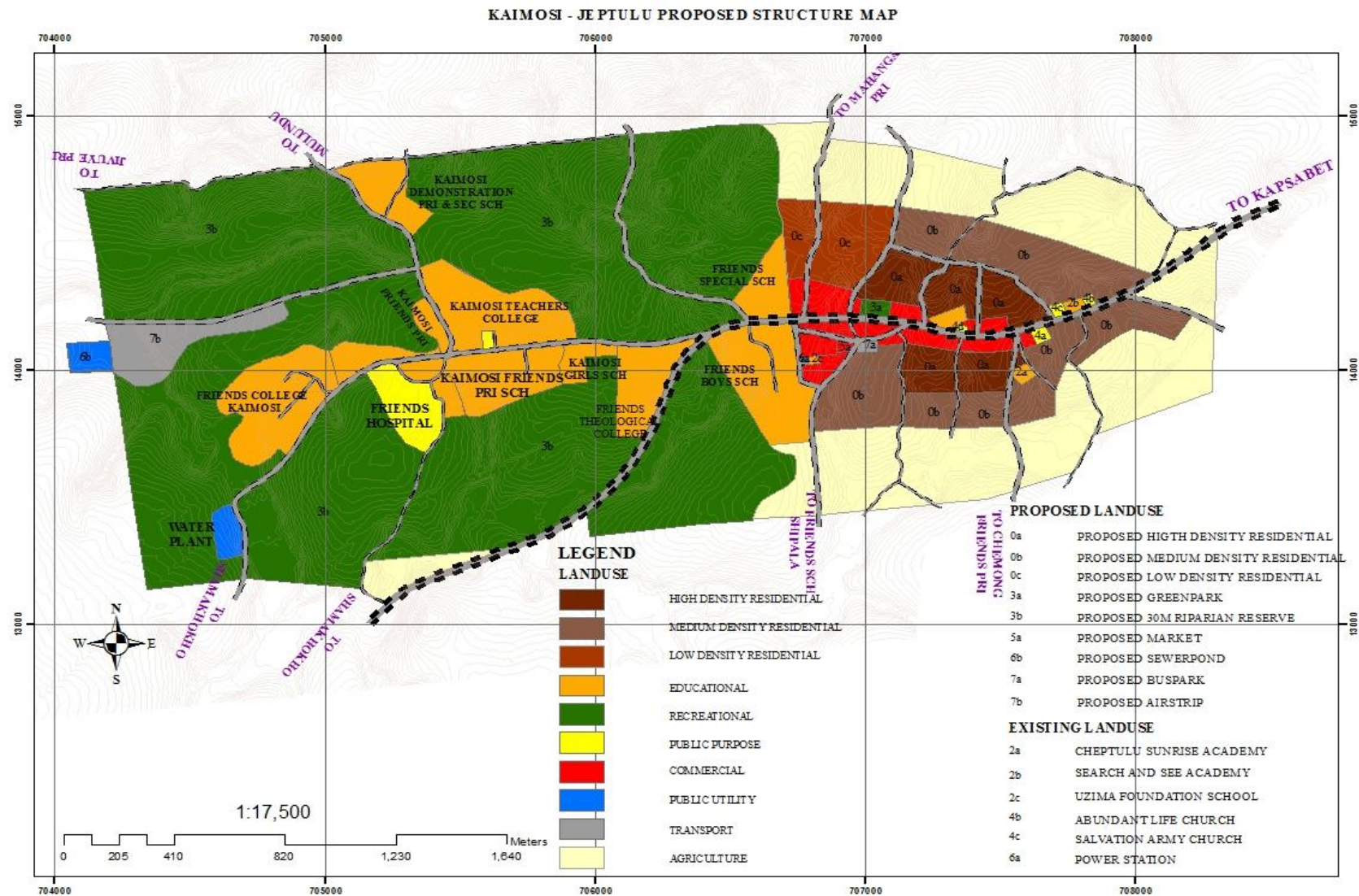
2.2.6 Integrated Strategic Urban Development Plan for Kaimosi-Jeptulu Urban Centre

2.2.7 Proposed Planning Interventions

Planning Issue	Place of occurrence	Proposed plan intervention/Strategy	Actors
Inadequate supply of piped water	Kaimosi and Jeptulu	<ul style="list-style-type: none"> Expansion of Kaimosi Water Supply Project Sustainable exploitation of underground water supply 	Ministry of Water, Environment and Natural Resources Lake Victoria Water and Sewerage Services Board, Amatsi Water and Sewerage Company, Water Resources Management Authority (WARMA),
Lack of conventional sewerage system	Kaimosi and Jeptulu	Implement a conventional sewerage system to cover Kaimosi, Jeptulu and Shamakhokho	Ministry of Water, Environment and Natural Resources Lake Victoria Water and Sewerage Services Board, Amatsi Water and Sewerage Company
Inadequate housing for low and medium income groups	Jeptulu, Kaimosi	<ul style="list-style-type: none"> Institutional houses to be developed (preferably 1 and 2-bedroom flats) for optimum utilization of land Private investors to invest in rental housing Adopt low-cost building technology (Extension services on building technology by Ministry responsible for Housing) 	Public and private institutions Private Real Estate developers Ministry responsible for Housing
Lack of cultural centre	Kaimosi	Establish cultural centre to serve as a tourist destination and educational centre	County Government, Terik Cultural Association, Ministry responsible for Culture, UNESCO
Inadequate support for special school Kaimosi Special School for Mentally Handicapped	Kaimosi	Special school to be given more support in terms of medical care and food supply and cleaning materials	CDF Committee, Ministry of Education, Ministry of Health, County Government, Donor

			Community
Lack of designated site for light industrial activities	Jeptulu	1 Acre of land to be set aside for light industrial activities	County Government- Ministry responsible for Land, Ministry responsible for industrialization
Lack of university	Kaimosi	Public University and Private University proposed at Kaimosi	Ministry of Education, Commission for University Education, County Government, Yearly Meeting of Friends Church (private university)
Poor road connectivity, Narrow roads Limited all-weather roads	Jeptulu	Enhance road connectivity; create new roads, expand existing roads Major roads serving Kaimosi Complex to be improved to all weather and continue to be maintained	County Government, Ministry of Roads
Lack of covered market	Jeptulu	A covered market to be established at Jeptulu	County Governemnt
Lack of street lighting	Kaimosi, Jeptulu	Street lighting programme to be implemented to enhance security and enable businesses to continue late into the night	County Government
Lack of solid waste disposal site	Kaimosi and Jeptulu	Suitable Resource Recovery Estate to be established at	County Government
Lack of Airstrip	Kaimosi	Airstrip to be established at Kaimosi opposite the Dairy Farm (land available)	County Government, Ministry of Transport
Limited exploitation of renewable energy sources e.g hydro-power	Kaimosi	Micro-hydro power plant to be established at Garagoli River to generate electricity for institutions and households	UNIDO, Local Community, Public and private institutions,
Poor control of development	Kaimosi and Jeptulu	Strengthen development control	County Government in liaison with other relevant departments

Map 3.5: Kaimosi-Jeptulu Area Action Plan



2.3: Serem Town

2.3.1 Location and Historical Background

Serem Town in Hamis Sub-County is a border town between Vihiga and Nandi Counties. It is located at 0°04' N 34°51'E. Serem Town is named after a Nandi businessman by the name Serem. The original name of the local trading centre is Esiekuti (Nandi name). The urban centre is mainly inhabited by the Nandi and Terik communities but it is also home to other ethnic communities including Maragoli, Kikuyu, Luo, Kisii among others. Serem emerged as a hamlet with grass-thatched shops and butcheries in 1930s. Local people used to gather there for social talks and exchange of ideas. Local people started business activities including butchery, eateries, and small retail shops. Business women were mainly involved in cooking and selling fermented porridge made of *wimbi* and finger millet. It is worthwhile observing that all the businesses were carried out in grass-thatched structures and tree sheds. Some of the local businessmen who started business activities at Serem include Serem, Karani, Andambi, Ndori, Shiverenge Maziba, Makaka Khadambi. Their grass-thatched shops were arranged in a row which means that urban planning did not come with colonial masters but the local people also used to practice planning (informal). The local trading hamlet became vibrant commercially with the arrival of two Arabs (Sharif and Wali) and one Kikuyu (Mr Njuguna). Mr Sharif specialized in hides and skins which he exported to Kisumu while Mr Wali operated a big general store and Mr Njuguna was involved in selling of roasted groundnuts (*njugu karanga*).

Formal planning by the Local Council (Kakamega County Council) started in early 1950s. The core area of the trading centre was planned and businessmen allocated the plots. Developers applied for development permission from Kakamega Local Council through their local representative and were required to use a prototype architectural plan designed by the council to ensure uniformity (control of development). Mr. Imboba (son of Emuguni) was the local representative to the Local Council of Kakamega. Since cement did not exist by then, developers used locally fired bricks cemented together with mud.

Serem Police Post was established early enough (1958-1961) due to insecurity associated with gambling activities among youths. Young men started gambling business which resulted in disputes and loss of lives. There were also frequent cases of stock theft between the Nandi and Terik communities that border each other. Serem has since grown into a vibrant urban centre and is cosmopolitan in nature due the presence of several ethnic communities.

2.3.2 Planning Area Characteristics;

location, demography, size, topography, climate, soils, geology, urban function

2.3.3 Problem Statement

Although Serem is an economically vibrant border town, it is currently developing without any spatial framework and hence a recipe for anarchy in the near future. The first attempt to prepare a development plan for Serem Town was made in 1950s and covered a limited area within the Central Business District. The initial plan was prepared by a Public Health Officer under Kakamega Native Council since there were no Professional Planners then. Town Planning was confined to limited public and therefore did not guide development outside public land. The new Physical Planning Act Cap 286 of 1996 empowers the Director of Physical Planning to plan on both private and public land. Preparation of an Integrated Strategic Urban Development Plan for Serem Town is a deliberate effort to come up with a spatial framework that will guide the town's future development and is informed by new planning principles.

2.3.4 Existing Spatial Structure

- Urban structure and form
- Transport features
- Terrain features
- Environmentally sensitive areas
- Land tenure system

Emerging Planning Issues

- Lack of designated site for open-Air market and covered market
- Livestock market lack basic infrastructure e.g. sheds, water and sanitation facilities
- Old and dilapidated commercial buildings
- Inadequate housing for low and medium income groups
- Poor coverage by piped water scheme, intermittent supply of piped water, over reliance on water from springs and streams for domestic use
- Lack of conventional sewerage system-over reliance on ordinary pit latrines
- Lack of green spaces for relaxation
- Lack of adequate Bus Park and car parking spaces
- Poorly regulated petroleum dispensing outlets-located on road reserves

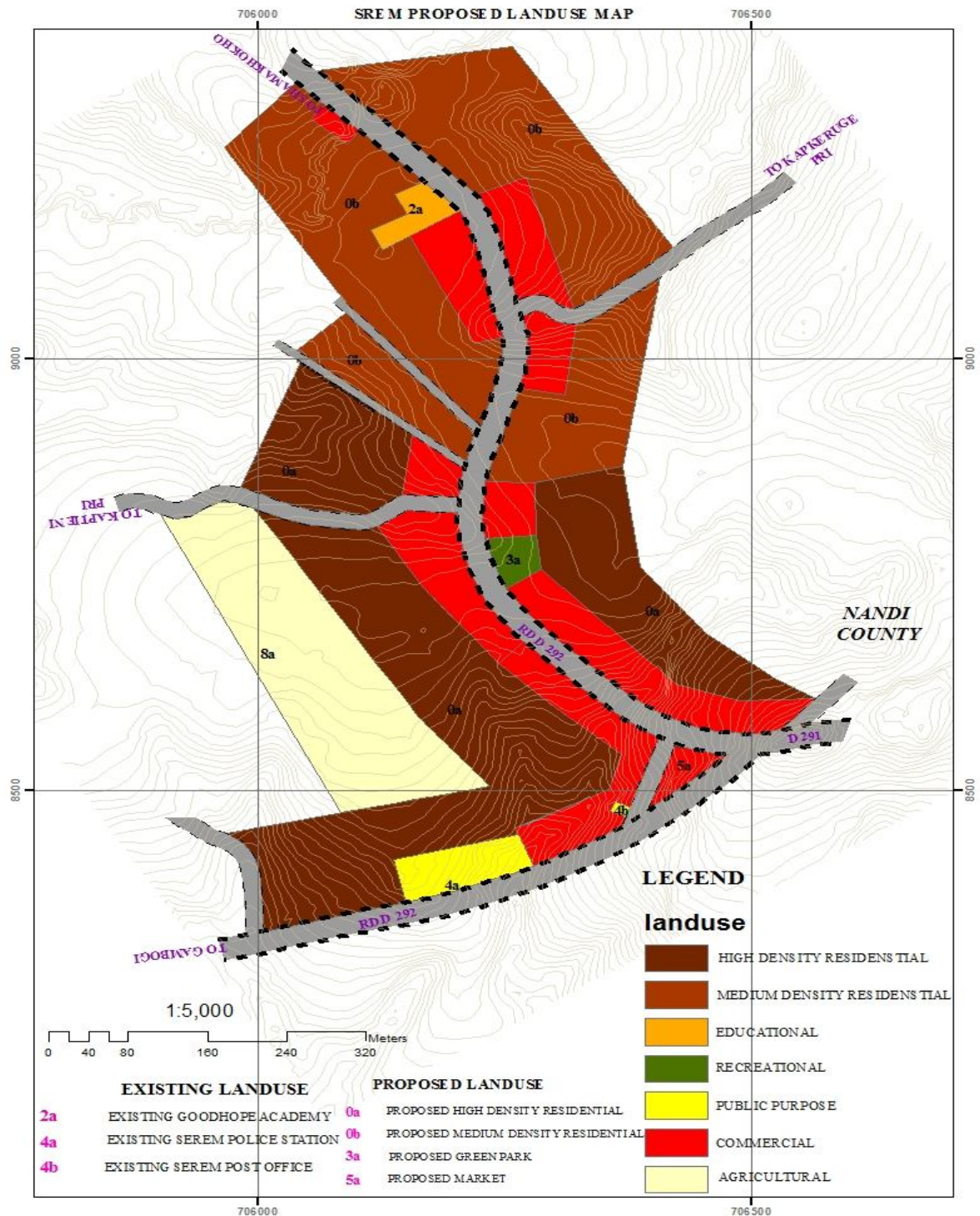
2.3.5 Integrated Strategic Urban Development Plan for Serem Urban Centre

2.3.6 Proposed Planning Interventions

Planning Issue/Problem	Place of occurrence	Proposed intervention/strategies	Actor(s)
<ul style="list-style-type: none"> Lack of designated site for open-Air market and covered market Livestock market lack basic infrastructure e.g. sheds, water and sanitation facilities 	Town-wide	Establish well planned open air market and covered market	County Government
Old and dilapidated commercial buildings	CBD	Replace old and dilapidated buildings within the CBD with modern ones	County Government, Private property owners
Inadequate housing for low and medium income groups	Town-wide	Private entrepreneurs to invest in rental housing for low and medium income groups	Ministry of Lands, Housing and Urban Development
Poor coverage by piped water scheme, intermittent supply of piped water, over reliance on water from springs and streams for domestic use	Town-wide	<ul style="list-style-type: none"> Short term measures include: Increase coverage of piped water scheme, exploit underground water potential (boreholes), encourage small scale independent water providers Long term measure: source water by gravity from neighbouring Nandi County (Water Tower) 	Lake Victoria North Water and Sewerage Board Amatsi Water and Sewerage Company Independent water providers
Lack of conventional sewerage system-over reliance on ordinary pit latrines	Town-wide	Invest in conventional sewerage system, encourage use of septic tanks and VIPs in low density areas	County Government Department of Public Health, Department of Physical Planning
Cross border insecurity	Town and its environs	Strengthen security	County Government, National Government
Lack of green spaces for	Specific sites in town	Provide and maintain public green	County Government

relaxation		park for relaxation	
Lack of adequate Bus Park and car parking spaces	CDB	Establish modern Bus Park since it is an economically vibrant urban area	County Government
Poorly regulated petroleum dispensing outlets-located on road reserves	CBD	Regulate petroleum dispensing outlets- well planned Petrol Service Stations and approved by all relevant authorities	County Government-Physical Planning Department, NEMA, Public Health Department

Map 3.6: Serem Area Action Plan



2.4: Hamisi Town

Location

Hamisi Town, the headquarters of Hamisi Sub-County is located at 0°04'N at 34°47'E

2.4.1 Location and Historical Background

Hamisi Town was named after an Arab businessman by the name Amis who owned a big general store there. People used to travel long distances to Amis's general store with a variety of goods. Hamisi therefore means Amis's place (or kwa Amis) in local dialect. The businessman became so popular with the local community that they named the town after him. Other Arab businessmen who came to the area include Sharif who operated hides and skins enterprises at the present day Serem and Mr Wali who owned a big general store at Serem with food stuffs, beads and among others.

Hamisi is a historical town. The missionaries from USA settled around Goibei area and introduced P.A.G denomination among the local community. The traditional court that was conducted under *Mutembe* tree was started at Hamisi to settle disputes among the local community. The colonial government introduced a court at Hamisi in 1896 due to frequent cases of insecurity especially cattle rustling. Goselwa was the first African Magistrate at Hamis Court.

Hamisi was elevated to a Division Headquarters by the colonial government in 1920 and its part of Nyanza region. The current Sub-District Hospital was developed by the colonial government in 1920 as a Health Centre. Hamisi stadium was introduced by the Friends Missionaries (The Quakers). Hamis Town attained the status of a District Headquarters in 2007 and Moses Oletutui was the first District Commissioner followed by George Okello who took over in 2008.

2.4.2 Planning Area Characteristics

location, demography, size, topography, climate, soils, geology, urban function

2.4.3 Problem Statement

The first attempt to plan Hamisi Town was made in 1970s. The Master Plan was never approved but nevertheless was used to guide spatial growth of the town. The plan has since been overtaken by events and can no longer be relied upon to guide future spatial growth and development of the town. Preparation of an Integrated Strategic Urban Development Plan for Hamis Town (2012-2030) is hence a deliberate effort to achieve sustainable urban development through economic recovery, enhanced social cohesion, and protection of environment.

2.4.4 Existing Spatial Structure

Urban structure and form

Urban structure and form: Hamis is a fairly compact town measuring about 0.23Km². The eastern side of the town specializes on public purpose including administrative and National/County Government line ministries, Sub-County Health Hospital, National Cereals and Produce Board (Store for cereals), among others; while the western side specializes on commercial activities and a stadium. In between are residential neighborhoods. The town is structured by a class C56 Road (Majengo Gisambai-Hamis- Jebrock Road) which connects the western and eastern part of the town. Hamis Town is surrounded by rich agricultural hinterland.

2.4.5 Emerging Planning Issues

- Decaying commercial area (old and dilapidated commercial buildings)

- Lack of specialized commercial outlets/provision stores
- Lack of recreational facilities for children and adults
- Hamisi stadium inadequate in size and is not developed to required standards
- Inadequate decent rental housing for middle income groups (civil servants)
- Lack of industrial activities (heavy and light)
- Lack of tertiary educational facility-e.g. university college, Medical Training College, Technical Training College or Teachers Training College
- Underutilized depot for National Cereals and Produce Board because farmers do not produce enough cereals

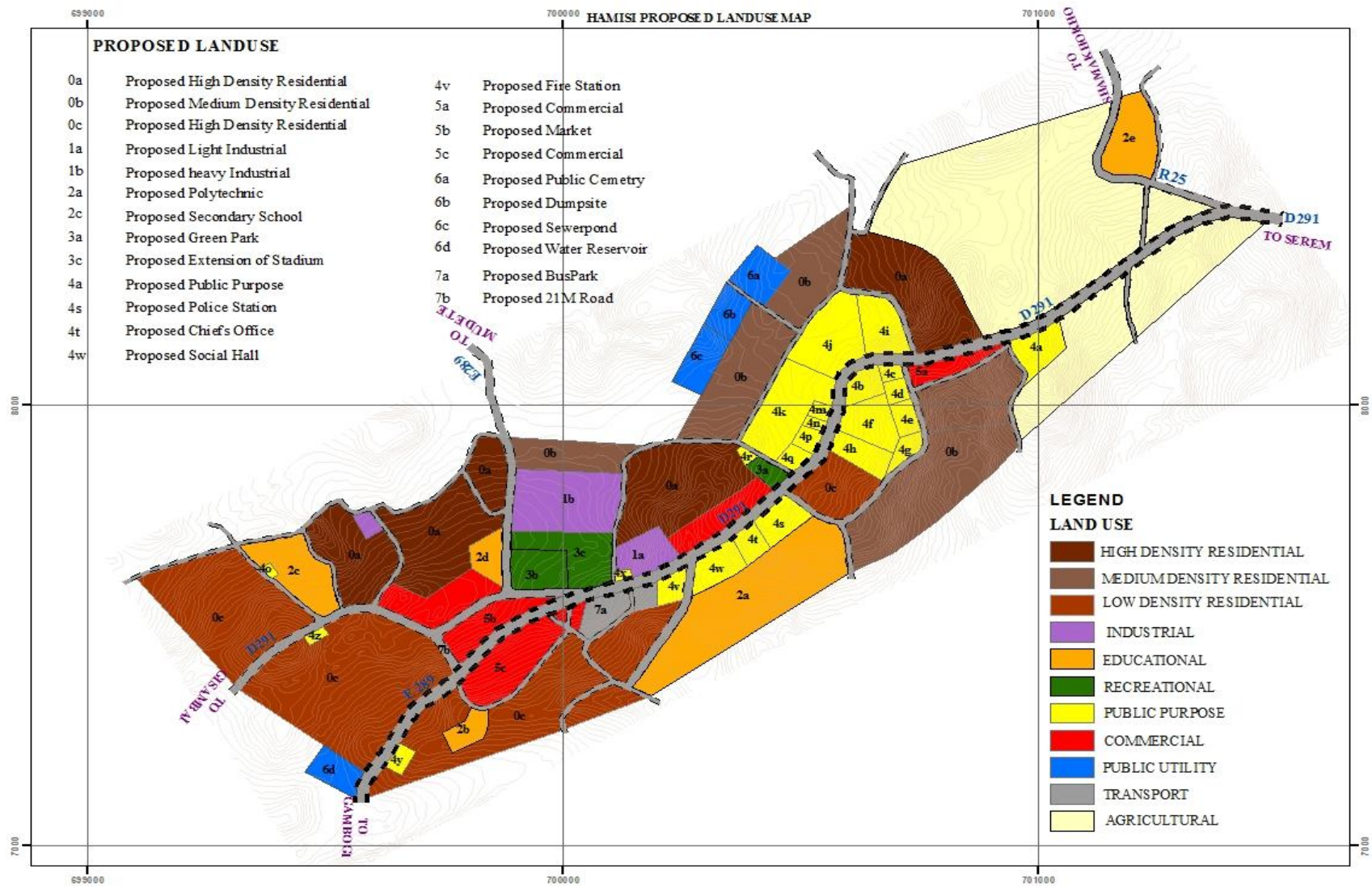
2.4.6 Integrated Strategic Urban Development Plan for Hamisi Urban Centre

Proposed Planning Interventions

Planning issue/Problem	Place of occurrence	Proposed intervention/strategies	Actor(s)
<ul style="list-style-type: none"> • Decaying commercial area (old and dilapidated commercial buildings) • Lack of specialized commercial outlets/provision stores 	Commercial section	Redevelop commercial area	
<ul style="list-style-type: none"> • Lack of recreational facilities for children and adults • Hamisi stadium inadequate in size and is not developed to required standards 	Hamisi Town and its environs	<ul style="list-style-type: none"> • Invest in recreational facilities such as snake park, nature walk • Acquire additional land for expansion of stadium and invest in necessary infrastructure 	County Government
Inadequate decent rental housing for middle income	Hamisi Town	Private developers to be encouraged to invest in rental housing	

groups (civil servants)			
Insecurity	Hamisi Town and its environs	Beef up security in town and its environs	National Government County Government Community
Lack of industrial activities (heavy and light)	Hamisi Town and its environs	Provide serviced land for industrial establishment of industrial activities e.g fruit processing,	County Government
Lack of tertiary educational facility-e.g. university college, Medical Training College, Technical Training College or Teachers Training College	Hamisi Town and its environs	Establish a tertiary educational facility e.g university college/ Medical Training College/Teachers Training College to generate more activity in town	National Government County Government
Old and dilapidated law courts-established during colonial era Lack of official residence for magistrate	Hamisi Town	Construct modern Law Courts and official residence for magistrates	National Government in liaison with County Government
Limited employment opportunities for trained youth	Hamisi Town and environs	Introduce light industrial activities to absorb trained youth	County Government
Underutilized Depot for National Cereals and Produce Board because farmers do not produce enough cereas	Hamisi Town	Upscale production of cereals so excess is stored in order to regulate prices	Ministry of Agriculture

Map 3.7: Hamisi Area Action Plan



2.5: Gambogi Town

2.5.1 Location and Historical Background

Gambogi Town in Hamisi Sub-County is located

The name Gambogi is a corrupted version of *Kambak*, a Kalenjin name for the place where the Terik community (a sub-tribe of Kalejin community) used to conduct their cultural and administrative functions. Visitors (non Terik people) who could not pronounce Kambak well called the place Gambogi. The Terik people who were mainly pastorists used to converge at Kambak for annual cultural events including wrestling, jumping, singing and dancing. Strong and well built Terik men from different areas used to converge there with their weapons such spears, clubs and shields to exhibit their mighty power and ability to protect themselves against aggressors. The annual peaceful competitions among strong men from different parts including Sino and Masani (Masana) and Geo were attended by all including women and children who provided moral support through songs, dances and cheering. Women also provided plenty of food during the event.

Missionaries took advantage of the annual cultural events that brought people together to preach the word of God to the local communities. The Terik community was more conservative and kept their culture, a factor that made the missionaries Church Missinary Society), Pentecostal Assemblies of God, The Quakers (Friends Church) and Anglicans to use the Tiriki (Luhya) to penetrate the area since they were more receptive.

Administrators (Chiefs) also used to hold Barazas at Gambogi to communicate government policies and programmes to the local people. A few local people including Cheptarus Arap Maina and his brother Chegugu Arap Maina started to conduct business activities in grass-thatched houses in 1930s. Grass-thatched shops were later replaced by shops made of used debes which were in turn replaced (in 1950s) by iron sheets (roofs) and fired bricks and mortar (walls). The original shops faced the original Kisumu–Kakamega Road where the police post and

water kiosk are located. Other businessmen who also invested at Gambogi include: Jotham Kichamu, Henry Mboku, Henry Kipruto, among others.

The first attempt to plan Gambogi was made in 1950s when the core business area was planned by Public Health Officers (There were no physical planners then). The then African District Council (ADC) with its headquarters at Kakamega (later County Council of Kakamega) came up with a policy that required all developers to apply to ADC for development permission by presenting building plans for approval. The ADC also came up with a prototype design for shops (The so-called Indian shops) to be adopted by all developers. This design replaced the previous design currently popular with iron sheet-roofed rural houses). Due to logistical challenges (long distance to Kakamega and lack of fast means of transport) Public Health Officers based at Hamis Locational Office used to assist local people with land use planning and approval of building plans.

The pawpaw processing factory was started by the community in early 1980s but has since collapsed due to poor management. Pawpaw farmers who were not being paid for raw material delivered stopped producing the fruit and the facility went under.

The current Kisumu-Kakamega Road through Gambogi Town was built in 1960 by a company from France. The new road has since influenced the spatial structure of the town. The original area for commercial activities has continued to delay as developers (being rational choice makers) prefer to locate their commercial buildings along the busy new road.

2.5.2 Study area characteristics;

location, demography, size, topography, climate, soils, geology, urban function

2.5.3 Problem Statement

Gambogi urban centre is the entry point to Vihiga County from the south. Urban development activities are concentrated along the A1 Kisumu-Kakamega Road and have acquired a lineal

trend albeit not long as compared to other urban centres in the county. It has continued to grow mainly due to the presence of commercial activities including the market and cattle auction. However, Gambogi lacks basic public purpose facilities such as hospital, government offices, recreational facilities, buspark among others. The urban centre does not have an approved spatial framework to guide its growth. Spatial growth has therefore been taking place unguided and without any planning philosophy. If the same trend is allowed to continue, anarchy in the use of land is the most likely outcome with resultant decline in their liveability. Preparation of strategic integrated urban development plans (SIUDPs) for the centre is consistent with the provisions of the County Government Act of 2012 and the Urban Areas and Cities Act of 2011.

2.5.4 Existing Spatial Structure

Urban Structure and Form

Sabatia (Wodanga) is a fairly compact urban area developed on either side of C39 Chavakali-Kapsabet Road. The major land uses include public purpose (administrative, law and order, Health facilities), Educational facilities, and commercial, residential and agricultural. The urban area is surrounded by a rich agricultural hinterland.

Transportation features

The road ribbon from Kisumu to Kakamega and Gambogi to Serem runs through the urban centre and acts as the spinal cord onto which various functions are hooked. The two roads dissect the urban centre into three parts. The two roads present the following possibilities;

- Gives the city its structure, dictating the nature and direction of urban development. The urban centre has adopted a lineal development along the Kisumu-Kakamega road.
- It acts as a means for disseminating local traffic at its various points, thus providing access to key urban functions.
- The roads acts as an organizer, dictating the location of key urban functions, for instance, the police post, market and cattle auction area are sandwiched between the two roads.

- Acts as a means through which the town is connected to its county. Gambogi being a border town for the county, it is linked by the roads to other parts of the county. The A1 (Kisumu-Kakamega) links it to Majengo urban centre while the Gambogi-Serem road links it to Serem and Hamisi towns.
- The roads also promote a linear development of the urban centre thus preventing a compact and efficient agglomeration of key urban functions.

Terrain features

Gambogi is closer to Kisumu and Lake Victoria and is therefore characterized by gentle sloping landscape which is suitable for urban expansion. The terrain allows free flow of surface run off and therefore there is no possibility of flooding in the area.

Land tenure system

Gambogi is characterized by limited public land. The rest of the land is under private freehold tenure system and currently under agricultural and livestock production. This has far-reaching implications since public land is inadequate and the County Government is compelled to allocate funds for acquisition of additional land for public purposes and public utilities.

2.5.5 Emerging Planning Issues

- Limited industrial activities
- Fruit (pawpaw) processing factory collapsed long ago
- Lack of designated site for open Air Market and covered market
- Lack of Bust Park
- Private slaughter House in conflict with commercial activities
- Police post in a rented commercial building
- Lack of Health Centre
- Old and dilapidated commercial buildings
- High incidences of insecurity
- Poor coverage by piped water scheme from Sosian Water Project

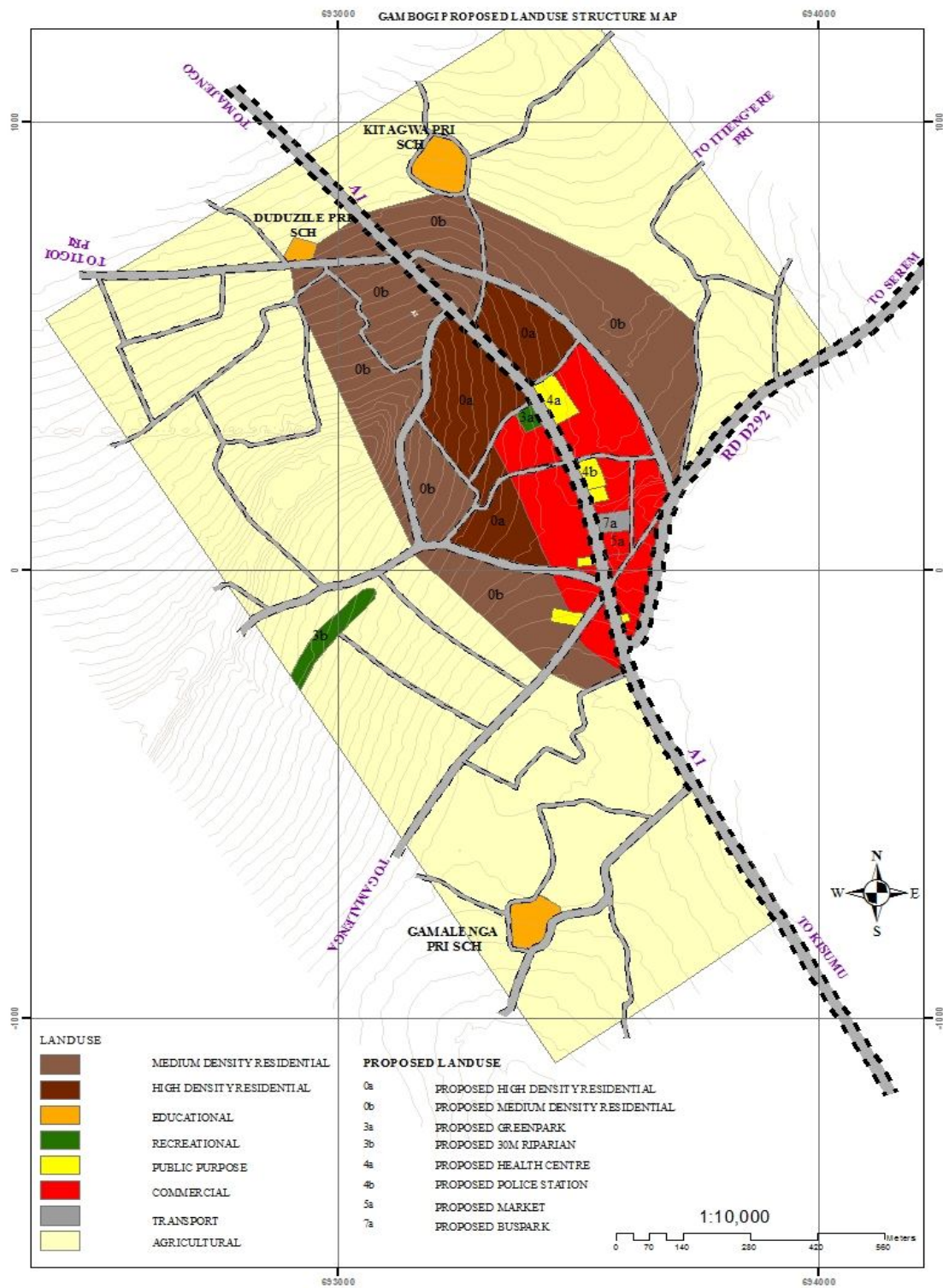
- Poor sanitation facilities- solid waste collection, widespread use of ordinary pit latrines

2.5.6 Integrated Strategic Urban Development Plan for Gambogi Urban Centre

2.5.7 Proposed Planning Interventions

Planning Issue/Problem	Place of occurrence	Proposed plan intervention/strategies	Actor(s)
Limited industrial activities Fruit (pawpaw) processing factory collapsed long ago	Gambogi	Revive fruit processing factory and ensure proper management	Community, Ministry responsible for industrialization, Ministry of Agriculture
Lack of designated site for open Air Market and covered market	Gambogi Town	Allocate space for open and covered market –at existing County Government land	County Government
Lack of Bust Park	Gambogi	Designate land for Bus Park at current site for cattle auction	County Government
Private slaughter House in conflict with commercial activities	Gambogi	Relocate slaughter House to new site to reduce conflict with commercial activities	County Government
Police post in a rented commercial building	Gambogi	Acquire land for establishment of police post/station	National Government in liaison (National Police Service) with County Government
Lack of Health Centre	Gambogi and environs	Establish Health Centre to take care of Gambogi and its environs	County Government –Ministry of Health
Old and dilapidated commercial buildings	Gambogi	To replace old and dilapidated commercial buildings with modern commercial buildings	County Government to come up with policy to be implemented by property owners
High incidences of insecurity	Gambogi	Beef up security	Community, County Government, National Government
Poor coverage by piped water scheme from Sosian Water Project		Operationalize new water supply project to supply enough water	
Poor sanitation facilities- solid waste collection, widespread use of ordinary pit latrines	Town-wide	Encourage adoption of improved human waste disposal facilities- VIPs, Septic tanks	Private property owners County Government- Ministry of Health, NEMA

Map 3.8: Gambogi Area Action Plan



2.6: Luanda Town

2.6.1 Location and Historical Background

Luanda town is located in the southern end of Emuhaya sub-county which was carved out of the greater Vihiga County. Under the new political dispensation, it falls within Vihiga County. It is located in Luanda division as its administrative headquarters. Luanda town is a small but economically vibrant town. It is located along Kisumu-Busia highway. It is about 37 km to the west of Kisumu City and 96km from Busia in the Kenya-Uganda border, and about 400km from Nairobi, the capital city of Kenya. It is a border town connecting four counties and effectively serves a wide catchment area including Busia, Siaya, Kisumu and Kakamega counties.

Luanda Town started as a small rural trading centre in 1916 during the reign of Chief Otiato of Emuhaya Location. Local people used to refer to it as Otiato's market. Local people used to go to Muihekhe (near Maseno) for their household needs before Luanda was established. Commercial activities then included selling of fish from L. Victoria, cereals, bananas and livestock, among others. Ugandan businessmen established a garment shop where they used to make African clothes (*Kanzus*). Their products became very popular with local people. The local people who used to own shops at Luanda include Mzee Joel Mukoya and Mzee Azza Nabule, among others. Luanda became vibrant with the arrival of Indian businessmen who moved in from Kisumu. Indians established a large cereals store and they used to buy cereals (especially maize) from local people and transport the commodity to Kisumu and other towns by train. Indians are still operating large scale businesses at Luanda Town today. The arrival of Railway line at Luanda in 1931 provided strong impetus for its growth. Physical infrastructure (roads and railway line) greatly influenced where Indians settled and carried out their businesses. Mumboa Church of God was established at Luanda in 1920 which later sponsored Mumboa Primary School. The Sugar jaggery at Mwibona was established in 1970 by Hon. Wilson Mukuna (MP for Bunyore) who later sold the facility to an Indian businessman.

The Kisumu- Luanda-Yala- Busia Road was constructed in 1890s. It was later in 1963 rerouted to its present location via Luanda Town. Luanda town started as a railway station in 1905 serving Vihiga, Kakamega and Mumias areas. It attracted a lot of business and missionary activities. By then it had only butchery and a health clinic which were allocated by the Local Native Council. The presence of Indians activated the growth of commercial activities. The Kima Missionary center was established a few kilometers away from the township. It served the hinterland as far as missionary and educational activities were concerned.

The first attempt to undertake formal planning of Luanda was made in 1926 under the then Kakamega Local Native Council which later became Kakamega African Council which later became the County Council of Kakamega.

Luanda attained status of a local headquarters in 1963 and was later elevated to Divisional Headquarters in 1980s. Luanda Post Office was established in 1963. Luanda town was gazetted as a market by the Kakamega African Council in 1920s. It continued to grow until 1987 when it was elevated to Urban Council and then Town Council in 1992. The town council has an area of 92 km².

Assets/Potentials

- Presence of a modern market and existing bus park.
- Proximity to Kisumu airport. The Eldoret airport is about 120km away. It is connected to these facilities by all-weather roads.
- Strategic location along national and international transportation network (A104 Trunk Road).
- Proximity to Maseno University (about 3km) and better placed to provide the much needed goods and services to university staff and students.
- Availability of railway transport
- Rich agricultural hinterland.
- Proximity to natural sites with tourism potential

2.6.2 Study Area Characteristics

Topography:

Luanda Township is characterized by slanting topography. The altitude ranges from 1300m to 1600m above sea level and slopes gently from west to east. Bunyore hill is found to the east of Luanda town and it is a major geographical feature within the township.

Geology and Soils

The geological formation of the district is composed of Kavirondian and Nyanzian rocks system. These rocks are mainly granites and they are clearly observable in Emuhaya and Luanda divisions. These rocks present developmental constraints as far as construction and agricultural production are concerned. The township is characterized by well drained red friable top soil derived from volcanic and basement complex rocks and the yellow red loamy soils derived from both sediments and basement.

Drainage

The town is drained by numerous streams that constitute tributaries of two main rivers namely River Esalwa (Edzawa) and River Yala. These rivers flow from north-east to south-west and drains into Lake Victoria. The rivers which drain the planning area include Jordan, Nasibi, Emukhalia and Mukhalakhala. There are also numerous springs and some seasonal rivers which include Ematenje, Ebutanyi and Itumbu. A few rivers and streams transverse the township. The Maseno Water Supply has its intake near Jordan Bridge.

Rainfall

The area has a high equatorial type of climate with fairly well distributed rainfall throughout the year with an average annual rainfall of 1900mm. Long rains begin from March to June, though the highest amount of rainfall is experienced during the month of May. The short rains are experienced during the months of September through to November. The area is therefore described as high potential area.

Temperature

The temperatures range from 14⁰c to 32⁰c with the average temperature being 23⁰c.

Vegetation

Much of the natural vegetation cover has been depleted and replaced by exotic trees and subsistence farming. The common ones are cypress, Grevilla Robusta and croton crystayelus. They are used to produce timber and poles. Cultural landscapes characterize the planning area since the greater part of the land is under active food production and human settlements. Crops grown include sugar cane, maize, bananas, arrow roots, beans vegetables. Since there are no large grazing fields Napier grass is grown on farms and road reserves.

Agro-Ecological Zone

The agro-ecological zone of the planning area is described as highland sub-tropical with moderate temperatures, low evaporation, transpiration and high rainfall. It is therefore suitable for agriculture.

Economic Setting

The township has a rich agricultural hinterland and the economic activities include sugarcane farming, livestock production, poultry keeping, maize farming, fish farming, growing of bananas and beans, *inter alia*. Cash crops such as tea, fruit trees, sugar cane, groundnuts and potatoes are also grown. Other economic activities include trade and commerce, transport industry, agro-based industrial activities (Kotecha jaggary) and banking services.

Luanda town is a bee-hive of commercial activities throughout the year and more so during market days. The presence of huge granite boulders is a source of income for some farmers who sell them to industrialists from Nairobi. The busy Kisumu-Busia international road places the town at a better advantage economically.

The informal sector commonly as Jua Kali is a very crucial and strategic base for industrial development in the town. This sector supplies farm inputs to the agricultural sector, wares for domestic and industrial use and also creates substantial employment opportunities to the majority of school leavers and drop-outs. This sector includes artisans, women groups, youth groups and self-help groups.

The major activities of the women groups include fish farming, dairy farming, poultry keeping, horticulture and bee keeping. Handicraft, pottery, knitting, tailoring, merry-go-round, housing and transport activities are also undertaken.

The main activities of the Jua kali artisans include vehicle/machinery repair, manufacture of farm implements, welding, electrical work, tailoring, brick making, carpentry, joinery, masonry, jiko making and carving. The main activities of the youth groups revolve around the above mentioned activities.

Agro-based Industries

The presence of Kotecha jaggery that processes sugar cane to produce industrial sugar is a major land mark in Mwibona market. The town has a very high potential for the development of an industrial economy because raw materials are readily available in the form of agricultural products like maize, beans, potatoes, and fruits. Others can be brought in through the good transportation network (both railway and road).

The industries that prove to be viable within the township include shifted maize meal, edible oil milling, animal feeds, manufacturing, poultry processing, tomato sauce processing, soft board processing, dairy plant, fruit canning, tiles and bricks making, *inter alia*.

Petroleum Dispensing Outlets

There are several petroleum products dispensing outlets at Luanda town. This is because of the town's strategic position along the busy Kisumu-Busia road and Kisumu-Siaya road and it is a pointer that the town is economically vibrant.

Trade and Commerce

The major commercial activities in Luanda include: Commercial Banks, open air market, hard wares, warehouses, butcheries, posho mills, chemists, hotels, bar and restaurants. Others include *jua-kali*, retail and wholesale stores, car washing services, beauty shops/salons, motorized and non-motorized (*boda boda*) road transport services, clinics, real estate business and professional services.

Social Setting

Population

Luanda Township is found in Emuhaya Sub-county within Vihiga County. According to the 2009 population census, the town had a population of 49,346. Emuhaya Sub-county is densely populated with a density of 1,067 persons Km². It is denser especially in urban and peri-urban neighbourhoods such as Luanda town. The population is projected to reach 87,076 by the year 2030 (Table below).

Being a border township, it is home to many communities with the majority of them being the Banyore, a sub-tribe of the Luhya. Day time migration is because these communities come from the neighbouring counties of Siaya, Kisumu and Kakamega for business hence exerting pressure on the few resources available.

Population Projection for Luanda Town from 2009-2030

Urban Centre	2009	2012	2017	2022	2027	2030
<i>Luanda Town</i>	<i>49,346</i>	<i>54,469</i>	<i>61,626</i>	<i>69,725</i>	<i>78,887</i>	<i>87,076</i>

Religion

There is a strong presence of various religious groups in Western Kenya and the same is evident in Emuhaya Sub-county. Religious groups tend to foster development by improving people's livelihoods alongside spiritual nourishment. A number of denominations are represented in Luanda Town and they include: Catholic, Anglican, Apostolic, Pentecostal, Divine African Church, Mwamba, Baptist, Legio Maria, Revival and Church of God in East Africa with its headquarters at Kima. The town is characterized by many religious denominations the major ones being –Church of God, Catholic, Pentecostals Assemblies of God. Islamic religion is also practiced.

Physical Infrastructure

Road Network

Generally the township is well served with classified roads but rural access roads need to be opened up. The A104 Kisumu-Busia road is in very good condition. Also the class D264 (Kima-Emusutwe road constructed by the Chinese is also in good condition. Class C (Majengo-Luanda) and Luanda- Siaya roads are tarmacked but the Siaya road is in poor condition because of potholes. Maseno-Ekwanda road is murramed.

The Luanda-Emusire-Butere road is murramed road that narrow earth road that is not in good condition. On the other hand the Luanda-Ekwanda road is earth road that needs to be widened and murramed.

Bridges

Major bridges include Jordan River Bridge along Kima-Emusutswe road and Mukhalakhala. Both bridges are in good condition.

Telephone/Mobile Phone Services

The whole of Luanda Township is covered Airtel, Orange, Yu and Safaricom mobile phone services providers. Landlines cover areas like Maseno, Luanda town and Mwibona.

Electricity

Areas covered include Luanda town, Mwibona and Miekhe, among others. The stretch between Luanda town and Ipali has no power supply line although high tension power lines run along the highway.

Railway line

At some point in time, Luanda town was very vibrant economically because of the railway station. The Kenya railway (now Rift Valley Railway) services collapsed several years ago and the town has become less active. It is the wish of the business community and entrepreneurs that the railway services be revitalized to enable transportation of bulky goods.

Water Supply

The Maseno water supply with its intake at River Esalwa supplies Maseno University and parts of Luanda town. There are numerous protected springs and shallow wells that supply water to the residents.

Liquid Waste Disposal

Luanda town has no sewage system and on-site waste disposal facilities are widely used including ordinary pit latrines, V.I.P latrines and septic tanks.

Solid Waste Management

Luanda town has just acquired a site for disposal of solid waste. Initially, solid waste found its way to individual's farms. There are no waste receptacles in town either.

Social Infrastructure

Schools

Luanda Town is home to many primary and secondary schools. The secondary school within township include: Ebusakami, Mumboha, and Eshiandumba, among others. The primary school include Ebusakami, Mumboha, Eshiandumba, Ebwiranyi, Ebusaba, Osinamutu, among others.

Health facilities

They include Equator Hospital /Nursing home and Maseno Hospital. It should be noted that some of these facilities are not found within the planning area but on its environs but were highlighted to show that the region is endowed with quite a number of such facilities.

Housing

The external town areas are characterized by farm houses while the urban areas are characterized by private rental houses. No well planned housing estate exists in Luanda town hence mixed housing typologies are common. A number of commercial buildings also double up as residential dwellings. Few storey buildings are found.

2.6.3 Problem Statement

Luanda town, like many other towns in developing countries, is grappling with multiple challenges associated with rapid urbanization. The existing development plan dates back to 1974 and cannot be relied upon to guide development within the township. The existing plan of 1974 only covers the open air market, bus-park and the immediate shops.

The former Town Council of Luanda in its efforts to deliver services to the residents came up with and approved a strategic plan for Luanda in 2012. However, the plan could not be implemented because it was not approved by the Director of Physical Planning and required by the Physical Planning Act.

County Government of Vihiga is keen to provide services in various sectors including transport, commercial, industrial, housing, water and sanitation, recreation, health and solid waste management. All these services require space (land) hence planning is inevitable.

The town is rapidly growing with limited control in the absence of a spatial plan. Physical structures are constructed without order while freehold land is undergoing uncontrolled land sub-divisions. If this trend is not checked, the end result is a vast informal settlement that will be impossible to upgrade.

2.6.4 Existing Spatial Structure

Structuring Elements

Luanda Town is characterized by various forms of structuring elements.

Hills

The rocky and rugged Bunyore hills to the north east of Luanda town, Ebusakami, Emutete and other parts of the planning area are major constraints to the expansion of the town. They are unsuitable for human settlement and even agricultural production. They may, however, be utilized as tourist attraction sites and as building/construction material.

Valleys

Numerous valleys with rivers and streams characterize the planning area.

Rivers and Streams

The major rivers passing through Luanda town en-route to Lake Victoria include River Jordan, River Mukhalakhala, among others.

Roads

The Town has a network of classified and unclassified roads which have influenced the town's development pattern including A104 Kisumu- Busia Road, Luanda – Siaya road, Majengo – Luanda road, Luanda –Emusire road and Maseno – Ekwanda road, among others.

Railway Line

With a railway reserve of about 70m wide, the railway line is a major structuring element within the planning area.

Regional Linkages

Luanda serves a rich adjacent agricultural land including Kisumu rural in Kisumu County, Siaya County, Butere, Mumias and Kakamega County. The town's close proximity to Maseno University is an added advantage since the University has strong influence on its development.

A strong rural –urban linkage is quite evident. Farmers from the rich agricultural hinterland find the market for their farm produce at Luanda town. They also purchase their farm inputs and implements at Luanda town. The town is therefore an engine to the development of the area. Farm produce sold at Luanda town come from as far as Kakamega, Nandi counties, central Kenya and even Uganda.

Environmental Concerns

- Bunyore Hills – The rocky Bunyore Hills to the North East of Luanda town are perfect examples of a fragile ecosystem. Others include the rocky areas of Ebusakami and Emutete. Protection of such fragile eco-system through gazettelement is imperative.
- Solid Wastes – Currently, Luanda town has no elaborate plan for management of solid wastes. Much of the wastes generated in town end up in people's farms where it is used as manure. This arrangement is not recommended by Public Health Department since the farmers are predisposed to potential health hazards (broken bottles, metals, glasses,

plastics, needles, *inter alia*). Further, the town is not clean due to presence of lots of solid wastes.

- River Banks and Valleys- Rivers and streams together with valleys traversing the planning area are a major natural resource that must be protected. Human activities that lead to degradation of such lands such as planting of eucalyptus trees and cultivation are quite evident

Land Tenure System

Land is a basic resource for economic development through agricultural production and construction. Access to and control over the same is important. Almost 97 % of the land within Luanda Township is private and is held under freehold ownership status. Trust land is limited and already 95% of it is already developed. This scenario has serious planning implications.

2.6.5 Emerging Planning Issues

The planning issues identified by stakeholders and development partners include:

- Congestion within the central business district of Luanda
- Lack of designated wholesale market
- Indiscriminate/inappropriate means of disposal of solid and liquid waste
- Lack of designated dumping site
- Lack of sewerage system in Luanda town
- Inadequate coverage of clean water provision and sanitation facilities
- Lack of open spaces/ recreational facilities
- Decaying sections of the town/Dilapidated structures
- Lack of a cemetery
- Lack of town's beautification programme
- Illegal construction of buildings/ structures or informal settlements
- Non – functional Railway Station
- Limited distribution of electricity with some sections of town not covered

- Mixed developments of residential, commercial, industrial uses, among others.
- Limited public land
- Lack of traffic segregation (*boda bodas*, pedestrians and vehicles)
- Inadequate parking (long vehicles/trucks parked along the highway)
- Linear developments along the major roads
- Absence of planned streets and back/service lanes leading to poor interconnectivity
- Encroachment on road reserves, alleys, service lanes
- Small and Inadequate bus/matatu park
- Lack/poor drainage system
- Presence of huge rock boulders
- Encroachment of fragile land such as hills, valleys, riparian reserve

2.6.6 Integrated Strategic Urban Development Plan for Luanda Urban Centre

Introduction

The Integrated Strategic Urban Development Plan for Luanda Town is geared towards addressing a number of planning concerns identified by the planning team and the stakeholders. The plan proposals highlighted below will go a long way in alleviating some of the said concerns.

In order to come up with comprehensive plan proposals, six action areas were identified, these are: Eshiandumba, Essaba-Itumbu, Luanda town, Epanga, Emutsuru and Ebusakami-Emutete action areas.

Eshiandumba Action Area Plan

Eshiandumba is located in the north-western tip of the planning area. The major structuring elements are the railway line and its station and the Luanda-Siaya road. This area has a market centre called Mwibona.

Land Use Proposals

0 Residential

The action area has a market centre and it is proposed that residential uses will be provided in the area designated as Urban Promotion Area (UPA). Both high and medium density residential developments may be allowed.

1 Industrial

An industrial park has been proposed along the railway line. 1₁ is proposed for the establishment of both light and medium industries. The urban promotion area should also accommodate light industrial activities.

2 Educational

The action area has both a primary and secondary schools both sharing the same name, that is, Eshiandumba (2₁).

3 Recreational

3₈ is an existing water reservoir. It is proposed that this land is protected from encroachment.

5 Commercial

Mwibona is the major commercial node in this area. It is proposed that the market area be expanded to congregate for increasing urban land uses and to accommodate residential developments.

7 Transportation

It is observable in the plan that some parcels of land do not have access. While it is paramount that every parcel of land must have access, it is recommended that the minimum road reserve should not be less than 9m.

7₁ is the existing Kisumu-Siaya road, it should be recarpeted to fill in the potholes. The Kisumu-Butere railway line also traverses this area. The existing Luanda Railway Station (7₂) should be reopened.

9 Agricultural

The remaining part of the area is characterized by agricultural land use activities. It is recommended that land sub-divisions into agriculturally uneconomical units be contained. The minimum land size should not be less than 1 acre and high value agricultural production be carried out. This includes zero-grazing and horticulture together with agro-forestry.

Essaba-Itumbu Action Area Plan

This area is found on the northern part of the planning area. It is punctuated by Kisumu-Busia highway and the Butere-Kisumu railway line.

Land Use Proposals

2 Educational

This action area has Mulwakhi School in its southern part. The northern part has Essaba primary school but is slightly outside the planning area.

5 Commercial

The area is adjacent to Luanda Town and Eshilandumba action areas hence most of the commercial and other activities related to urban uses can be sourced in the two areas.

It must be noted, however, that commercial buildings is a common site along major roads, especially along the Busia-Kisumu highway. This trend needs to be checked to avoid linear development and to concentrate urban developments in identified commercial nodes.

6 Public Utility

Public utility land is a major component of urban settlements. Within this area, public utility land is set aside. 6₁ is the proposed waste disposal site. The site will also accommodate a cemetery. It is, however, recommended that an alternative site be identified for waste disposal since the parcel is small.

7 Transportation

It is also observable that quite a number of land parcels do not have access. On the ground, however, there are footpaths which have not been mapped.

It is proposed that the road from Luanda Town to Essaba School (outside the northern tip of the planning area) be expanded to have a minimum road reserve of 15m. Other road reserves should have a minimum of 9m and 12m.

9 Agricultural

The area is generally proposed as an agricultural promotion area in order to enhance food security in the town and its environs. It is recommended that modern agricultural practices are put in place to ensure maximum returns from the limited land sizes. This will include dairy cattle keeping, beekeeping, horticulture, fish farming and agro-forestry, among others.

Luanda Town Action Plan

This action area covers Luanda town. The specific plan proposals for Luanda Town are shown in table 3.1 below. The area is characterized by high value developments including commercial, residential, institutional and public purpose developments. It is the core of the planning area.

The major structuring elements include the railway line, the Nairobi-Busia-Kampala highway and the Luanda-Siaya road.

Land Use Proposals

0 Residential

Three categories of residential land use are proposed for different income groups of both the residents and working class.

O₁ is proposed for high density residential to accommodate low income earners working or carrying out business activities in the proposed light and medium industrial sites. Single or double dwelling units can be developed and the plot coverage should not exceed 70% of the plot and the minimum plot size should not be less than 0.045 of a hectare. This is justified on the basis of terrain and rocky nature of much of the planning area. Septic tanks should be provided in such plots.

O₄ and **O₅** are proposed for medium and low density residential uses respectively. Self-contained dwelling units may be developed. This may include flats or storey buildings. The plot coverage should not exceed 50% in order to accommodate vehicle parking, among others. The minimum plot size should not be less than a quarter of an acre for medium density whereas the minimum plot sizes for low density should not be less than half an acre. The use of septic tanks is highly recommended. These developments may be served by 9m, 12 and 15 road reserves.

1 Industrial

Industrial activities play a crucial role in making an urban setting vibrant in terms of employment creation and subsequent income generation and provision of goods and services. In the absence of large scale farming or large scale mining, the development of light and medium industrial land use activities is envisaged. These may include *Jua Kali* activities, vehicle repair and maintenance, carpentry and woodwork, handicraft, pottery, brick-making, jiggery and milling, *inter alia*.

1₂ is proposed for the development of industries and their complementary activities. It is recommended that the minimum plot size for light industrial activities should not be less than 0.045 of a hectare while those of medium industrial activities should not be less than a half an

acre. The minimum size of access road for light industrial sites should be 12m whereas medium industrial sites should be served by a 15m road network or more.

2 Educational

The provision of education is one of the basic social pillars of ***Vision 2030*** Strategy whose overall call is reduction of illiteracy by increasing access to education by providing quality education, training and research.

Within the planning area, the distribution of education institutions is adequate. There is need, however, to improve the facilities within these institutions in order to provide quality education and diversified training opportunities.

2₂ is the existing site for Itumbu School. Mumboha primary and secondary schools are also found within this zone.

3 Recreational

The provision of recreational facilities in human settlements is a basic requirement that serves to offload stress and fatigue due to increased human activities in search of daily requirements.

3₂ is a proposed site for the establishment of a recreational park which may include the construction of a stadium or a playfield with its attendant complementary facilities.

4 Public Purpose

Land for public uses is a crucial component of any human settlement. The planning area generally has very limited land for public purpose use. 4₁ is the existing site for Luanda Town Council's offices and Luanda Divisional Office. This compound also houses the Department of Agriculture and Livestock offices together with Administrative Police Camp. It is proposed that 4₂ be acquired to accommodate other public purpose uses.

Similarly, **4₃** is designated as existing site for Luanda Police Post. This site is not adequate and it is recommended that the proposed site **4₄** be acquired to allow for its expansion. There is an existing shrine in parcel West Bunyore/Itumbu/514 which can be extended to incorporate a public cemetery (**4₅**).

5 Commercial

The vibrancy of an urban settlement is determined to a large extent by commercial activities. Luanda town is the major service centre within the planning area.

All commercial plots will be served by a minimum of 9m road reserve for a single block of commercial buildings but where commercial plots face each other a minimum of 12m road reserve is recommended. All commercial plots will have a service lane of 5m or more. The plot size should not be less than 0.045 of a hectare. The plot coverage should not exceed 75% and the use of septic tanks is highly recommended. It is also recommended that renewal efforts in central business district especially in Luanda town should entail storey buildings.

7 Transportation

In order to ensure smooth interaction between the various land uses, an efficient transport system is imperative since it facilitates movement from one place to another. **7₁** is Luanda-Siaya road whose reserve ranges from 30m-40m. **7₂** is the existing Luanda Railway Station.

The Kisumu-Busia international highway with a road reserve of 60m is marked as **7₃**. **7₄** designate the existing bus/matatu park whereas **7₅** is the existing petroleum dispensing outlets. The Kisumu-Butere railway line is marked as **7₆**. **7₇** is the 25m Luanda-Majengo road reserve.

9 Agricultural

The zone is purely categorized for urban and its related activities use hence no land was reserved for agricultural production.

Epanga Zone

This zone is located on the eastern part of the planning area. The major structuring elements include the Kisumu-Busia highway and a river.

Land Use Proposals

0 Residential

O₂ and O₃ are proposed for high and medium density respectively. This zone has undergone land sub-divisions into small parcels of land with an average of 1 acre.

2 Educational

2₇ is the existing Epanga primary school.

5 Commercial

The planning zone lies between Luanda Town and Ebusakami commercial node hence no proposal for commercial land use was made.

7 Transportation

Luanda-Epanga road needs to be widened to at least 15m from the current 9m since it serves a wide area even beyond the planning area. The minimum road size should not be less than 9m.

9 Agricultural

A small portion of the planning area on the north-eastern part can be utilized for agricultural production.

Emutsuru Zone

This zone is characterized by high value developments but the building density is not as high as that of Luanda Town zone. The Nairobi-Busia Kampala road also serves as its major structuring

element together with the railway line. Agricultural production goes hand in hand with commercial and residential functions.

The development proposals for this zone include residential, educational, transportation and agriculture.

Land use Proposals

0 Residential

0₆ is proposed for low density residential use. Maisonettes, multi-family dwelling units and bungalows are recommended and the plot coverage should not exceed 50%. The minimum plot size should not be less than half an acre.

2 Educational

Emutsuru and Osinamutu schools are located in this zone and they are designated as 2₈ and 2₁₁ respectively.

5 Commercial

The zone lies between Luanda Township and Ebusakami commercial node. In the southern part is another commercial node known as Ebusaba just below Osinamutu School even though it is not captured in the plan.

7 Transportation

Apart from the Kisumu-Busia Highway, there are a number of secondary access roads including Luanda-Ekwanda and Luanda-Osinamutu roads whose road reserves need widening to at least 15m. The other road is the Luanda-Epanga road which also needs to be made wide to 15m from 9m.

9 Agricultural

The remaining parts of the zone will be utilized as agricultural promotion areas (APA). As a result of small land sizes of approximately 1 acre, high value agricultural and livestock production such as dairy farming and horticulture should be emphasized to enhance food security.

Ebusakami-Emutete Zone

This zone is found in the south-eastern part of the planning area. The eastern tip of this planning zone is characterized by rock boulders which impede both agricultural and urban development. The other major structuring elements include the Kisumu-Busia highway and the Luanda-Majengo road.

It should be noted that this zone has one of the highest population density not only in the region but also in the country with a density of 1788 persons per square kilometer.

Land Use Proposals

0 Residential

The eastern tip of the planning area is proposed for medium density residential development whereas the central part of this zone is proposed for high density residential. The commercial node will also serve the purpose of meeting residential needs of the community since the area is zoned as commercial cum residential. This will specifically serve the low income bracket.

1 Industrial

The commercial node will also incorporate the establishment of light industrial activities such as furniture making, welding, vehicle repair and tailoring, among others.

The presence of rock boulders may lead to exploitation through crushing to provide ballast used in the construction industry.

2 Educational

The zone is served by Ebusakami School which incorporates both primary and secondary sections.

5 Commercial

The Luanda-Majengo road junction is located in this zone hence the development of Miekhe as a commercial node. This commercial node will incorporate other land use activities such as residential and industrial.

The minimum plot size should not be less than 0.045 of a hectare and the plot coverage should not exceed 75%. Septic tanks should be used as the means of waste disposal. The minimum road reserve should not be less than 12m since the zone have a hilly terrain.

7 Transportation

The Kisumu-Busia and Luanda-Majengo road are the major structuring elements and means of access in this zone. A major secondary road is the Miekhe-Ematsi road which needs widening to accommodate at least 15m road reserve. The major constraint in this zone is the existence of huge rock boulders and outcrops which restrict development.

9 Agricultural

Agricultural production is hampered by the hilly terrain and its' attendant rock boulders and valleys. This zone has experienced intensive land sub-division with average land sizes of less than an acre. There is the possibility of promoting tourism due to the existence of unique scenery presented by rock outcrops.

2.6.7 Proposed Planned Interventions/Strategies

Public Utility

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
Lack of conventional sewerage system	Luanda	Implement Luanda sewerage system project <ul style="list-style-type: none"> Acquire land for construction of sewer ponds Construct sewer lines to cover the CBD and residential areas 	County Government with donor support Local Engineering firms Lake Victoria North Water Services Board
Inadequate piped water scheme coverage Intermittent supply of water from central treatment plant	Luanda	Short term interventions <ul style="list-style-type: none"> Expansion/augmentation of Maseno Water Treatment Plant and any other existing water supply schemes to cover Luanda Exploitation of underground water sources Licensing of independent water provider Undertake a study on the number of households with access to piped water 	Lake Victoria North Water Services Board County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
High cost of water supply due to huge electricity bills	Luanda	Identify and implement gravity-dependent water reticulation system	Lake Victoria North Water Services Board, County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
Regular electricity interruption	Luanda	<ul style="list-style-type: none"> Expansion of electricity coverage Install street lights along the highway and within the CBD Connecting all the public institution in the town Connect Luanda to Rang'ala power station Long term interventions	County Government, Kenya Power, KENGEN

		<ul style="list-style-type: none"> • Develop the Kaimosi Hydro-power plant • Supply electricity to Luanda Town 	
Lack of designated dumpsite	Luanda	<ul style="list-style-type: none"> • Acquire land for a designated dumpsite at Itumbu • 	County Government
Lack of a public cemetery	Luanda	<ul style="list-style-type: none"> • Acquire land for a designated public cemetery at Itumbu • Separating the public cemetery to accommodate both Muslims and Christians separately • Fencing of the public cemetery 	County Government
Lack/poor drainage system	Luanda	<ul style="list-style-type: none"> • Develop storm drainage system within the town 	County Government

Residential

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
<p>Inadequate housing for low, medium and high income groups</p> <p>Lack of official residences for the Luanda Town Management Board Officers</p>	Luanda	<ul style="list-style-type: none"> • Implement formal housing project for low income groups • Promote low cost appropriate housing technologies • Innovative financing mechanism to enable low income groups to afford housing • Provide serviced land for housing development • Local investors to be encouraged to establish housing cooperative and develop rental houses • Institutions to invest in staff housing scheme especially Kenya Police, Ministry of Health • Land to be acquired for development of 	County Government (Department of Housing), Independent real estate developers, National Housing Corporation, Homegrown Housing Cooperative Societies, Financial institutions, Ministry of Lands, Housing and Urban Development

		residences for County Government officials. • Partner with KENSUP and KISIP on upgrading of informal settlements	
--	--	---	--

Recreation

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
Lack of space for recreational facilities	Luanda	<ul style="list-style-type: none"> Improving the Eshiandumba water reservoir into a recreational facility Acquire land for development of a public recreational park in the CBD Conserve riparian reserves for streams for recreational purposes 	County Government
Poor town beautification programme	Luanda	<ul style="list-style-type: none"> Undertaking tree planting along the highway Enforce laws on advertisements to ensure the aesthetic nature of the town is maintained Regular painting of buildings 	County Government
Lack of a stadium	Luanda	<ul style="list-style-type: none"> Acquire land for a stadium at the CBD 	County Government

Industrial

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Collapsed industries	Luanda	<ul style="list-style-type: none"> Partner with donors to revive the jiggery and coffee industries Offer incentives to investors such as no charge on land leased for industrial activities Encourage local cooperatives to 	County Government, Kenya Industrial Estates, UNDP, Ministry of Industrialization, Luanda Jua Kali Association, Kenya Chamber of Commerce and Industry, Export

		take over these industries	Promotion Council, Luanda Farmers Cooperative, Ministry of Agriculture
Lack of designated area for heavy and light industrial activities	Luanda – along the Railway line in Eshiadumba Zone	Acquire land for both heavy and light industrial activities along the railway line at Eshiadumba Zone. <ul style="list-style-type: none"> This will remove carpentry and welding activities along the highway 	County Government, Kenya Industrial Estates, UNDP, Ministry of Industrialization, Luanda Jua Kali Association, Kenya Chamber of Commerce and Industry, Export Promotion Council

Public purpose

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of office spaces for expansion of Luanda Police Station	Luanda	<ul style="list-style-type: none"> Acquire land around the existing police station for its expansion Improve the police facilities such as offices, holding cells and houses Supply the police with adequate equipments including patrol vehicles 	County Government, Kenya Police Service, Luanda Business Community
lack of a Library	Luanda	A library to be established at Luanda	County Government/ Kenya National Library Services
Inadequate land for expansion of health facilities- Luanda Health Centre	Luanda Health Centre	Additional land to be acquired from private land owners neighbouring the Health Centre	County Government

Commercial

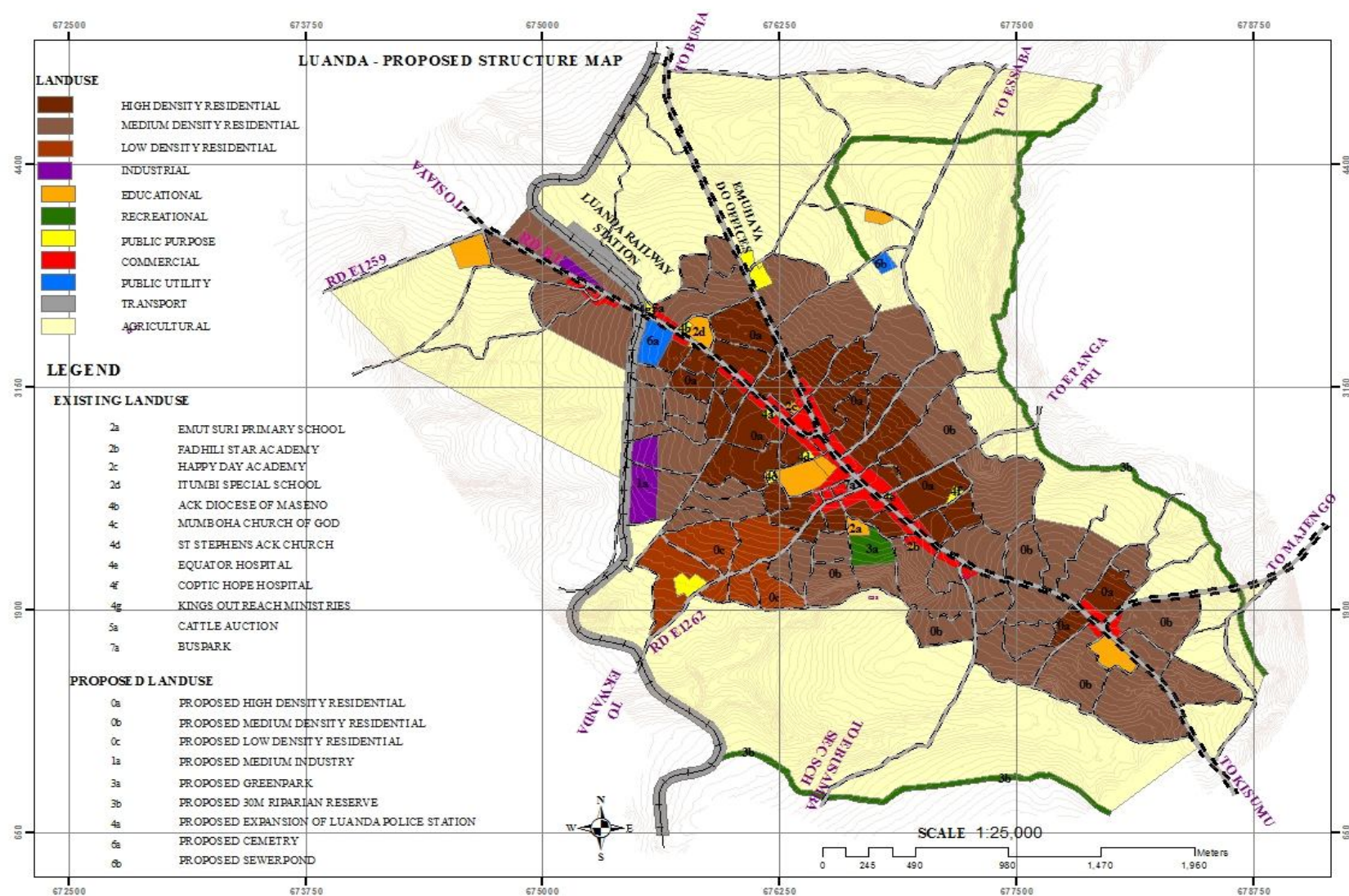
Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Inadequate land for market Hawking along the highway	Luanda	<ul style="list-style-type: none"> Acquire land for expansion of the existing market Enforce laws on hawking in the town 	County Government
Central Business District dominated by old and outdated low-rise commercial buildings (Indian Shops design) that were introduced in 1940s	Luanda CBD	Modern high-rise commercial buildings to be encouraged especially within CBDs	County Government
Congestion in the Central Business District	Mwibona, Miekhe and Ebusakhame	<ul style="list-style-type: none"> Establish commercial nodes at Mwibona, Miekhe and Ebusakhame 	County Government
Inadequate and unplanned cattle auction yard	Mwibona	<ul style="list-style-type: none"> Expand the cattle auction yard Fence the cattle auction yard to ensure registration of all cattle sale Plan the yard to incorporate other supplementary activities such as the hotel industry 	County Government

Transportation

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Inadequate Bus Park	Luanda	Acquisition and expansion of the existing Bus Park at Luanda	County Government
Lack of Car Park	Luanda	<ul style="list-style-type: none"> Tarmacking of road reserves to be used as car park Acquire land to be used as car 	County Government

		park	
Lack of designated sites for motorized <i>boda boda</i> (motorbikes)	Luanda	Designate specific sites for motorized <i>boda boda</i> (motorbikes)	County Government
Poorly regulated motorized <i>boda boda</i> (Motorbike) transport services	Luanda	Regulate motorized <i>boda boda</i> transport services to reduce insecurity and accidents in towns	County Government
Collapsed railway services	Luanda Railway Station	Revive the railway station to revive industrial activities in the town	Kenya Railways Corporation, Rift valley Railways
Poor roads infrastructure	Luanda	<ul style="list-style-type: none"> • Improve the Luanda-Siaya road • Tarmac the Luanda-Epanga, Luanda-Ekwanda, Miekhe-Ematsi and Luanda-Osinamutu roads • Improving and widening all the feeder roads linking to Luanda town • Improve the Kisumu-Busia road into a dual carriageway 	County Government, KeRRA, KURA, KeNHA

Map 3.9: Luanda Structure Plan



2.7: Mago/Shamakhokho Urban Centres

2.7.1 Location and Historical Background

Mago and Shamakhokho are close by urban centres along the C39 Chavakali-Kapsabet Road.

Mago is a border town between Sabatia and Hamis Sub-Counties while Shamakhokho in Hamis Sub-County and located at 0°06' N 34°49'E.

Mago Urban Centre

Mago in lagooli language means a hole dug on the ground. The local people who were hunters used to dig huge holes that were covered with grass and other materials to trap wild animals which fell into the holes while escaping from hunters. The current market place was a wilderness home to a variety of wildlife. Local communities used to supplement their food requirements with game meat.

Mago market was started in 1950s as a local service centre. The market offers commercial services to the local community. The original businessmen constructed shops with help of locally available materials (Mud and wattle for walls and grass thatch for roofs). The first shop was developed by Mzee Chagema while the second shop was established by Alwenya Debede. Other businessmen who came up with initial shops include: Joshep Lokongo, Boaz Samola, Charles Machani, Richard Matini, Festo Kimanani, Reuben Yida, Ben Ensonga, Nathan Lwenya, Lianda, Elijah Libaha, Ezekiah Odanga, Jonathan Atonya, Shem Bushoro, Nathan Beru, Joel Matini, Laban Endala, Moses Magona, Ambasi Libayekha, and Chadebela. Mzee Richard Matini was an enterprising businessman who also kept dairy animals and pigs.

Mago market was planned by Mr Isaac Kifani of the then Kakamega County Council and Mr Serebwa. The well established trees at Mago Market were planted by Mr. Isaac Kifani. The rate of growth of Mago market can be described as too low given that not much has been achieved since 1950s. The presence of newly established Mago Polytechnic is a major boost for the development of the marketplace. The polytechnic has a modern Guest House and Hospital (new).

Shamakhokho Urban Centre

Shamakhokho started as a small rural service centre in 1930s. The name Shamakhokho was derived from the name *Makhokho*, a dark bird of the air with white chest area. These birds used to patronize the area in large numbers to feed on the remains of slaughtered animals. Mzee Asunga established the first Eatery at the present day Tiriki East Divisional Headquarter upon his return from the military in 1938. The Hotel was later converted into present day Tiriki East Divisional Headquarters. The open space at the Divisional Headquarters was used for community activities including wrestling and cultural music and dances especially during harvest season. Others who established grass thatched houses include Witsula, Wonekha, Shahale, Kanga and Natse. The land on which the Town is established including the Divisional Headquarters was originally owned by Mzee Khateji who gave up the land for public purposes. Other important features at Shamakhokho include Shamakhokho Intermediate Primary School which was established in 1930s by the Friends Missionaries. Mzee Amutiali and Mzee Sangale gave up their land to pave way for establishment of the primary school.

Chavakali-Kapsabet road which passes through Shamakhokho together with Shamakhokho-Serem road have greatly influenced the spatial growth and development of the urban centres since most of the developments are located along the main road.

2.7.2 Study area characteristics;

location, demography, size, topography, climate, soils, geology, urban function

2.7.3 Problem Statement

Mago and Shamakhokho urban centres were established in 1950s. They are characterized private land save for limited public land within the Central Business District. Both urban centres lack an up to date and approved development plans and therefore urban development activities are currently taking place on private land unguided. Kenya's County Government Act of 2012 requires all urban areas to be planned in order to guide future growth and development.

An Integrated Strategic Urban Development Plan for Mago-Shamakhokho area will used to guide spatial growth of the two nearby urban centres

2.7.4 Existing Spatial Structure

Urban structure and form

Mago and Shamakhokho are fairly compact urban centres located along the C39 Chavakali-Kapsabet Road. Mago is about 0.5Km² while Shamakhokho is about 2.5 Km².

- Transport features
- Terrain features
- Environmentally sensitive areas
- Land tenure system

2.7.5 Emerging Planning Issues

The planning issues identified by stakeholders and development partners include:

- Congestion within the central business district of Mago and Shamakhokho
- Lack of designated wholesale market
- Indiscriminate/inappropriate means of disposal of solid and liquid waste

- Lack of designated dumping site
- Lack of sewerage system
- Inadequate coverage of clean water provision and sanitation facilities
- Lack of open spaces/ recreational facilities
- Decaying sections of the town/Dilapidated structures
- Lack of a public cemetery
- poor town's beautification programme
- Illegal construction of buildings/ structures
- Limited distribution of electricity with some sections of town not covered
- Uncontrolled developments
- Limited public land
- Lack of traffic segregation (*boda bodas*, pedestrians and vehicles)
- Linear developments along the major roads
- Absence of planned streets and back/service lanes leading to poor interconnectivity
- Encroachment on road reserves, alleys, service lanes
- Lack of designated bus park/picking of passengers on the highway
- Lack/poor drainage system
- Encroachment of fragile land such wetlands, riparian reserve

2.7.6 Integrated Strategic Urban Development Plan for Shamakhokho-Mago Urban Centre

This plan presents the long term development framework for Shamakhokho and Mago urban centres. It is a structure plan with various land use classifications, including transportation, location of utilities, residential and other services. The plan in total shows the form, shape, urban development limits, trends and pattern in developments that Shamakhokho and Mago urban centres town will take

Land Use Proposals

Residential

This structure plan has categorized residential areas into high, medium and low density housing areas in responding to various housing needs of diverse socio-economic groups. The proposed residential land use covers approximately 127Ha representing approximately 70% of the entire planning area. The plan has considered the existing residential land uses, the prevailing economic activity and its proximity to Kaimosi Educational Hub as well as to cater for the future housing demands.

Land Allocation

Table below gives the percentage allocation of land in various residential estates. They may be used as a guide in planning for residential estates and reasonable variations may be permitted depending on local conditions.

Averages observed land use allocations in residential neighborhood development

LANDUSE	PERCENTAGE OF DEVELOPED AREA		
	High Density	Medium Density	Low Density
Dwelling plots	40-60	64-74	80-90
Recreation	21-29	7-16	—
Community Facilities	5-20	9-10	0.1-1
Roads and Streets	4-15	6-7	8-8.8
	1-7	3-4	0-2.2

Source: Physical Planning Handbook, 2008

a) Density of Development

Density is determined by availability of services such as water, sewerage, size of roads, etc, and the zoning recommended. In recommending gross residential densities care should be taken that they create in spatial and functional meaning an independent system of the built-up area (both multi-family and one family dwelling units) well provided with day-to-day services, recreation and communication network. Table below gives a range of densities that can be adopted.

Recommended Densities for Residential Development

TYPE OF DWELLING	NO. OF DWELLING PER HECTARE	SPACE ALLOCATION PER DWELLING (M ²)
<i>BUNGALOW DETACHED</i>		
(i) Low density	10	1000
(ii) Medium density	16	500
(iii) High density	35	285
<i>SEMI DETACHED AND ROW HOUSING</i>		
(i) Low density	20	417
(ii) Medium density	32	333
(iii) High density	70	250
<i>MULTI-FAMILY DWELLINGS</i>		
(i) Low density		
(ii) Medium density	50	200
(iii) High density	60	167.6
(iv) Special Density	70	142.8
	133	75

Source: Physical Planning Handbook, 2008

i. High Density Residential

Areas earmarked for high density housing include: Mago at the lower side of the commercial zone. This is because Mago unlike Shamakhokho is not highly populated and there is little economic activity. At Shamakhokho, high density residential areas are located next to the Assistant County Commissioner's office which is next to the proposed market and light industry. This is to enable traders easy access to the market while close proximity to the County Commissioner's office will ensure security to both the market and residential areas. These are the areas that are sparsely densely populated and are expected to house the bulk of the population. This will consist of low cost housing developments that will house the relatively low income households. Population densities in the areas are expected to increase. This will consist of mainly multiple residential developments. The total area earmarked for high density residential neighbourhoods is 3Ha.

ii. Medium Density Residential

Areas proposed for medium density housing include behind Mago polytechnic and next to Bututi primary school, area around Mago primary school, while in Shamakhokho, the proposed medium density residential include the area behind the Assistant County Commissioner's Office, area along the Shamakhokho-Serem road and along the Chavakali-Kapsabet road behind the first petrol station from Mago. The total area earmarked for medium density residential neighbourhoods is 124Ha. Since the urban area is not highly dense, the residential units projected will have a combination of single and multiple dwelling units but the former will dominate as population density of the urban centres increase.

iii. Low Density Residential

Due to low economic activities taking place in these centres, low density residential areas have not been proposed in this plan. However, a combination of urban agriculture and large plot residential areas exist in the larger rural hinterland.

Commercial

Mago and Shamakhokho are small urban centres with a lineal growth along the Chavakali-Kapsabet road. The plan proposes expansion of the commercial zone to the hinterland to discourage lineal growth. At Shamakhokho the commercial zone extends from the petrol station through the inner road heading to Kaimosi ending past the water kiosk and back to the highway all the way to the Serem/Hamisi junction. The plan recommends that the existing commercial zone at Mago be densified. The plan proposes that the minimum number of floors in the economic zone be 4.

A modern market has been proposed at Shamakhokho on a 0.17Ha land next to the County Commissioner's office. Due to scarcity of land, the plan proposes that the modern market should be a storey building to accommodate more traders.

Transport

The plan proposes establishing a bus park at Shamakhokho along the Shamakhokho-Kaimosi road. In order to decongest Shamakhokho, the by-pass leading to Kaimosi water treatment plant that passes through the town parallel to Chavakali-Kapsabet road should be tarmarcked. Hamisi road should be tarmarcked to link Shamakhokho to Hamisi. The plan proposes that approximately 15% of the planning area will be used for transportation. It is observable in the plan that some parcels of land do not have access. While it is paramount that every parcel of land must have access, it is recommended that the minimum road reserve should not be less than 9m.

Education

Shamakhokho/Mago urban centres have a projected population of 12,479 by the year 2030. It requires approximately 2 primary schools and 1 secondary school. This planning area currently has 3 primary schools and a mixed secondary school with an approximate land area of 5.3 Ha. The planning area also has a youth polytechnic at Mago with approximately 1.9 Ha. The plan proposes increased streams in both primary and secondary schools three-streams and land to be acquired on the lower side of Shamakhokho Friends Secondary School for its expansion to accommodate more students. The plan also proposes that educational institutions be encouraged to build vertically due to scarcity of land so as to leave more land for play grounds.

Industrial

Approximately 0.1hectares, of land have been earmarked for *juakali* development to be located along the inner road towards the Assistant County Commissioner's office. These will accommodate welding, carpentry among other non-offensive and can easily coexist harmoniously within or adjacent to commercial and residential neighborhoods.

Public utilities

✓ Sewer system

The plan proposes for the construction of sewer lines running from Mago to Shamakhokho dumping a proposed sewer pond at Kaimosi as dictated by the terrain. The sewer pond will

serve both Mago and Shamakhokho in addition to Kaimosi and Jeptulu urban centres. It is proposed that public toilets be constructed at the market and bus park in Shamakhokho and in Mago centre.

✓ **Solid waste disposal**

The plan recommends that the county government should erect a waste collection point at Shamakhokho market where waste will be collected and then transported to the Sabatia dump site. In addition, it is proposed that waste bins be placed around the economic zones, in the market and at the bus park

✓ **Water system**

Due to its proximity to Kaimosi water project, the plan proposes for the expansion of tapped water to the proposed residential areas.

✓ **Energy lines**

Kaimosi hydro-electric plant has been proposed next to the water treatment plant. This will increase electricity supply to Vihiga County and specifically to the neighbouring urban centres of Mago and Shamakhokho. The plan proposes expansion of electricity to the proposed residential areas.

✓ **Cemetery**

The plan recommends the proposed Hamisi cemetery to be used for burial.

Public purpose

The development of land for public purposes is generally expected to be intertwined within the residential and commercial developments especially where the planning area is a small urban centre such as Mago and Shamakhokho. As result no broad zones for public purposes are expected. Shamakhokho is divisional headquarters for Shamakhokho Division in Hamisi Sub-county and its hosts the Assistant County Commissioner. This plan proposes that existing administrative centers at Shamakhokho to be maintained and densified to accommodate

additional county functions. The plan proposes that the Administration Police line at Shamakhokho be maintained and better housing for the officers be developed.

The plan proposes that the health centre at Shamakhokho be densified to be able to treat more disease and have a wider catchment area as a divisional health centres.

Recreation

It is recommended that 1-2 hectares of land is provided for open spaces per 10,000 populations in areas with a population density of above 50 persons per hectare (Physical Planning Handbook, 2008). Therefore, Shamakhokho and Mago require a recreational area of approximately 1 hectare. The plan proposes that land be set aside for a green park to be located opposite Mago polytechnic. Another proposal is to reclaim riparian reserves for small streams that run around the two urban centres.

Agricultural land

Urban and peri-urban agriculture is mostly allowed when it is in sync with aesthetics of the town and not a nuisance. Agriculture is the backbone of many urban centres in Vihiga County. Mago and Shamakhokho are small urban centres with a large rural agriculture. The agricultural potential that exists within the rural areas of the urban areas must be exploited to the benefit of the residents. Infrastructural services should be improved to promote access to markets

2.7.7 Proposed Planned Interventions/Strategies

Public Utility

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
Lack of conventional sewerage system	Mago and Shamakhokho	<ul style="list-style-type: none"> Acquire land for construction of sewer ponds at Kaimosi Construct sewer lines to cover Mago and Shamkhokho 	County Government with donor support Local Engineering firms Lake Victoria North Water Services Board
Inadequate piped water scheme coverage Intermittent supply of water from central treatment plant	Mago and Shamakhokho	<p>Short term interventions</p> <ul style="list-style-type: none"> Expansion/augmentation of Kaimosi Water Treatment Plant and any other existing water supply schemes Exploitation of underground water sources Licensing of independent water provider Undertake a study on the number of households with access to piped water 	Lake Victoria North Water Services Board, Amatsi Water Company, County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
High cost of water supply due to huge electricity bills	Mago and Shamakhokho	Identify and implement gravity-dependent water reticulation system	Lake Victoria North Water Services Board, County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
Regular electricity interruption	Mago and Shamakhokho	<ul style="list-style-type: none"> Expansion of electricity coverage to uncovered areas Connecting all the public institution Install street lights within the CBD <p>Long term interventions</p> <ul style="list-style-type: none"> Develop the Kaimosi Hydro-power plant Transmit electricity to Mago and Shamakhokho 	County Government, Kenya Power, KENGEN

		urban centres	
Lack of designated dumpsite	Mago and Shamakhokho	<ul style="list-style-type: none"> Erect a waste collection point at Shamakhokho Place waste collection bins within Mago and Shamakhokho (including the proposed market and bus park) 	County Government
Lack of a public cemetery	Mago and Shamakhokho	<ul style="list-style-type: none"> The urban population will use the Hamisi public cemetery 	County Government

Residential

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
<p>Inadequate housing for low, medium and high income groups</p> <p>Lack of official residences for the County Government Officers</p>	Mago and Shamakhokho	<ul style="list-style-type: none"> Implement formal housing project for low income groups Promote low cost appropriate housing technologies Innovative financing mechanism to enable low income groups to afford housing Provide serviced land for housing development Local investors to be encouraged to establish housing cooperative and develop rental houses Institutions to invest in staff housing scheme especially Kenya Police, Ministry of Health Land to be acquired for development of residences for County Government officials. 	County Government (Department of Housing), Independent real estate developers, National Housing Corporation, Homegrown Housing Cooperative Societies, Financial institutions, Ministry of Lands, Housing and Urban Development

Recreation

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
Lack of space for recreational facilities	Mago and Shamakhokho	<ul style="list-style-type: none"> Acquire land for development of a public recreational park at Shamakhokho Conserve riparian reserves for streams for recreational purposes 	County Government
Poor town beautification programme	Mago and Shamakhokho	<ul style="list-style-type: none"> Undertaking tree planting along the highway Enforce laws on advertisements to ensure the aesthetic nature of the urban centres are maintained Regular painting of buildings 	County Government

Industrial

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of designated area for heavy and light industrial activities	Shamakhokho	<ul style="list-style-type: none"> Offer incentives to investors such as no charge on land leased for industrial activities Encourage local cooperatives to undertake industrial activities Acquire land for both heavy and light industrial activities at Shamakhokho 	County Government, Kenya Industrial Estates, UNDP, Ministry of Industrialization, Jua Kali Association, Kenya Chamber of Commerce and Industry, Export Promotion Council

Public purpose

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of office spaces for	Shamakhokho	<ul style="list-style-type: none"> Acquire land around the 	County Government, Kenya

expansion of Shamakhokho Sub-county offices		<p>existing sub-county offices for its expansion</p> <ul style="list-style-type: none"> • Improve the administration police facilities such as offices, holding cells and houses • Supply the administration police with adequate equipments including patrol vehicles 	Police Service, Business Community, Ministry of Interior Coordination
lack of a Library	Mago and Shamakhokho	A mobile library to be stationed at Shamakhokho	County Government/ Kenya National Library Services
Inadequate land for expansion of health facilities-Shamakhokho Health Centre	Shamakhokho Health Centre	Additional land to be acquired from private land owners neighbouring the Health Centre	County Government

Commercial

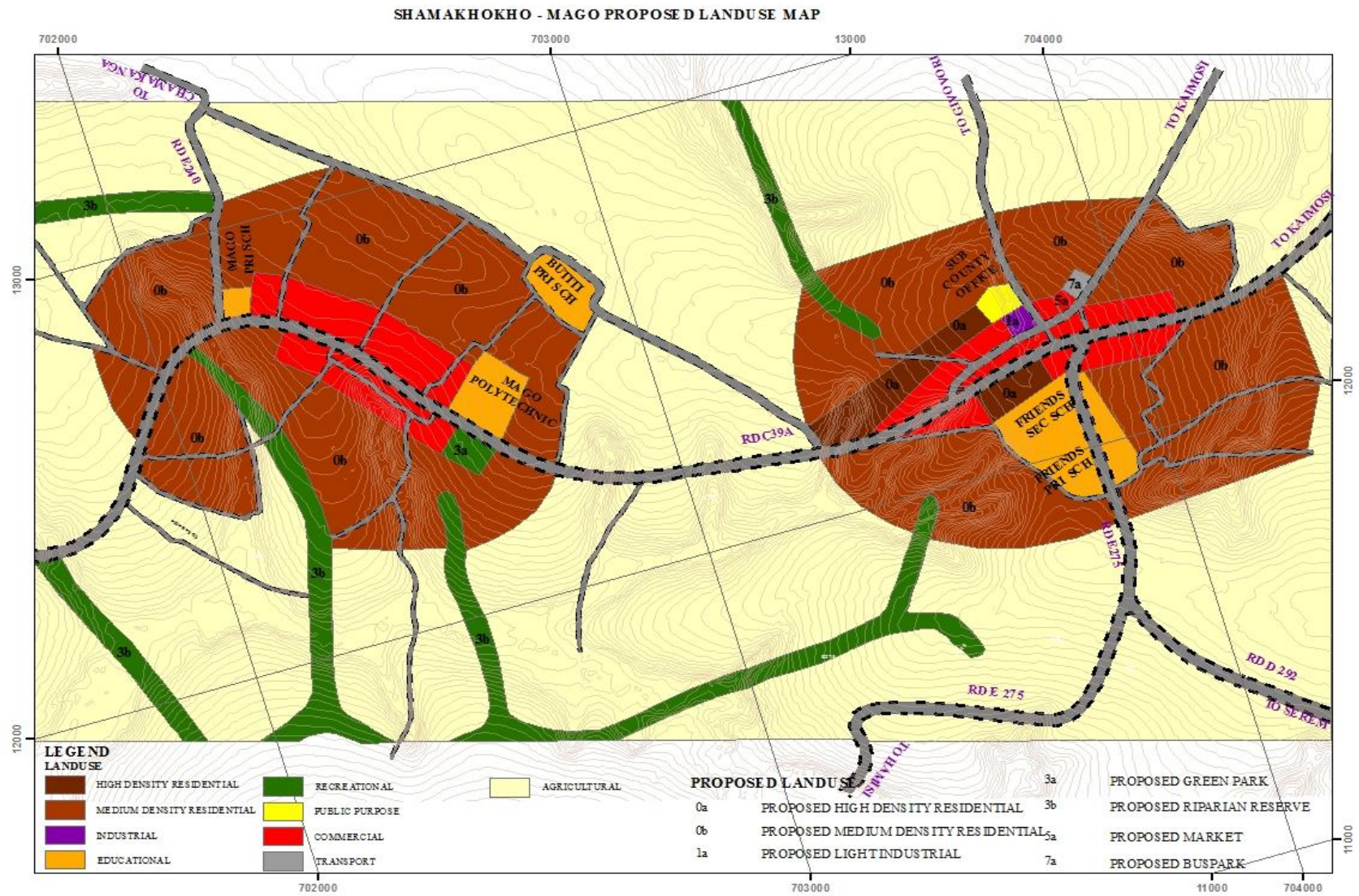
Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of market/Hawking along the highway	Shamakhokho	<ul style="list-style-type: none"> • Acquire land for construction of a market • Enforce laws on hawking 	County Government
Urban centre is dominated by old and outdated low-rise commercial buildings (Indian Shops design)	Mago and Shamakhokho	<ul style="list-style-type: none"> • Modern high-rise commercial buildings to be encouraged 	County Government
Inadequate and unplanned cattle auction yard and slaughter slab	Shamakhokho	<ul style="list-style-type: none"> • Acquire land for the construction of a modern slaughter house away from the commercial centre • Acquire land for relocation of the current cattle auction yard • Fence the cattle auction yard to 	County Government

		ensure registration of all cattle sale <ul style="list-style-type: none"> Plan the yard to incorporate other supplementary activities such as food business 	
--	--	--	--

Transportation

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Inadequate Bus Park	Shamakhokho	Acquire land for construction of a Bus Park at Shamakhokho	County Government
Lack of Car Park	Mago and Shamakhokho	<ul style="list-style-type: none"> Tarmacking of road reserves to be used as car park 	County Government
Lack of designated sites for motorized <i>boda boda</i> (motorbikes)	Mago and Shamakhokho	Designate specific sites for motorized <i>boda boda</i> (motorbikes)	County Government
Poorly regulated motorized <i>boda boda</i> (Motorbike) transport services	Mago and Shamakhokho	Regulate motorized <i>boda boda</i> transport services to reduce insecurity and accidents in towns	County Government
Poor roads infrastructure	Mago and Shamakhokho	<ul style="list-style-type: none"> Tarmac the Shamakhokho-Hamisi, Shamakhokho-Kaimosi Water Treatment Plant-Kaimosi-Jeptulu roads Improving and widening all the feeder roads linking Mago and Shamakhokho Widen the Chavakali-Kapsabet road 	County Government, KeRRA, KURA, KeNHA

Map 3.10: Shamakhokho-Mago Area Action Plan



2.8: Emuhaya/Kima Urban Centres

2.8.1 Location and Historical Background

Emuhaya Centre

Emuhaya, the Headquarters of Emuhaya Sub-County is named after the local community *Amuhaya*. The white settlers called the centre Emuhaya. It was established in 1927 after the then area Chief moved his office there from Wehomo which lacked adequate space. The centre was established as the centre for Banyore community and all issues affecting the community were discussed there. The centre was established on about 20 acres of land but this has since reduced to only 8 acres due to irregular land allocations. It is worthwhile observing that Emuhaya also served as a kind of “state lodge” for the District Commissioner (Kakamega District) who used to operate from there while offering services to people in this part of then Kakamega District.

The current Sub-County Hospital was established there as a Health Centre in 1974. Emuhaya became the Divisional Headquarters of Emuhaya Division in 1972 and was elevated to Headquarters of Emuhaya District in the year 2007. It is currently the headquarters of Emuhaya Sub-County.

Kima (Wehomo) Centre

Kima, is a historical centre which was established in 1905 when the missionaries arrived and established the headquarters of Church of East Africa there. The original name of the centre is Wehomo but missionaries called it KIMA due to the presence of many monkeys (Kima is a Swahili word for monkey). Wehomo means the cradle of Banyore people and this is where the Banyore community` settled before spreading out to other parts of the sub-county. Kima trading centre has no public land and local land owners developed shops on their private land in 1946. Kima is a religious centre and the headquarters of Church of God in East Africa.

2.8.2 Problem Statement

Kima and Emuhaya are historical urban areas in Emuhaya Sub-County which have continued to grow mainly due to the presence of public and private institutions. However, the two centres have no approved spatial framework to guide their growth. Spatial growth has therefore been taking place unguided and without any planning philosophy. If the same trend is allowed to continue, anarchy in the use of land is the most likely outcome with resultant decline in their liveability. Preparation of strategic integrated urban development plans (SIUDPs) for the two centres is consistent with the provisions of the County Government Act of 2012 and the Urban Areas and Cities Act of 2011.

2.8.3 Existing Spatial Structure

Kima and Emuhaya are two centres linked by all-weather Kima-Emusustwi Road. They are relatively compact urban areas but likely to merge as the agricultural land in-between slowly get converted into urban use. Kima area is characterized by undulating terrain with granite rock outcrops. Kima-Emuhaya corridor slopes gently and allows free surface runoff. The terrain is suitable for urban development.

The main transport infrastructure is the all-weather Kima-Emusustwi Road through Emuhaya and the C38 Majengo-Luanda Road through Kima. The commercial area of Kima referred to as Wehomo has been undergoing decay since it was by-passed by Majengo-Luanda Road. There is therefore urgent need to re-develop and plan to stimulate growth. Kima area can also be described as an ecologically sensitive area due to the presence of rock outcrops and indigenous trees/shrubs that should be protected.

In terms of land tenure system, the two urban centres are characterized by private land save for the few public institutions that occupy public land including: Emuhaya Sub-County Headquarters, Emuhaya Sub-District Hospital, Bunyore Girls School, Bunyore Primary School, Kima Mission Hospital and land occupied by Church of God in East Africa (HQs). Lack of

adequate land for public purpose and public utilities makes it difficult for the proposed land use proposals to be implemented effectively.

2.8.4 Emerging Planning Issues

- Lack of recreational facilities such public recreational parks, green spaces, and nature walks.
- Lack of reliable piped water scheme
- Inadequate housing for workers in public and private institutions
- Inadequate land for expansion of public educational and health facilities and health
- Limited employment opportunities for the youth
- Poorly developed/maintained infrastructure facilities for ecotourism
- Limited tourist attractions yet there is potential for ecotourism
- Widespread use of on-site sanitation facilities
- Poor road connectivity
- Urban decay- consider Wehomo Market
- Insecurity
- Limited use of renewable energy sources

2.8.5 Integrated Strategic Urban Development Plan for Emuhaya-Kima Urban Centre

2.8.6 Proposed Planned Interventions/Strategies

Public Utility

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
Lack of conventional sewerage system	Emuhaya and Kima	<ul style="list-style-type: none"> Acquire land for construction of sewer ponds Construct sewer lines within the two centres 	County Government with donor support Local Engineering firms Lake Victoria North Water Services Board
Inadequate piped water scheme coverage Intermittent supply of water from central treatment plant	Emuhaya and Kima	Short term interventions <ul style="list-style-type: none"> Expansion/augmentation of Maseno Water Treatment Plant and any other existing water supply schemes Exploitation of underground water sources Licensing of independent water provider Undertake a study on the number of households with access to piped water 	Lake Victoria North Water Services Board, Amatsi Water Company, County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
High cost of water supply due to huge electricity bills	Emuhaya and Kima	Identify and implement gravity-dependent water reticulation system	Lake Victoria North Water Services Board, County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
Regular electricity interruption	Emuhaya and Kima	<ul style="list-style-type: none"> Expansion of electricity coverage to uncovered areas Connecting all the public institution Install street lights along the highway Long term interventions <ul style="list-style-type: none"> Develop the Kaimosi Hydro-power plant Transmit electricity to Emuhaya and Kima urban 	County Government, Kenya Power, KENGEN

		centres	
Lack of designated dumpsite	Emuhaya and Kima	<ul style="list-style-type: none"> • Erect a waste collection point at Emuhaya • Place waste collection bins within Emuhaya and Kima 	County Government
Lack of a public cemetery	Emuhaya and Kima	<ul style="list-style-type: none"> • The urban population will use the proposed Luanda public cemetery 	County Government

Residential

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
<p>Inadequate housing for low, medium and high income groups</p> <p>Lack of official residences for the County Government Officers</p>	Emuhaya and Kima	<ul style="list-style-type: none"> • Implement formal housing project for low income groups • Promote low cost appropriate housing technologies • Innovative financing mechanism to enable low income groups to afford housing • Provide serviced land for housing development • Local investors to be encouraged to establish housing cooperative and develop rental houses • Institutions to invest in staff housing scheme especially Kenya Police, Ministry of Health, Bunyore Girls • Land to be acquired for development of residences for County Government officials. 	County Government (Department of Housing), Independent real estate developers, National Housing Corporation, Homegrown Housing Cooperative Societies, Financial institutions, Ministry of Lands, Housing and Urban Development

Recreation

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
Lack of space for recreational facilities	Emuhaya and Kima	<ul style="list-style-type: none"> Acquire land for development of a public recreational park at Emuhaya Conserve riparian reserves for streams for recreational purposes 	County Government
Poor town beautification programme	Emuhaya and Kima	<ul style="list-style-type: none"> Undertaking tree planting along the highway Enforce laws on advertisements to ensure the aesthetic nature of the urban centres are maintained Regular painting of buildings 	County Government

Public purpose

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of office spaces for expansion of Emuhaya Sub-county offices	Emuhaya	<ul style="list-style-type: none"> Acquire land around the existing sub-county offices for its expansion Improve the administration police facilities such as offices, holding cells and houses Supply the administration police with adequate equipments including patrol vehicles 	County Government, Kenya Police Service, Business Community, Ministry of Interior Coordination
lack of a Library	Emuhaya and Kima	A mobile library to be stationed at Emuhaya	County Government/ Kenya National Library Services
Inadequate land for expansion of health facilities- Emuhaya Health Centre	Emuhaya Sub-County Hospital	<ul style="list-style-type: none"> Additional land to be acquired from private land owners neighbouring the Health Centre Increase the capacity of the hospital 	County Government

		<ul style="list-style-type: none"> Construct a mortuary to be attached to the hospital Build residential quarters for medical personnel 	
Postal office	Emuhaya Post Office	<ul style="list-style-type: none"> Improve service provision 	Ministry of Information and Communication

Commercial

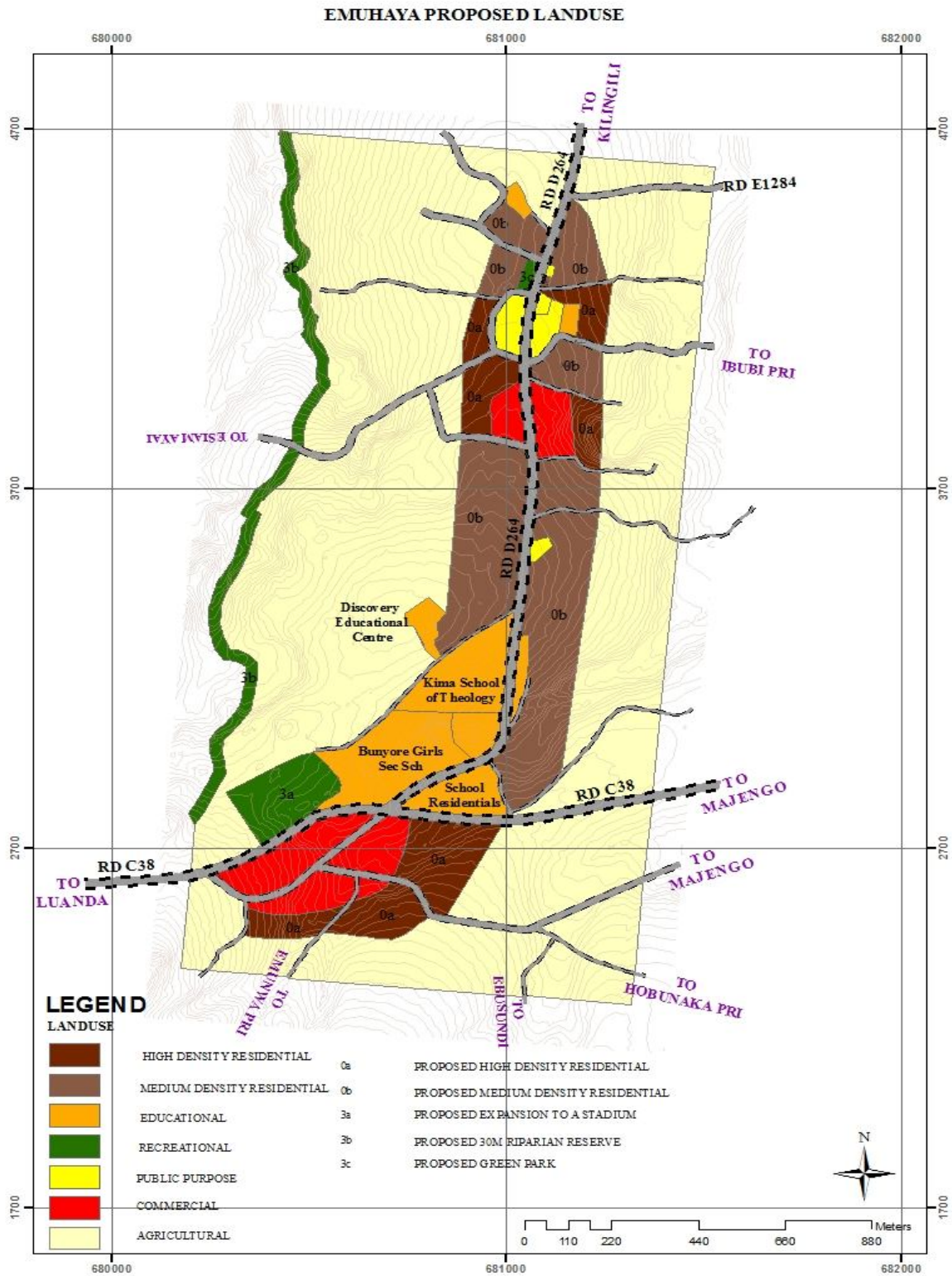
Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Urban decay	Kima (Wehomo) centre	<ul style="list-style-type: none"> Provide infrastructure to spur development in the centre Enforce laws on hawking 	County Government
Urban centre is dominated by old and outdated low-rise commercial buildings (Indian Shops design)	Emuhaya and Kima	<ul style="list-style-type: none"> Encourage modern high-rise commercial buildings for sustainable utilization of land 	County Government

Transportation

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of a bus stop/picking passengers along the road	Emuhaya and Kima	Construct bus stops in each urban centre	County Government
Lack of Car Park	Emuhaya and Kima	Tarmacking of road reserves to be used as car park	County Government
Lack of designated sites for motorized <i>boda boda</i> (motorbikes)	Emuhaya and Kima	Designate specific sites for motorized <i>boda boda</i> (motorbikes)	County Government
Poorly regulated motorized <i>boda boda</i> (Motorbike)	Emuhaya and Kima	Regulate motorized <i>boda boda</i> transport services to reduce insecurity and	County Government

transport services		accidents in towns	
Poor roads infrastructure	Emuhaya and Kima	<ul style="list-style-type: none"> Improving and widening all the feeder roads linking Emuhaya and Kima 	County Government, KeRRA

Map 3.11: Emuhaya-Kima Area Action Plan



2.9: Sabatia (Wodanga) Urban Centre

2.9.1 Location

Sabatia (Wodanga), the headquarters of Sabatia Sub-County is located 34°47' N 0°07'E along the Chavakali-Kapsabet Road and about 8.76Km Southeast of Mbale Town (County Headquarters).

2.9.2 Historical Background of the town

Sabatia Town also called Wodanga is the headquarters of Sabatia Sub-County. The name Wodanga is derived from the name of the then Senior Chief Ezekiah Gabala Odanga who had his grass-thatched office at the current Sabatia Sub-County headquarters. Wodanga means Odanga's place or office where people of Maragoli North Location used to come for administrative services.

The name Sabatia is a corrupted version of Nandi word *Sabatiek* which means *Mutembe* in Lagooli language. *Mutembe* is a sacred tree which was traditionally used by the Maragoli people as traditional courts. Senior Chief Odanga introduced the first traditional court at Sabatia which was conducted under *Omutembe* tree. In order to find out the truth, the accused person was required to throw a spear at the sacred tree, an act with far-reaching implications. If the accused person was pleaded innocent, he/she could accept to hold the spear and spear the tree and if nothing happened to him he/she could be set free. However, if the accused was guilty of an offence his/her conscience could not allow him/her to hold the spear and spear the tree since he/she could suffer serious negative implications including death. Instead he/she could therefore plead guilt and the elders could prescribe punishment accordingly.

The centre started to grow as an administrative centre as well as rural service centre. The first semi-permanent shop was built by Senior Chief Ezekiah gabala Odanga opposite the Sub-County headquarters and it is existing to date but dilapidated. Wavisero and Kwa Shem started

earlier than Wodanga as commercial nodes but were overtaken by Wodanga due to administrative services combined with commercial services. Others who constructed shops at the market centre include Odanga's son Joshua Odanga Mbado (Health Officer), Counsellor Lawrence Isige, Samula and Avugwi. The shops were constructed with locally available materials (mud and wattle for walls and grass thatch for roofs).

During the colonial era the current place for Sabatia Sub-County Hospital was used for recreational activities such as wrestling. Whites used to frequent the place. Later Sabatia Health Centre was constructed to offer health services.

Other landmarks at Sabatia Sub-County headquarters include Avugwi Hall which was named after Mr Avugwi who was a respected Education Officer. The Hall was officially opened in 1972. It was recently renovated and is used for meetings and other important functions. The Hall was constructed during Jamin Mwavale's term as area Chief. Chief Mwavale is also remembered and recognized for planting the indigenous trees existing at Sabatia Sub-County Headquarters today.

Other administrators who contributed to the history of the Sub-County headquarters and growth of Sabatia Town include Chief Mwenesi who introduced the *Harambee* (combining efforts) and helped to construct Chavakali High School (then as Harambee Secondary School) and also helped to built the first permanent building that became Sabatia Divisional Office. The building is still in good condition and currently used as Sabatia Constituency CDF Office. All people of Maragoli North Location were required to contribute ksh 12.50 towards the two projects. Of this amount, ksh 12.00 was meant for school development and 50 cents for construction of the administrative office.

Sabatia was elevated to Divisional headquarters for Sabatia Division in 1980s by the late Hon. Moses Mudavadi. It became the District Headquarters for Sabatia District in the year 2009 and it is currently the Headquarters of Sabatia Sub-County under Kenya's Constitution of 2010.

Altitude: The altitude for Sabatia Sub-County ranges from 1500-1700m above sea level. Altitude of Sabatia Town and its environs varies from 1606 to 1616 M asl with an average of 1610M asl. The area has a gently slope and suitable for urban expansion.

2.9.3 Study area characteristics

Climatic Characteristics

Precipitation: Sabatia Town and its environs receive bimodal rainfall regime. The long rains are experienced between March and June while short rains are experienced during the months of September, October and November. The area receives average rainfall of 1900-2100mm with an average of 150 days of rainfall per year. This amount of rainfall is sufficient to support a variety of cash and food crops together with vegetation. Heavy rains lead to loss of soil fertility due to leaching.

Temperature: Temperature at Sabatia Town and its environs ranges between 14⁰c and 32 °c with an average of 23⁰c. This temperature range is suitable for crop and animal production.

Geology and Soils

The basement rock system at Sabatia consists of Kavirondian system. Sabatia Sub-county has dark brown friable ferrosols nitrisols. The soils are deep and well drained and suitable for a variety of crops. The geology and soils at Sabatia are competent and can support high-rise buildings.

Urban function

2.9.4 Statement of the Problem

Sabatia (Wodanga) is an administrative centre (Sub-County Headquarters) which has been developing without an approved local physical development plan (LPDP). The first attempt to

prepare a Local Physical Development Plan for the centre was made in 1970s and only covered public land. The plan has since be overtaken by events and cannot be relied upon to guide future development of the centre. New physical developments on both public and private land are currently taking place unguided. Except for the Chavakali-Kapsabet Road through the centre, the rest of the roads serving Sabatia and its environs are too narrow and do not meet planning standards. As a Sub-County Headquarters, the need to prepare an Integrated Strategic Development Plan for Sabatia (Wodanga) cannot be overstated.

2.9.5 Existing Spatial Structure

Urban Structure and Form

Sabatia (Wodanga) is a fairly compact urban area developed on either side of C39 Chavakali-Kapsabet Road. The major land uses include public purpose (administrative, law and order, Health facilities), Educational facilities, and commercial, residential and agricultural. The urban area is surrounded by a rich agricultural hinterland.

Transport Infrastructure

Sabatia (Wodanga) is served by the all-weather C39 Chavakal- Kapsabet Road and a number of internal access roads which are not classified. The rural access roads connecting the hinterland to the centre are fairly narrow measuring about 6M wide and therefore do not meet the minimum standards as per the Physical Planning Handbook. There is poor road connectivity since the centre's environs lack planned road infrastructure.

Terrain features

Sabatia is characterized by gentle sloping landscape and therefore suitable for urban expansion. The terrain allows free flow of surface run off and therefore there is no possibility of flooding in the area.

Land tenure system

Sabatia is characterized by limited public land (Approx. 6Ha). The rest of the land is under private freehold tenure system and currently under agricultural and livestock production. This has far-reaching implications since public land is inadequate and the County Government will be compelled to allocate funds for acquisition of additional land for public purposes and public utilities.

2.9.6 Emerging Planning Issues

Inadequate public land; lack of recreational facilities such as sports club/Golf Course; unreliable piped water supply; inadequate coverage by piped water scheme; lack of formal housing estates for low and middle income groups (including civil servants); limited provisional stores (only one wholesale store), lack of conventional sewerage system; narrow roads; poor road connectivity; lack of solid waste receptacles and primary collection point; lack of accommodation facilities for visitors such as Guest Houses/Hotels; under utilization of social hall/resource centre (Avugwi Hall).

2.9.7 Integrated Strategic Urban Development Plan for Sabatia (Wodanga) Urban Centre

Residential

Currently, Sabatia (Wodanga) does not have areas designated for low, medium and high density residential neighborhoods. Some of the Senior Civil Servants based at Sabatia Sub-County Headquarters are accommodated by Mudete Tea Factory due to lack of secure and decent official residences. This plan proposes formal housing (LDR, MDR and HDR) neighborhoods to cater for civil servants and other private sector employees. Residential areas account for about 50% of total urbanized land. The specific sites zoned for residential use is shown in the Action Area Plan for the town (refer.....). The plan proposes the town to remain compact (densification) to avoid dependence on motorized modes of transport to service areas, workplaces and schools. Densification of residential neighborhoods will ensure that limited land

change user from agricultural to urban. Small provision stores are proposed in each residential neighborhood in line with Ebenezer Howard's neighborhood concept to provide lower level commercial services to residents.

Commercial

Limited commercial activities are proposed at Sabatia since the centre is currently about 2.5Km from Mudete Town which is emerging as an industrial-cum-commercial node. A medium size Super Market is proposed to be established there together with a Guest House (about 10-15 rooms). Other commercial services proposed at Sabatia include: ICT village, decent eateries, chemist, Bookshop, among others.

Transport

In order to improve transport in Sabatia (Wodanga) and its environs, the following proposals were suggested:

- Improved road connectivity (shown on land use proposals)
- Expansion of existing narrow roads to a minimum of 9M
- Integration of non-motorized transport (NMT) into land use plan
- Regulation of motorbike (*boda boda*) mode of transport to minimize accidents and reduce the insecurity associated with this mode of transport

Education

Sabatia is an ideal place for educational facilities because of its serenity, low noise levels, accessibility, among others. Some of the educational facilities existing at Sabatia centre and its immediate environs include: Moi Girls Vokoli, Serve Academy, Sabatia Primary School, Vohovole Primary School. While the centre is home to a number of primary and secondary educational facilities, tertiary educational facilities including polytechnics and colleges are conspicuously lacking. There is also urgent need for a model boys' and girls' schools together with a talent academy to cater for talented children.

Public utilities

Sewerage system

On-site sanitation facilities such as septic tanks, pit latrines (ordinary and VIP) are currently used at Sabatia centre and its immediate environs. A conventional sewerage system connected to an oxidation pond is therefore proposed to serve urbanized area while septic tanks and VIPs are recommended for its environs since it is not economically viable to extend sewerage system to sparsely settled areas.

Solid waste disposal

The strategy employed for management of solid waste is based on the fact that “waste is a resource” and zero waste philosophy. This plan proposes an efficient and effective strategy for management of solid waste originating from public institutions, business premises, households, transport sector, among others. The strategies proposed include, minimization, re-use, recycle and disposal. What cannot be re-used or recycled can then be transported to the site proposed for waste disposal near Chavakali junction.

Water Supply System

Sabatia is currently served by piped water from a borehole located at Vikoli and another one at Sabatia Sub-County Headquarters (currently dysfunctional) . However, the water supply is inadequate and most of the public institutions and private properties are not connected to piped scheme. Clean water supply to the centre is irregular.

This plan proposes that piped water for Sabatia to be sourced from Lake Vistoria North Water Service Board’s water pan along Wakikuyu River near Mudete Tea. It is recommended that water from the pan should undergo full treatment before it is pumped to a raised reservoir for onward reticulation to Sabatia Urban Centre. This plan also proposes rapid and widespread adoption of roof water harvesting by institutions and households since Sabatia is a high rainfall area.

Energy

The level of access to modern form of energy (electricity) is an indicator of the level of development of an area. While the urbanized area of Sabatia is connected to electricity, the same is not true for farm households around the centre. This plan proposes up-scaling of power connections and adoption of renewable energy sources such as solar energy and biogas digesters.

Public purpose

Government institutions

These include areas set aside for public institutions such as administrative areas, government ministries and departments. Sabatia is characterized by rich presence of government institutions. However, the existing public land is inadequate for future expansion.

Health

Sabatia and its environs are currently served by Sabatia Eye Hospital (private) and Sabatia Health Centre (public). These health facilities are considered adequate. However, the plan proposes that delivery of essential health services should be enhanced in line with the sector's vision. This calls for adequate staffing (all cadres) and supply of adequate medicines by the county government.

Social halls

Avugwi Hall (opened 1972) was recently renovated and is adequate for various public functions

Recreation

Recreational facilities are conspicuously lacking at Sabatia (Wodanga). This plan proposes a County Sports Club to be established there since climatic conditions are ideal and landscape is

suitable for such recreational activity. This implies acquisition of about 5 Acres of land from willing private owners.

Agriculture and Livestock Production

Agricultural land: Sabatia urban Centre is surrounded by agricultural land. Climate and soils of Sabatia area is ideal for a variety of crops including tea, maize, vegetables, horticultural crops, Irish potatoes, among others. Livestock kept include cattle, goats, poultry and rabbits. This plan advocates for intensification of crop and animal husbandry due to limited land holdings and rapid and widespread adoption of emerging crops such as moringa, vanilla, passion fruits.

2.9.8 Proposed Planned Interventions/Strategies

Public Utility

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
Lack of conventional sewerage system	Sabatia	<ul style="list-style-type: none"> Acquire land for construction of sewer ponds Construct sewer network 	County Government with donor support Local Engineering firms Lake Victoria North Water Services Board
Inadequate piped water scheme coverage Intermittent supply of water from central treatment plant	Sabatia	Short term interventions <ul style="list-style-type: none"> Expansion/augmentation of Kaimosi Water Treatment Plant and any other existing water supply schemes Exploitation of underground water sources Licensing of independent water provider Undertake a study on the number of households with access to piped water 	Lake Victoria North Water Services Board, Amatsi Water Company, County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
High cost of water supply due to huge electricity bills	Sabatia	Identify and implement gravity-dependent water reticulation system	Lake Victoria North Water Services Board, County Government of Vihiga (Ministry of Water, Environment and Natural Resources)
Regular electricity interruption	Sabatia	<ul style="list-style-type: none"> Expansion of electricity coverage to uncovered areas Connecting all the public institution Install street lights along the highway Long term interventions <ul style="list-style-type: none"> Develop the Kaimosi Hydro-power plant Transmit electricity to Sabatia centre 	County Government, Kenya Power, KENGEN

Lack of designated dumpsite	Sabatia	<ul style="list-style-type: none"> • Dumpsite proposed at Chavakali • Erect a waste collection point at Sabatia • Place waste collection bins 	County Government
Lack of a public cemetery	Sabatia	<ul style="list-style-type: none"> • The urban population will use the proposed Hamisi or Boyani public cemeteries 	County Government

Residential

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
<p>Inadequate housing for low, medium and high income groups</p> <p>Lack of official residences for the County Government Officers</p>	Sabatia	<ul style="list-style-type: none"> • Implement formal housing project for low income groups • Promote low cost appropriate housing technologies • Innovative financing mechanism to enable low income groups to afford housing • Provide serviced land for housing development • Local investors to be encouraged to establish housing cooperative and develop rental houses • Institutions to invest in staff housing scheme especially Kenya Police, Ministry of Health, Education officials Girls • Land to be acquired for development of residences for County Government officials. 	County Government (Department of Housing), Independent real estate developers, National Housing Corporation, Homegrown Housing Cooperative Societies, Financial institutions, Ministry of Lands, Housing and Urban Development

Recreation

Planning issue	Place (urban area) of occurrence	Proposed intervention(s)/Strategies	Actors
----------------	----------------------------------	-------------------------------------	--------

Lack of space for recreational facilities	Sabatia	<ul style="list-style-type: none"> • Acquire land for construction of Vihiga Sports Club • Acquire land for development of a public recreational park at Sabatia • Conserve riparian reserves for recreational purposes 	County Government
Poor town beautification programme	Sabatia	<ul style="list-style-type: none"> • Undertaking tree planting along the highway • Enforce laws on advertisements to ensure the aesthetic nature of the urban centre is maintained • Regular painting of buildings 	County Government

Public purpose

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of office spaces for expansion of Sabatia Sub-county offices	Sabatia	<ul style="list-style-type: none"> • Acquire land around the existing sub-county offices for its expansion • Improve the administration police facilities such as offices, holding cells and houses • Supply the administration police with adequate equipments including patrol vehicles 	County Government, Kenya Police Service, Business Community, Ministry of Interior Coordination
lack of a Library	Sabatia	A mobile library to be stationed at Sabatia	County Government/ Kenya National Library Services
Inadequate land for expansion of health facilities- Sabatia Health Centre	Sabatia Sub-County Hospital and Sabatia Referral Eye Hospital	<ul style="list-style-type: none"> • Additional land to be acquired from private land owners neighbouring the Health Centres • Increase the capacity of the hospitals • Construct a mortuary to be attached to the hospital • Build residential quarters for 	County Government

		medical personnel	
--	--	-------------------	--

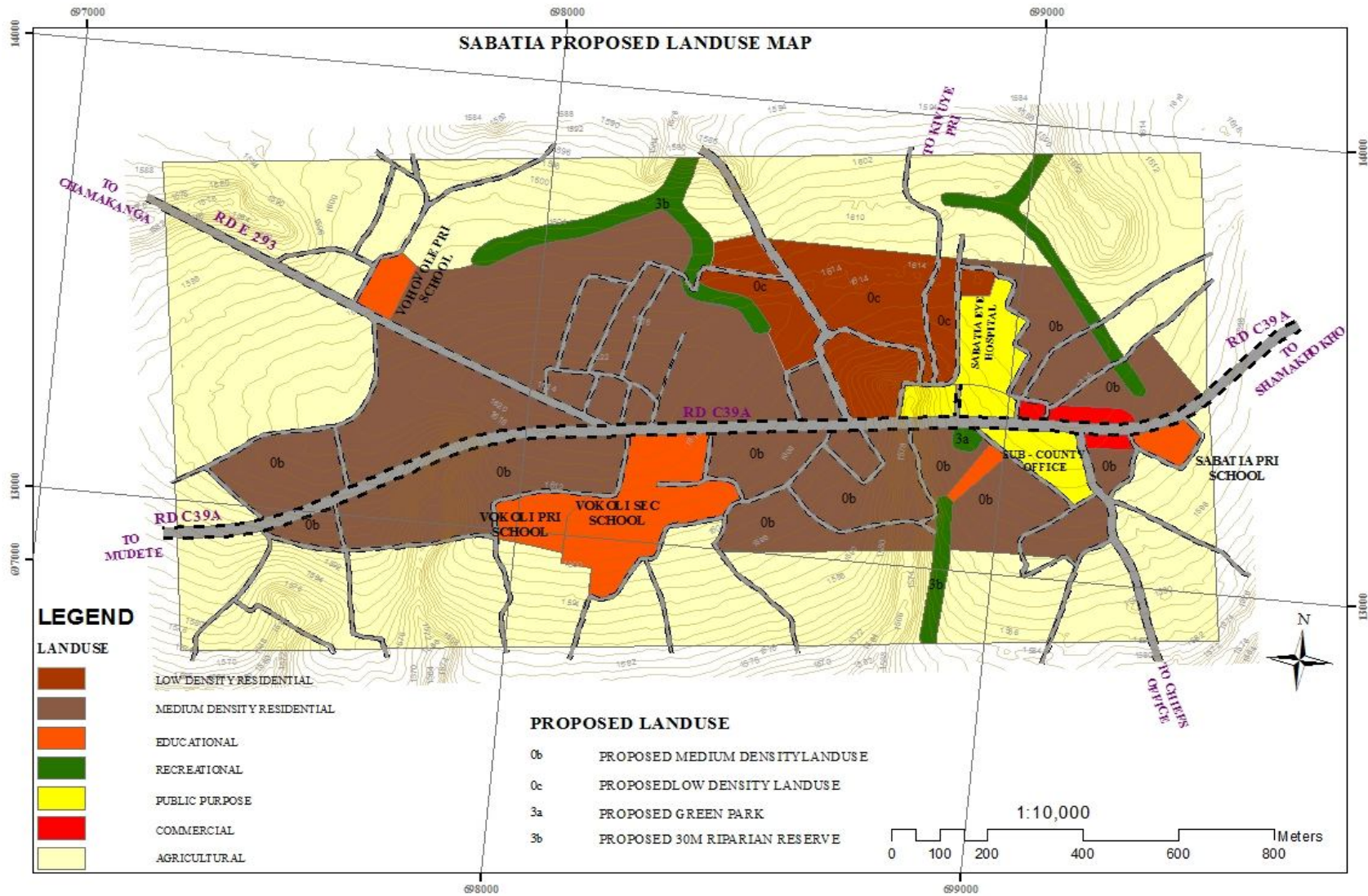
Commercial

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Urban decay	Sabatia centre	<ul style="list-style-type: none"> • Provide infrastructure to spur development in the centre • Enforce laws on hawking 	County Government
Urban centre is dominated by old and outdated low-rise commercial buildings (Indian Shops design)	Sabatia	<ul style="list-style-type: none"> • Encourage modern high-rise commercial buildings for sustainable utilization of land 	County Government

Transportation

Planning issue/Problem	Place (urban area) of occurrence	Planned intervention/Strategies	Actors
Lack of a bus stop/picking passengers along the road	Sabatia	Construct bus stop in the urban centre	County Government
Lack of Car Park	Sabatia	Tarmacking of road reserves to be used as car park	County Government
Lack of designated sites for motorized <i>boda boda</i> (motorbikes)	Sabatia	Designate specific sites for motorized <i>boda boda</i> (motorbikes)	County Government
Poorly regulated motorized <i>boda boda</i> (Motorbike) transport services	Sabatia	Regulate motorized <i>boda boda</i> transport services to reduce insecurity and accidents in towns	County Government
Poor roads infrastructure	Sabatia	<ul style="list-style-type: none"> • Improving and widening all the feeder roads linking to Sabatia 	County Government, KeRRA

Map 3.12: Sabatia Area Action Plan



2.10 Planning Standards

Table: Planning Standards and Regulations

Area	Type of Development	Minimum Land Size	Maximum Coverage	Remarks
Residential				
Low Density Residential				
Medium Density Residential				
High Density Residential				
Commercial				

REFERENCES

- GoK (2012), Draft National Environment Policy. Ministry of Environment and Mineral Resources, Nairobi
- GoK (2012), The County Government Act, No. 17 of 2012. Government Printer, Nairobi
- GoK (2012), The Land Act, 2012. Government Printer, Nairobi
- GoK (2012), The Transition to Devolved Government Act, No. 1 of 2012. Government Printer, Nairobi
- GoK (2011), First Medium Term Update (Vision 2030). Ministry of State for Planning, National Development and Vision 2030, Nairobi
- GoK (2011), The Commission on Revenue Allocation Act, No. 16 of 2011. Government Printer, Nairobi
- GoK (2011), The Tourism Act, No. 28 of 2011. Government Printer, Nairobi
- GoK (2011), The Urban Areas and Cities Act, 2011, No. 13 of 2011. Government Printer, Nairobi
- GoK (2010), The Constitution of Kenya. Government Printer, Nairobi
- GoK (2009), Emuhaya District Development Plan (2008-2012). Government Printer, Nairobi.
- GoK (2009), Hamisi District Development Plan (2008-2012). Government Printer, Nairobi.
- GoK (2009), Integrated National Transport Policy. Ministry of Transport, Nairobi
- GoK (2009), Sessional Paper No. 3 of 2009 on National Land Policy. Ministry of Lands, Nairobi
- GoK (2009), Vihiga District Development Plan (2008-2012). Government Printer, Nairobi.
- GoK (2008), Concept Paper for the Preparation of a National Urban Development Policy, 2012. Office of the Deputy Prime Minister and Ministry of Local Government, Nairobi
- GoK (2006), Draft National Tourism Policy. Ministry of Tourism and Wildlife, Nairobi
- GoK (2005), Forest Policy. Ministry of Environment and Natural Resources, Nairobi
- GoK (2002), The Water Act, No. 8 of 2002. Government Printer, Nairobi

GoK (1999), The Environmental Management and Coordination Act, No. 8 of 1999. Government Printer, Nairobi

GoK (1996), Vihiga District Development Plan (1997-2001). Government Printer, Nairobi.

GoK (1996), The Physical Planning Act, Cap 286. Government Printer, Nairobi



