



REPUBLIC OF KENYA
MINISTRY OF LANDS, HOUSING AND URBAN DEVELOPMENT
URBAN DEVELOPMENT DEPARTMENT

**INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN
FOR BUSIA TOWN (2010-2030)**



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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

Director of Physical Planning

Date

APPROVED

Cabinet Secretary of Lands, Housing and Urban Development

Date

Approved Development Plan NO.

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LIST OF ABBREVIATIONS AND ACRONYMS

A.E.Z	-	Agricultural Economic Zones
AP	-	Administration Police
BMC	-	Busia Municipal Council
CBD	-	Central Business District
CDC	-	Center for Disease Control
CO-OP	-	Co-operative Bank
CDF	-	Constituency Development Fund
ECD	-	Early Childhood Development
EIAs	-	Environmental Impact Assessment/Audits
EACC	-	Ethics and Anti-Corruption Commission
FTC/ATC	-	Farmers/Agricultural Training College
GOK	-	Government of Kenya
ICDC	-	Industrial and Commercial Development Corporation
IGF	-	Internally Generated Fund
ICT	-	Information, Communication Technology
KARI	-	Kenya Agricultural Research Institute
KEMRI	-	Kenya Medical Research Institute
KEFRI	-	Kenya Forest Research Institute
KETRI	-	Kenya Trypanosomiasis Research Institute
KIE	-	Kenya Industrial Estates
KENSUP	-	Kenya Slum Upgrading Programme
KURA	-	Kenya Urban Roads Authority
KISIP	-	Kenya Informal Settlements Improvement Project
KENHA	-	Kenya National Highways Authority
KERRA	-	Kenya Rural Roads Authority
KETRACO	-	Kenya Electricity Transmission Company
KWFT	-	Kenya Women Finance Trust
KCB	-	Kenya Commercial Bank
LBDA	-	Lake Basin Development Authority
LVNWSB	-	Lake Victoria North Water Services Board
LATF	-	Local Authority Transfer Fund
LAs	-	Local Authorities
MDG	-	Millennium Development Goals
MOA	-	Ministry of Agriculture
NEMA	-	National Environmental Management Authority
NBK	-	National Bank of Kenya
NHC	-	National Housing Corporation
PCUs	-	Passenger-Car Units
PPPs	-	Public-Private Partnerships
PSV	-	Public Service Vehicle
RMLF	-	Roads Maintenance Levy Fund
SMEs	-	Small and Medium Enterprises
UPAL	-	Urban and Peri-Urban Agriculture and Livestock
WWSC	-	Western Water and Sanitation Company
WARMA	-	Water Resources Management Authority

ACKNOWLEDGEMENT

This first Integrated Strategic Urban Development Plan for Busia has been prepared with the support and collaboration of various ministries, stakeholders and organizations. Special thanks go to the departments of Urban Development and Physical planning of the Ministry of Lands, Housing and Urban Development. Officials from these two departments were actively involved in the initiation and supervision of the planning process. We acknowledge the commitment of the Ministry to the planning process by funding the project. We appreciate the efforts of various heads of County departments in Busia for their willingness to provide secondary information.

Sincere gratitude is granted to the respondents and key stakeholders in their provision of relevant data and information for consideration and use, the members of the planning team for their teamwork, local administration and the resident communities for their involvement, views, hospitality and co – operation. God bless you all.

FOREWARD

The process of Urbanization is on the increase worldwide. This growth of urban areas is posing a major challenge in the management of these areas. In Kenya like any other developing country, rapid urbanization has generated a lot of concern due to the challenges it imposes on the future development of the cities and towns. The urbanization trend with its characteristics such as rapid demographic growth, spatial expansion, economic differentiation, social complexity, cultural diversity and institutional fragmentation call for an efficient and responsive mechanism to reduce the ancillary impacts of process such as poverty, inequality, traffic congestion, growth of informal settlements and environmental degradation.

It is against this backdrop that a deliberate exercise aimed at directing the use and development of scarce resources in harmony with the environment is needed to promote health, safety, amenity, social equity, convenience and environmental conservation in Busia urban area. The Busia Integrated Strategic urban Development Plan is therefore intended to provide guidelines on the growth of the urban area in order to address the various land use concerns such as environmental, social and economic issues. The plan covers a period of 20 years (2010-2030). The proposals contained in the plan aim at providing a living and sustainable urban environment which will ensure optimal utilization and efficient management of land and land based resources within the urban area.

The planning team adopted a participatory approach in the development of the plan. The process involved two distinct but related activities, that is digital mapping and the use of the resultant digital map in the preparation of the integrated strategic urban development plan for the urban area. Planning for urban area was guided by the community's vision and the smart growth model's benchmarks. The community's vision for Busia was:

To be a vibrant, sustainable and competitive gateway to Kenya with an edge in the areas of hospitality, safety, housing and efficient infrastructure.

The development of the plan was a collaborative effort between the Ministry of Devolution and Planning, the Ministry of Lands, Housing and urban development, the County government of Busia and Syagga and Associates.

As the plan demonstrates, the urban area is subject to many interrelated processes of change. In the plan, a great amount of exploratory and analytical work has been done and it presents a great opportunity of making fundamental changes and adjustments to the development of the urban area. The trends for future development have been outlined and the County government is armed with a clear conception of the pattern which future development should take.

It is my hope that this plan will guide the development of the urban area and make a positive difference to the residents of the urban area in particular and the County in general.

Director,
Syagga and Associates.

EXECUTIVE SUMMARY

This document represents a Strategic Urban Development Plan for Busia urban area. The plan covers a period of 20 years (2010-2030). The plan provides a framework for the spatial development of the urban area over the plan period. The proposals contained in the plan aim at providing a living and sustainable urban environment which will ensure optimal utilization and efficient management of land and land based resources within the urban area. The main objective of the plan is to integrate land use and infrastructure planning to improve the built, economic and social environments of the urban area and ensure compactness of urban form and design of transport and communication network to enhance interaction while minimizing loss of open land, agricultural land, forests and water catchment areas amongst others.

The plan was prepared in the context of the legislative framework of the country's Constitution 2010, Kenya's Vision 2030, Urban Areas and Cities Act, the Physical Planning Act amongst other pieces of legislation. The Busia community vision for the urban area guided the planning process. Their vision for the urban area as developed during the visioning workshop is: To be a vibrant, sustainable and competitive gateway to Kenya with an edge in the areas of hospitality, safety, housing and efficient infrastructure.

The plan is in six Chapters. Chapter one forms the general background to the plan and highlights the planning problem in Busia, the purpose and goal of the plan, scope of the plan, the vision, objectives and the methodology adapted in the plan making process. Chapter two gives the planning context of the plan area. It outlines geographical profile, the legal and institutional framework, the population dynamics and the socio-economic profile. The chapter is in two parts. Part one outlines the main physical features of the planning area such as climate, topography, geology and soils, vegetation and drainage. The second part of the chapter gives other useful information critical to the understanding of planning area such as population dynamics, socio-cultural profile, labour force profile, household income and expenditure, housing and informal settlements, transport, land tenure structure, economic scenario and the state of social and environmental infrastructure.

Chapter three gives the situational analysis of the planning area and emerging planning issues. The challenges are in various sectors such as housing and social services, health,

education, transport and infrastructural services, environment, the economy of the town amongst others. It also highlights the development trends and scenarios in Busia.

Chapter four outlines the proposed Integrated Strategic Urban Development Plan and the land use plan matrix while chapter five gives the development proposals and strategies. For the urban area to achieve its vision and address the challenges identified, a number of strategies, projects and programmes have been proposed to be implemented over the plan period. The key strategies include: housing and settlement upgrading strategy, environmental management strategy, transport strategy, social infrastructure strategy, economic and investment strategy and revenue enhancement strategy. The last part of the chapter gives the zoning and action area plans while the last outlines the implementation matrix.

It is hoped that the implementation of this plan will contribute positively to the lives of the residents of the urban area.

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CHAPTER ONE: INTRODUCTION

1.1. General Background

Over the last decade, Kenya has been urbanizing rapidly mainly due to rural urban migration and high rate of population growth. In the year 2005, 20.4 % of the population resided in urban areas. This is projected to rise to 60% in the year 2030 (GOK 2007). This rapid growth needs to be guided by a planned programme in urbanization consistent with the principles in the social pillar envisaged in vision 2030. It is against this background that this plan has been prepared.

Urbanization in Kenya like any other developing country is generating a lot of concern due to the challenges it imposes on the future development of the cities and towns. The rapid urbanization has surpassed the authorities' capacity to manage urban centres by providing essential services. The urbanization trend with its characteristics such as rapid demographic growth, spatial expansion., economic differentiation, social complexity, cultural diversity and institutional fragmentation call for an efficient and responsive mechanism to reduce the ancillary impacts of urbanization such as poverty, inequality, traffic congestion, growth of informal settlements and environmental degradation. Further, rapid urbanization has led to poor arrangement of houses and other infrastructure within the urban set up leading to disharmony in various functions such as accessibility and maintenance of a healthy environment.

1.2. Purpose and Goal

The purpose of the Strategic Urban Development Plan is as stipulated in the Physical Planning Act (1996), SECTION 24(2) – (3) includes: -

- Interpreting regional physical development policies in terms appropriate to the local areas;
- Articulating the aims of the Government and municipality for the areas together with strategies, policies and general proposals which are intended to achieve those aims;
- Providing a framework for detailed development policies and proposals for subsequent short-term plans for the area;

- Indicating action area for immediate development or re-development;
- Providing a coordinated basis upon which various implementing agencies can develop their individual programmes of work for which they have executive responsibility, for example, housing, transportation, water supply, electricity supply, sewerage development, etc

1.3. Planning Problem in Busia

Located along the Kenya-Uganda border, Busia town has been experiencing rapid growth. This rapid expansion calls for planning interventions to aid the town in its development. The Physical Planning Act (Cap 286), Urban Areas and Cities Act, and the County Government Act provide all counties and urban areas with the mandate to ensure that all developments conform to the recommended planning standards. It is against this backdrop that a deliberate exercise aimed at directing the use and development of scarce resources in harmony with the environment is needed to promote health, safety, amenity, social equity, convenience and environmental conservation in Busia town. The Busia Town Strategic Development Plan is therefore intended to provide a guideline on the physical growth of the town in order to address the various land use concerns such as environmental, social and economic issues.

The responsibility for urban planning of Busia town rests with the county government, which also takes care of most management, maintenance and provision of infrastructure and basic services. Currently, there is no legally approved master plan for Busia town. Some plans with different thematic scope have been developed but they have neither been endorsed as legal documents. In principle, they have not served as a proper framework for spatial and social development but only for a few casual interventions.

A part from the lack of a master plan, the basic planning data base for the Busia town is scattered and inadequate. Neither the county government nor the municipalities have databases or registers with reliable information on numbers of inhabitants, infrastructure, legal status of land, or access to services.

The responsibilities for town development and management are dispersed in a maze of government institutions, agencies, departments and divisions without any coordinating agency. Duplication and gaps are common.

1.3.1. Planning Challenges in Busia Town

Like many other townships in Kenya, Busia faces many development challenges, principal among them being planning and management problems. The land use profile is characterized by congested CBD, Mushrooming slums and narrow 4m access roads. The key planning issues in Busia include:

- (i) Unplanned and uncoordinated urban growth and economic development
- (ii) Poor road network and transport system
- (iii) Rapid growth and illegal subdivisions, informal land transactions,
- (iv) urban sprawl, and slum expansion,
- (v) High level of unemployment and declining opportunities
- (vi) Increased pollution and deterioration of the environment
- (vii) HIV/AIDS pandemic and high incidences of urban poverty
- (viii) Inadequate service delivery.

The Integrated Strategic Urban Development Plan for Busia is intended to attain the following:

- i. Integrate land use and infrastructure planning to improve the built, economic and social environments of the town.
- ii. Reduce land use conflict and enhance urban safety
- iii. Improve on urban and regional governance since Busia will be the County Headquarters
- iv. Encourage economic development while promoting the efficient use of land and protection of significant natural and heritage features.
- v. Execute a program of drainage improvement and upgrading to minimize cross border floods
- vi. Adaptation to climate change, including reduced vulnerability to natural disasters

1.4. Vision

The vision for Busia town was supported by overall objectives which guided the planning process. This vision was formulated by the residents, fine tuned by the planning team and validated during the feasibility study report validation workshop held on 24th February 2012 at Farmview Hotel, Busia. Thus the development of the vision was a collaborative effort between various stakeholders. The vision as validated is:

To be a vibrant, sustainable and competitive gateway to Kenya with an edge in the areas of hospitality, safety, housing and efficient infrastructure

1.5 Objectives of the plan

The overall objective of the planning exercise was to prepare an integrated urban development plan in order to;

- promote integrated development of socio-economic activities
- provide and develop sustainable human environment and resource system
- preserve and protect existing features and fragile ecosystem
- create the town's character and ensure compactness of the urban form and design
- Provide policy framework for socio-economic investments, economic use of space, preservation of community facilities, and infrastructural services.
- provide framework of plan implementation, organization and administration requirement and resources for implementing the plan

1.6 Scope of the plan

The strategic urban development plan for the town is meant to guide development for the next 20 years (2010-2030). The area to be planned is 45km² and is based on the assumption that annual development will take place at a coverage rate of 0.5km². The plan covers the entire area of the former Busia Municipality.

1.7 Outputs

The main output of the plan is an Integrated Strategic Urban Development Plan that provides both long term and short term strategies for guiding development of the town and its environs. The long term framework offers the desirable spatial structure and indicates broad land use

proposals. The short term framework specifies the appropriate actions and their location within the planning area. These include the following:

- Area Action Plans.
- Transportation Strategy
- Environmental Protection and Conservation Strategy
- Economic (Investment) strategy
- Housing Strategy.
- Implementation Strategy

1.8 TERMS OF REFERENCE

The plan was prepared in response to the following terms of reference:

- Carry out a physical and natural ecological features study of town and its outlying region with view to preparing a strategy for their efficient use, conservation and spur economic development.
- Determine the existing resource potentials with view to their maximisation utilization.
- Undertake a Land-Use and Socio-economic studies with a view to proposing a policy/strategy for mixed land uses, minimum standards applicable in urban areas; and minimum agricultural economic units.
- mapping and digitisation of topographical cadastral features and natural resources of the town.
- Identify the existing land malpractices and settlements and propose strategies for improved land Management, administration, development approval, control and regularisation.
- Undertake an assessment of transport, infrastructure and utility needs, housing and community services and propose new strategies.
- Prepare analysis reports and present proposals for future spatial, demographic, social and economic growth.
- Prepare a long term 20-30 years Integrated Strategic Development Plan for town, together with detailed plans in the identified areas.

- Prepare attendant transport infrastructure services and community development facility plans.
- Identify suitable land for both public purpose and utilities
- Prepare plan implementation schedule, planning and development policy guidelines and attendant resource and institutional requirements.

1.9 Methodology

The process involved two distinct but related activities, that is, digital mapping and the use of the resultant digital map in the preparation of the integrated strategic urban development plan for the town.

1.8.1 Strategic Planning Approach

The conventional urban planning approaches that have been applied in Kenya have been found to be inadequate since they adopted planning laws and regulations from the colonial administration. These approaches set standards that were too high when it comes to development while in some cases, emphasis was on the built up zones of the townships instead of seeing the town as a unit. This led to the adoption of strategic planning which is a more holistic, inclusive and integrated approach which focuses on the; planning of the whole township, residents views, local governance and gender equity among others. It is this approach which was adopted for the planning of Busia town. The three key questions that this approach addresses include:

- Where are we today?
- Where do we want to go?
- How do we get there?

1.8.2 Digital Mapping

The objective of the Digital topographical survey was to: Provide a reliable digital map of Busia town for planning and use in infrastructure design and maintenance program.

The planning team endeavoured to provide a methodology that provides accuracy and flexibility without sacrificing the quality of products required. This method was used to develop the following final documents:

- Satellite imagery/aerial photography in both hard and soft copies that are georeferenced and rectified
- Ground control points, approved by Director of Surveys
- Preliminary maps
- Cadastral layer of the registered land parcels
- Final digital maps and hard copies

1.8.3 Planning Approach

After the development of the digital maps, the planning process involved five main steps or phases:

Phase One: Preparatory

This phase included undertaking reconnaissance visit, meeting with Busia Municipal Council officials, the Town Planning Committee and a courtesy call on the District Commissioner. A consultative meeting was also held with key stakeholders. The result of the meeting was the formation of a steering Committee. The committee has 20 members and comprised of officials from line ministries such as the representative of the DC, Physical Planning Officer, District Development Officer, District Statistics Officer, Water Officer, NEMA officer, Busia Municipal Council Administrator, and Council Engineer. Other members include the representative of Bodaboda Association, Trade Association, women and youth groups and residents' associations amongst others.

Phase Two: Sensitization of Stakeholder

Stakeholders' involvement and participation was an important task for the project for the following reasons:

- Obtaining ownership of the process
- Identifying the planning status of the urban centre in question
- Determining issues to be considered in the data collection and analysis.
- Establishing the extent of planning areas
- SWOT Analysis- identifying the Strength, Weakness, Opportunities and Threats

Visioning and Objective Settings Workshop

As part of the sensitization process, a Visioning and Objective Setting Workshop was held on the 25th November 2011. Approximately 150 members attended including officials from the National and Local Governments, the business community, professionals, residents etc. The workshop was divided into six (6) thematic groups to enable them deliberate on planning issues. These thematic groups included;

- Land use
- Transportation and other Infrastructure
- Governance and Capacity Building
- Environmental
- Economic and Investment
- Housing and Upgrading of Informal Settlement

These deliberations led to the formation of a common vision statement for the town. All the thematic groups proposed their visions and stakeholders mandated the planning team to construct one common vision statement from all the proposed visions.

Phase Three: Investigative phase

The main aim of this phase was to collect data to be used in the actual preparation of the plan, and it involved several steps, beginning with field survey. Field survey involved recruiting and training of research assistant, fine tuning of data collection tools and approaches to fit the challenges and issues arising from the reconnaissance and stakeholders sensitization. Other activities included sampling of households and conducting interviews, and data analysis. The main steps involved included:

- Identification of sources of primary and secondary data
- Collection and analysis of data on planning components
- Identification of key issues for planning
- Presentation of the findings to a validation workshop

Data was collected on the following issues:

- i. Household characteristics
- ii. Migration trends

- iii. Land ownership
- iv. Housing
- v. Social amenities(health, education, recreation, places of worship, etc)
- vi. Inventory Infrastructure facilities (Motorised and Non Motorised roads, communication, etc)
- vii. Utility services(water, sewerage, waste disposal, etc)
- viii. Economic activities (formal and informal)
- ix. Institutional framework
- x. Environmental management

Data Collection

The techniques for data collection included questionnaires, interviews, observation and photographs. A survey using questionnaires with carefully agreed representative sample of the population was conducted. The sample sizes in the town were determined after the reconnaissance survey and thorough discussions with the client and Municipal Council of Busia.

A total of 636 respondents were interviewed from the study area with samples being drawn proportionately based on the population size of each location and sub-location, ward and estates. Highly populated areas such as Mabale/Mayenje, Burumba, Bulanda and Marachi had more respondents. There were more females respondents (387; 60.8%) than male respondents (249; 39.2%). Table 1.1 shows the distribution of respondents in Busia town.

No.	Cluster/Ward/Estate	Frequency	Percentage
1	Mabale/Mayenje	75	11.8
2	Burumba	76	11.9
3	Bulanda	81	12.7
4	International	42	6.6
5	Marachi	76	11.9
6	Road Block	44	6.9
7	Ojamii	52	8.2
8	Omeri	57	9.0
9	Alupe	25	3.9
10	High Rock	40	6.3
11	Amerikwai	43	6.8
12	Angorom	25	3.9

Source: Fieldwork, November 2011

Interviews were held with a variety of stakeholders which included representatives of the residents of the town, the business community, various interest groups and officials of the national and local governments. These included the District Commissioner; District Officers, Area Chiefs and Assistant chiefs and the village elders. Other key informants included officials from all government ministries such the Ministry of Planning, National Development and Vision 2030, Ministry of Lands, District Surveyor, District Development Officer, all food and livestock related ministries, District Environment and Forestry officers, District Water Officer, Health Officer, Education Officer and CDF officials from two constituencies (Amagoro and Nambale) among others. These are persons with day to day knowledge on challenges and constraints affecting the town.

Interviews with management and staff of the Busia Municipal Council including the Mayor, the Deputy Mayor and all councillors, the Town Clerk, Treasurer, Administrator, revenue officer, Town Engineer and the Works officer, Social Services Officer, and Town Planning Committee with a view to obtaining information on;

- Projects targets set by the town to improve service provision
- Successes and frustrations in the implementation of these projects
- Expectations and aspirations for the future of Busia town

The data obtained in each component was used to validate, authenticate, supplement and complement data obtained in other components.

Data Analysis

Statistical Package for Social Sciences (SPSS) was used for processing the household data collected. Processing of data involved the following;

- coding of questionnaires,
- development of SPSS frame for data entry,
- data entry,
- data cleaning
- developing table of frequencies

Data analysis was through triangulation of data of the household survey data, interviews and literature review. The analysed data led to the development of the following:

- Situational analysis of existing services, land and financial capability
- Challenges affecting the town in the provision of its services
- Emerging planning issues
- Way forward
- Development of sectoral strategies in the following sectors:
 - ✓ Transportation
 - ✓ Environment
 - ✓ Housing and settlement upgrading
 - ✓ Social infrastructure
 - ✓ Economic and Investment
 - Revenue Enhancement

Stakeholder forum

- A one-day stakeholder workshop was held to validate the aspirations and concerns of the stakeholders. They assisted in refining the proposals, and was useful in promoting and popularizing implementation strategies and findings.

Phase Four: Draft Integrated Strategic Urban Development Plan

- Modeling spatial scenarios showing desired outcomes, alternatives, strategies and programmes.
- Development of implementation plan.

Phase Five: Approval and Publication of Final Plan for Busia Town

On completion, the final strategic urban development plan was submitted to Busia full council meeting for adoption, before submitting the adopted plan to the client ODPM-MoLG for approval. The legal approval procedures for the plan were followed as stipulated in the Physical Planning Act Cap 286,

Approval of the plan by the Minister in charge of Physical Planning and publication of the approved plan will be done in accordance to the P.P.A 4 form.

Monitoring and Evaluation of the Integrated Strategic urban Development Plan

Monitoring and evaluation strategy for implementing the plan was prepared so as to ensure better coordination amongst urban development actors, enhance and structure participation of different actors and have a clear resource mobilization strategy.

Implementation of the Plan

Plan implementation is highlighted in the Implementation Matrix. For successful implementation of the plan, partnership between the county government, government ministries, CSOs, private sector and other bodies responsible for the plan implementation is needed.

Training and Skills Transfer

An important part of this assignment included a programme of training, capacity building, and skills transfer, in particular to the selected staff of County Government of Busia. A hands-on training for a few selected technical staff has been in progress since initiation of the project. This was to ensure a clear understanding of the final strategic urban development plan, and a long term sustainability and efficiency during implementation stage. A much higher level of training was undertaken upon completion of the plan to assist the staff in plan implementation and on the use of various software used in the development of this plan.

2 CHAPTER TWO: PLANNING CONTEXT

2.1 Introduction

This plan has been prepared within the context of: the Constitution of Kenya; the Vision 2030 national development blue print; various sectoral policy frameworks; relevant legislative provisions; the terms of reference and stakeholder concerns. This are discussed below.

2.2 Part One -Physical Characteristics

2.2.1 Location and Size

Busia is located in Busia County, along the Kisumu-Busia Road at the Kenya-Uganda Border. It is about 550Km West of Nairobi, 124Km Northwest of Kisumu and 130Km Southeast of Kakamega. It borders Uganda on the West, Matayos Division to the East and South and Teso South Sub-county to the North (Busia County).

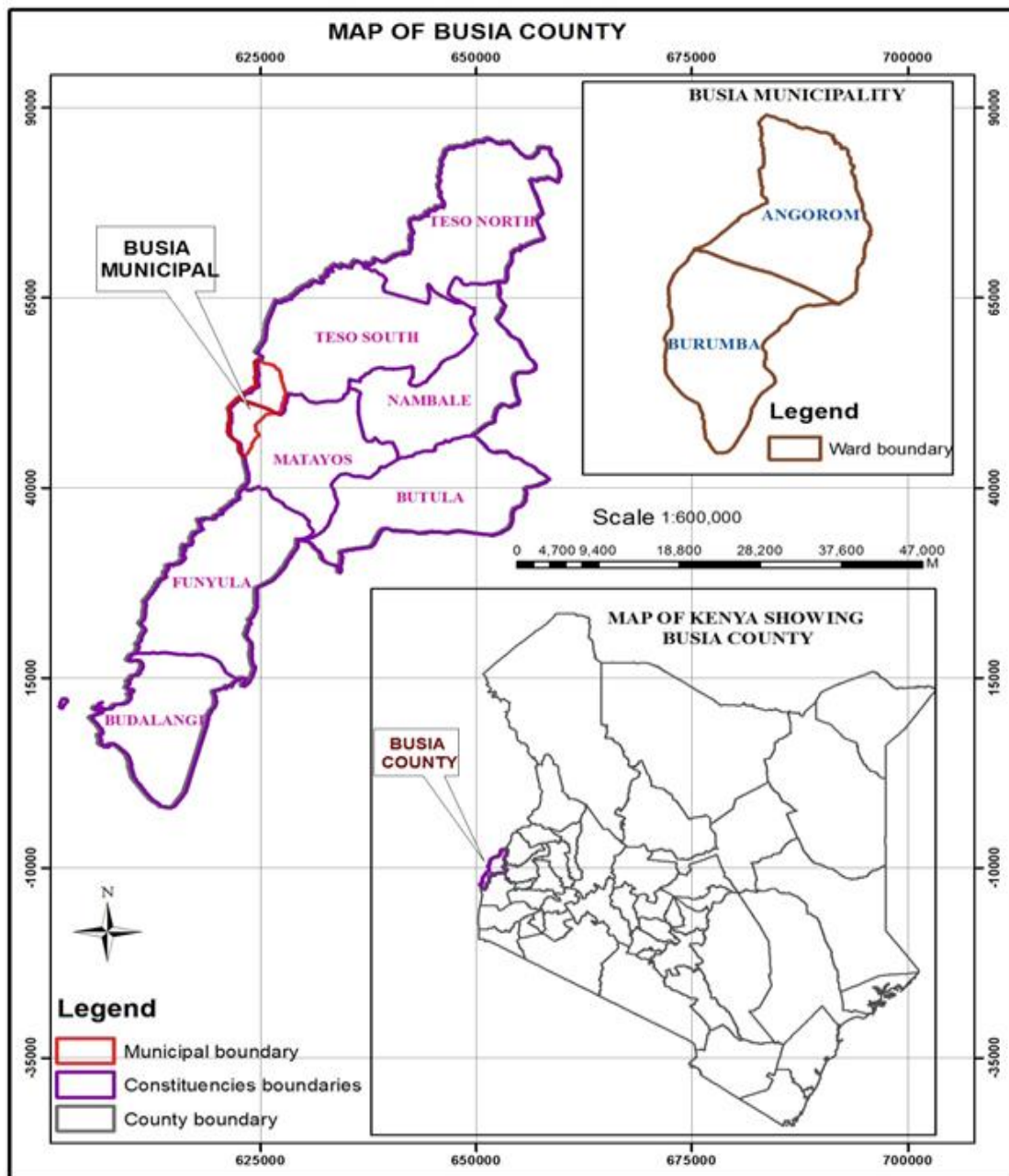
Busia is one of the towns in Busia County; others include Port Victoria, Funyula and Nambale, Bumala and Malaba towns. Busia town covers an area 44Km² divided into two (2) county electoral units – Burumba and Angorom. The town lies between latitudes 0° 36” and 0° 33” North and Longitudes 33° 54’ 32” and 34° 25’ 24” East.

Busia Town is the gateway to Uganda and Central Africa. The town was established as a market centre in the 1930s by the Elgon Nyanza District African Council and later grew as a town and an important border crossing point to Uganda.

In 1963, Busia Town became the District Headquarters of the Busia District. It was later elevated to the status of Urban Council in 1979. It was upgraded to Town Council status in 1982 and to a Municipal Council in 1990 covering an area of 44 Km². Currently Busia Town is the headquarters of Busia County and is located in both Busia and Teso sub-counties.

2.2.2 Political and Administrative Units

Busia town lies within two Divisions of Township in Busia Sub-county and Chakol in Teso Sub-county in Busia County. It has two Locations - Township location has two sub locations (Central Mjini and Mayenje) and Angorom location has three sub locations (Alupe, Agoloto and Amerikwai). Busia town is divided into two (2) county electoral units – Burumba and Angorom. See Map 2.1.



2.2.3 Topography

Busia is located on an undulating plain intersected by V-shaped Alupe River in the North and a broad-U-shaped bottom lands in the South. This forms the plain on which Busia Town is located. The altitude ranges from about 1130m to 1500m above Sea Level.

2.2.4 Climate

Busia experiences two rainy seasons; the long rains from March to May and the short rains from August to October. The dry spells are between December to February and June to August. Generally the annual rainfall ranges between 1270mm and 1790mm with mean annual of 1500mm.

The mean maximum temperatures ranges between 260 C and 300 C and the minimum temperatures vary between 140 C and 180 C. Due to the proximity to Lake Victoria the town records high evaporation rates of 1800mm to 2000mm per year, thus relatively high humidity. The Direction of wind is east – west.

2.2.5 Geology and Soils

The Town falls within the Lake Victoria Basin with the Kavirondian rocks series. The basement complex can sup storey/vertical buildings.

The Soils within the town are developed from various parent materials that include intermediate and basic igneous rocks. Soils along rivers and river valleys, terraces, and swamps are derived from alluvial deposits and colluviums. The soils are moderately deep, rocky and stony consisting of well-drained clays of natural fertility. Busia cascades within the LMI agro-ecological zone which is suitable for sugarcane growing.

2.2.6 Vegetation

The natural vegetation is characterized by shrub and thickets with some have indigenous tree species. There are also patches of localized vegetation around swamps there are no distinct forests but on farm forestry is practiced.

2.2.7 Drainage

The Alupe River and the bottom lands/plains are important features that determine the drainage of the Town. The highest part of the plain is where Busia Town and the Busia-Kisumu main road are situated. The plain to the north of the road drains its water into Okane

River, while the plain south of the main road drains its water into Sio River which finally drains into Lake Victoria. The water table level is shallow therefore ground water is plenty, for example shallow wells strike water at an average of 20 feet. There are several springs on the gentle slopes.

2.2.8 Functional Context

Busia Town as the headquarter of Busia County plays a major functional role as a gateway to Uganda and the central African countries.

It is a major Commercial hub on this part of Western Province. These Commercial activities include: - Hotels, Wholesale & Retail shops, Banks, Clearing and Forwarding offices. There are various Institutions both Public and Private – within Town e.g. Newly established Medical Training College, at Alupe and Busia Level 5 Hospital, KEMRI, KEFRI, Rehabilitation and Orphan Homes, Youth polytechnic etc. There are small scale industrial activities such as bakeries, juakali, etc.

The Transport sector is relatively developed to and from other parts of the country. The Town serves countries such as Uganda, Burundi, Rwanda, Democratic Republic of Congo, Southern Sudan, etc. The bicycle taxi popularly known as boda boda transport in Kenya has its roots in Busia. There is an airstrip though it is underutilized and unmaintained.

Weakness: Busia lacks heavy industries because most of the investments passing through the town are on transit to other countries or other parts of Kenya. There should be a plan to attract these investments.

2.2.9 Structuring Elements

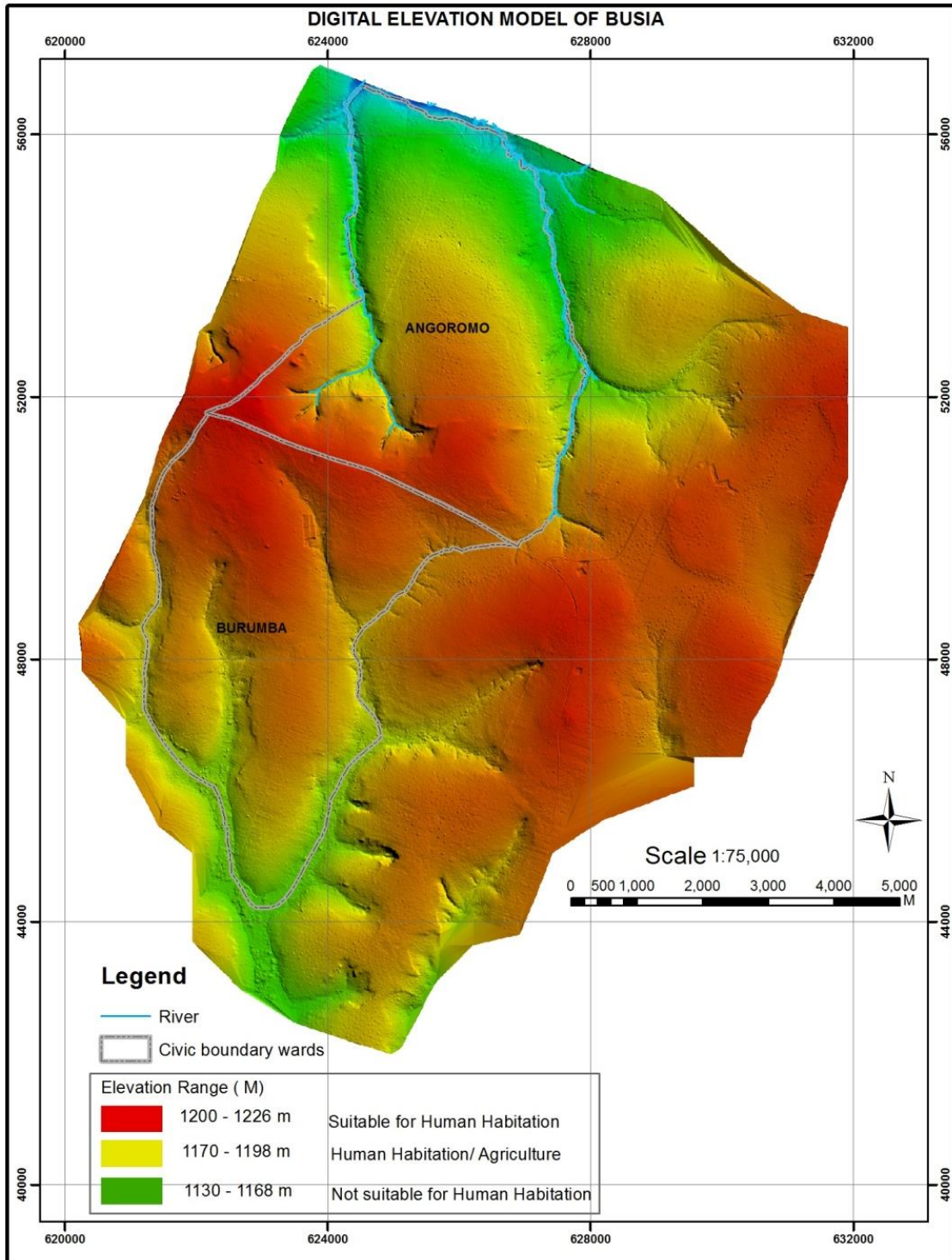
Busia Town is a linear town along the major transportation route, the Trans-African highway from Mombasa through Nairobi, Kisumu, Busia, Jinja to Kampala and beyond within the Great Lakes Region. The other road that determines the growth of the Town is Busia-Malaba (C-43). Major developments are along these roads.

River Valleys – the stream in Mayenje forms the boundary and Alupe River thus restricting development in these areas. The area along Alupe River is characterized by sparse rural settlements with large land parcels. The international boundary and the No man’s land give a break to urban structures and restrict any form of urban development.

Terrain Features

Busia town is located on an undulating plain intersected by V-shaped Alupe River in the North and a broad-U-shaped bottom lands in the South. The altitude for the town ranges from about 1130m to 1290m above Sea Level. The municipality is partially bounded by swamps from Alupe to road block to Burumba, Mayenje then along the Kenya-Uganda boarder to Marachi area. The Alupe River and the bottom lands/plains are important features that determine the drainage of the Town. The highest part of the town is between the border post and air strip area along Busia-Kisumu road. There is also a depression in Angorom around Ojamii area where spring water drains from towards the Kenya Uganda boarder.

A part from the swamps and the Ojamii depression, other areas are suitable for other forms of development since the land is stable and not disaster prone. However, the flatness of the land, reduction of vegetation cover and poor drainage has contributed to flooding in the town during the rainy periods. See Map 4.2.



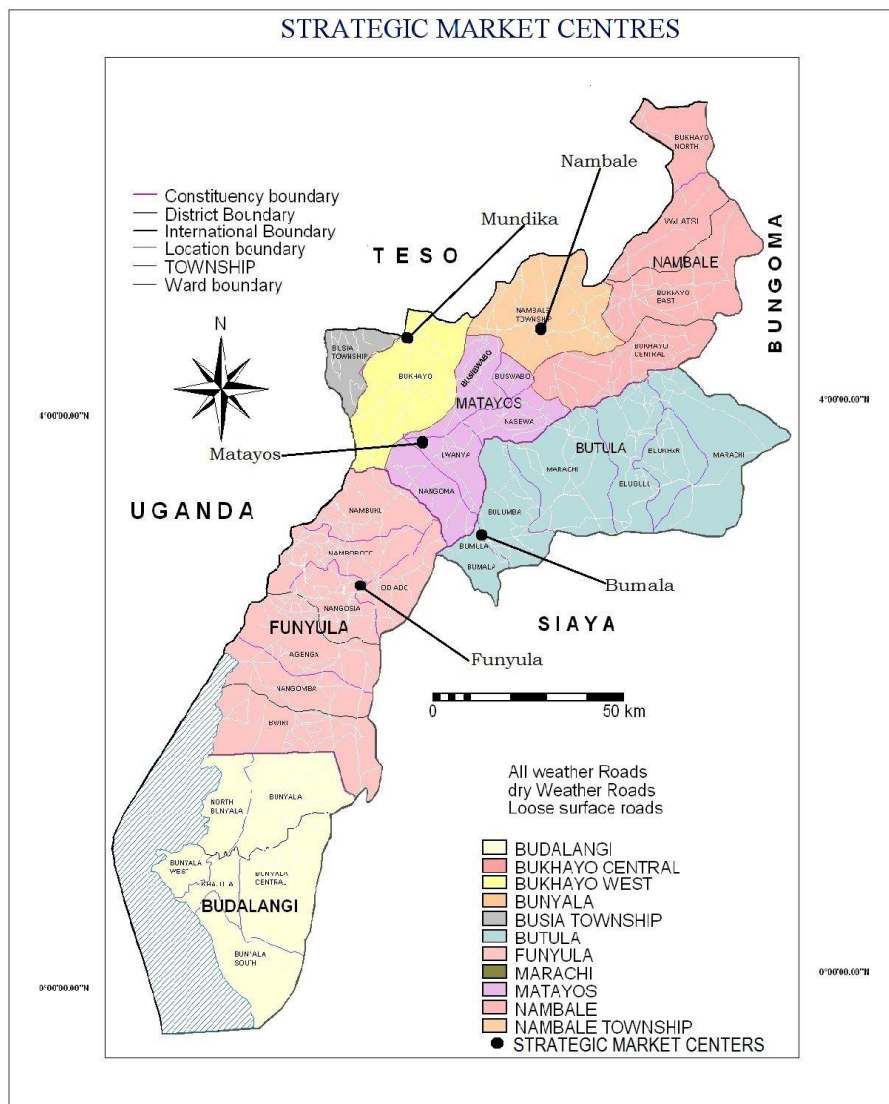
Map 2-1: Showing the Digital Elevation Model of Busia

Source: Syagga and Associates, 2012

Urban Development Trends

Towns and markets are main space gathering region of socio-economic elements which play a decisive role on the distribution of future population and the land use pattern of the urban development. Busia has several peri-urban and market centres in its umland. The main Peri-

Urban and market centres outside Busia town include Mundika, Matayos, Nambale, Funyula and Bumala (Map 4.3). These centres have a bearing on the growth of Busia town since they are located at a distance of not more than 30 km from the CBD and along the main transport corridors radiating from the CBD. Their growth are also linked to Busia since some act as dormitory towns while others as key markets to its products or goods. The other markets within the township area are in Alupe and Angorom. Alupe's growth as an educational centre will have a huge impact on Busia Municipality's development due to the continued location of major institutions like Moi University, KEMRI, KEFRI and KETRI. The development of these institutions will continue to attract other developments that will need proper development control.



Map 2-2: Regional Map Showing Strategic Market Centres.

Source: Busia Sub-County Development Office, 2011

Challenges

The key challenges here include:

- Ecological fragility
- land degradation,
- flood and erosion,
- loss of biodiversity,
- destruction of wetlands and increased runoff (see Map 4.2).

Opportunities

The town is endowed by few natural resources including streams, rivers and a long swamp surrounding the town. These resources serve as a good potential for the town as they can be exploited and used for commercial and/or domestic purposes. Some sections of the town also have black cotton soil which can be used in the construction industry. Rivers, streams drain into the big swamp and are potential for horticulture, fish farming and water harnessing. The soil is also fertile for agriculture especially sugarcane cultivation which is undertaken in large scale in the neighboring areas.

2.3 Part Two : Population Dynamics

Population dynamics is a major determining factor in the planning and development of any region. This is because its characteristics and structure greatly influences the direction and content of development as well as impacts on the provision of various infrastructural facilities. The population of Busia town, like the other upcoming urban areas in Kenya, has had an upward trend rising from 36,787 in 1989 to 44,879 in 1999 and 54,732 in 2006 as shown in Table 2.1. Currently, the population stands at 61,715. The increased population is due to the high growth rate, rural-urban migration and extension of the town's boundary. The human population is important while planning for facilities and services. The increased population exerts pressure on the existing social infrastructure such as telephone, electricity, water and sanitation among others.

Table 2-1: Busia Population by sub-location and sex (1999-2006)

Sub Location	1999		2003		2006	
	Male	Female	Male	Female	Male	Female

Alupe	2229	2423	2541	2762	2754	2993
Amerikwai	2772	2965	3160	3370	3425	3653
Agoloto	4575	4757	5215	5423	5653	5878
Central Mjini	8282	8897	8728	9048	9618	9971
Mayenje	3686	3993	4313	4672	4753	5148
Total	21844	23035	23957	25275	26203	27643

Source: Busia District Statistics Office, November 2011

Busia town is divided into five (5) sub-locations; these are Alupe, Amerikwai and Agolot Sub locations in Angorom location in Chakol Division Teso South District and form the Alupe, Amerikwai & Agolot Wards (Table 2.1). Secondly are the Central Mjini and Mayenje sub locations in Township Division of Busia District. Mjini, Bulanda, Mayenje Wards are in Township location. The population analysis has been done as per the sub locations that are within Busia town.

Table 2-2: Municipal Council of Busia Population by Sex (2009)

Sex	Core -Urban	Peri-Urban	Rural Areas	Total
Male	19, 789	5, 403	4, 735	29, 927
Female	20, 951	5, 838	4, 999	31, 788
Total	40, 740	11, 241	9, 734	61, 715

Source: 2009 Kenya Population and Housing Census, August 2010

The town has a higher urban population as compared to peri-urban and rural areas; however, rural areas have large coverage in terms of area and this explains why there is bias in service delivery towards the urban and core-urban. In addition, the population density has been rising since 1989 from 836 Km² to 1,391 Km² in 2009 thus exerting a lot of pressure on land and specifically in Township Division. Table 2.3 shows the increase in population, area and density from 1989 to 2009.

Table 2-3: Busia Population, Area and Density, 1989-2009

Year	Population	No. of Households	Area Km²	Density
1989	36,787	8,179	44	836
1999	44,879	10,555	44	1,020
2009	61,715	14,584	45	1,391

Source: Busia District Statistics Office, November 2011

Busia has a household size of 4.2 this is low as compared to the regional (Western Province) or national rates which stands at 4.7 and 4.4 respectively. The population is expected to increase due to influx of people in search of jobs and better social infrastructural facilities. Table 2.4 shows the number of people recorded entering and leaving Kenya from 10th to 16th November, 2011. This figure is exclusive of those who cross freely every day. This means that the daily population of the town may be higher than the night population thus increasing more pressure on the limited facilities offered within the Council.

Table 2-4: Migration to and from Busia

Time	Entry	Departures
10th Nov 2011	4,052	3,102
11th Nov 2011	3,411	4,642
12th Nov 2011	5,112	3,400
13th Nov 2011	3,149	4,290
14th Nov 2011	3,188	2,994
15th Nov 2011	2,882	3,244
16th Nov 2011	3,248	3,642
Total	25,042	25,314

Source: Busia Immigration Department, November 2011

The population of Busia town is computed using the 2.54% growth rate for Western region. The formula used to compute population projection is compound rate of growth method.

Busia town is expected to have a population of approximately 42,793 (41%) by the year 2030. This is an estimated increase of approximately 10,000 people per every 10 years. This population increase will be factored in the preparation of the strategic plan. Population projections show that by 2030, the under 5 years of age will account for 19% of the population (Table 2.5), while children under 10 years of age will account for 34% of the population. The youth population will increase annually to 45,531 (42.5%) and the old population (60-80+ years age) will have reached 5,199 (4.9%) by the year 2030.

Table 2-5: Busia Town Population Projection up to 2030

Year	2009	2012	2017	2022	2027	2030
Population	61,715	68,228	77,344	87,679	99,394	107,162

Source: Field Survey, 2011

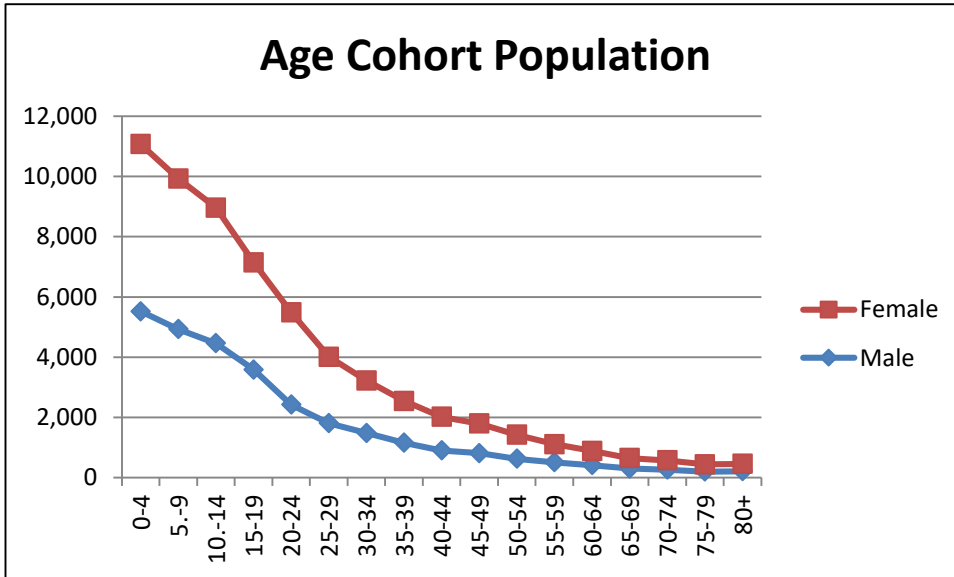


Figure 2-1: Population of Busia by Age Cohort

Source: Field Survey, 2011

Table 2-6: Population Projection (2009-2030)

Cohort Years	2009			2012			2017			2022			2027			2030		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	5,521	5,554	11,075	6,104	6,140	12,244	6,919	6,960	13,879	7,844	7,891	15,735	8,892	8,945	17,837	9,587	9,644	19,231
5-9	4,930	5,001	9,931	5,450	5,528	10,978	6,179	6,272	12,451	7,004	7,105	14,109	7,940	8,054	15,994	8,561	8,684	17,245
10-14	4,462	4,502	8,964	4,913	4,957	9,870	5,592	5,642	11,234	6,339	6,396	12,735	7,186	7,251	14,437	7,748	7,817	15,565
15-19	3,584	3,563	7,147	3,942	4,107	8,049	4,492	4,462	8,954	5,092	5,062	10,154	5,772	5,738	11,510	6,223	6,187	12,410
20-24	2,422	3,067	5,489	2,758	3,504	6,262	3,035	3,844	6,879	3,441	4,357	7,798	3,901	4,940	8,841	4,206	5,326	9,532
25-29	1,805	2,206	4,011	2,055	2,449	4,504	2,262	2,765	5,027	2,564	3,134	5,698	2,907	3,553	6,460	3,134	3,831	6,965
30-34	1,480	1,741	3,221	1,610	1,911	3,521	1,855	2,182	4,037	2,103	2,473	4,576	2,384	2,804	5,188	2,570	3,023	5,593
35-39	1,156	1,389	2,545	1,306	1,505	2,811	1,449	1,741	3,190	1,642	1,973	3,615	1,862	2,237	4,099	2,007	2,412	4,419
40-44	902	1,113	2,015	942	1,208	2,150	1,130	1,395	2,525	1,281	1,581	2,862	1,453	1,793	3,246	1,566	1,933	3,499
45-49	812	981	1,793	838	1,033	1,871	1,018	1,229	2,247	1,154	1,394	2,548	1,308	1,580	2,888	1,410	1,703	3,113
50-54	625	798	1,423	622	822	1,444	783	1,000	1,783	888	1,134	2,022	1,007	1,285	2,292	1,085	1,386	2,471
55-59	508	598	1,106	577	661	1,238	637	749	1,386	722	850	1,572	818	963	1,781	882	1,038	1,920
60-64	412	471	883	456	524	980	516	590	1,106	585	669	1,254	664	759	1,423	715	818	1,533
65-69	302	346	648	339	360	699	378	434	812	429	492	921	486	557	1,043	524	601	1,125
70-74	265	306	571	301	344	645	332	383	715	376	435	811	427	493	920	460	531	991
75-79	201	236	437	222	253	475	252	296	548	286	335	621	324	380	704	349	410	759
80+	211	245	456	224	263	487	264	307	571	300	348	648	338	393	731	366	425	791
Total	29,598	32,117	61,715	32,659	35,569	68,228	37,093	40,251	77,344	42,050	45,629	87,679	47,669	51,725	99,394	51,393	55,769	107,162

Source: Field Survey, 2011

According to the 2009 Population and Housing Census there were 18,896 pre and post-primary school going age children and 7,147 children of secondary school going age. By the year 2030, this population is projected to double (Table 2.7) to 32,809 children for the pre/post primary and 12,410 for secondary education.

Table 2-7: Projection for School Going Age Cohort

Years	5-14 Years (Basic/Primary Education)			14-19 Years (Secondary Education)		
	Male	Female	Total	Male	Female	Total
2009	9,393	9,503	18,896	3,584	3,563	7,147
2012	10,363	10,485	20,848	3,942	4,107	8,049
2017	11,771	11,914	23,685	4,492	4,462	8,954
2022	13,343	13,501	26,844	5,092	5,062	10,154
2027	15,126	15,305	30,431	5,772	5,738	11,510
2030	16,308	16,501	32,809	6,223	6,187	12,410

Source: Field Survey, 2011

The active age (labor force) is approximately 34.9% in 2012 (Table 2.8) and is projected to increase to 37,512 in 2030 from 23,801 in 2012 an increase of 13,711 people. This is a grave situation compared to jobs available in the town and number of employment opportunities created by the economic sector.

Table 2-8: Active Age

Years	20-59 Years		
	Male	Female	Total
2009	9,710	11,893	21,603
2012	10,708	13,093	23,801
2017	12,169	14,905	27,074
2022	13,795	16,896	30,691
2027	15,640	19,155	34,795
2030	16,860	20,652	37,512

Source: Field Survey, 2011

2.4 Labour and Employment

2.4.1 Industries/Employment Ratio

The field survey found that trading/business contributes 37.2% of job opportunities available in the town and this is due to the rampant cross-border trading that has been made possible by the free movement of people allowed by the East African Community. Other job opportunities includes service industry/hotel/food industry (17.6%) and this is also due to the high demand

for these services by the high number of trailer and track drivers, tourist travelling to other East and Central African countries; Bodaboda (14.9%); Jua Kali (11.7%) among others as shown in the table below. The field survey also found that 12.4% of the respondents are unemployed.

Table 2-9: Percentage of main sources of employment in Busia

		Responses	
		N	Percentage
	Trading/business	302	37.2%
	Service industry/Hotel/Food Industry	143	17.6%
	Jua kali	95	11.7%
	Boda boda	121	14.9%
	Employment(NGO,GOV)	67	8.3%
	Farming	65	8.0%
	Building and construction	18	2.2%
Total		811	100.0%

Source: Field Survey, 2011

2.5 Household Income and expenditure

The study revealed that 30.7% have an income range of between Kshs. 10,000-20,000, while 24.4% earns between Kshs. 1,000-5,000, 5,001-10,000 (27.6%) and 17.3 earns above Kshs. 20,000 in a month. This puts the average monthly income at Kshs. 13,656.60 (Table 2.10). This is in contrast to Busia District's average income which stands at Ksh.1,200 per month (Busia District Development Plan (2008-2012)).

Table 2-10: Household Income

Amount (Ksh)	Percentage
1,000	1.2
1,001-3,000	10.7
3,001-5,000	12.5
5,001-10,000	27.6
10,001-20,000	30.7
20,000 and above	17.3
Total	100.0

Source: Fieldwork, November 2011

According to study, 2.2% spend about Kshs. 1,000 in a month; more than Kshs. 1,000-3,000 (15.2); more than Kshs. 3,000-5,000 (13.4%); majority spend between Kshs. 5,001-10,000

(39.2%) followed by Kshs. 10,001-20,000 (24.7%) as show in the Table 2.11. The average expenditure for the town is Kshs. 9,828.

Table 2-11: Household Expenditure

Amount (Ksh)	Percentage
1,000	2.2
1,001-3,000	15.2
3,001-5,000	13.4
5,001-10,000	39.2
10,001-20,000	24.7
20,000 and above	5.3
Total	100.0

Source: Fieldwork, November 2011

2.6 Poverty Indicators

Absolute Poverty for Busia District is 65.99% and contributes 2.43% to the National poverty (Republic of Kenya, 2008). Lack of basic education is one of the contributing factors of poverty in the region.

2.7 Part Three : Policy, Legal and Institutional Framework

The Constitution of Kenya, 2010

Article 176 and 184 of the Constitution of Kenya 2010 makes provision for devolved governance and management of urban areas and cities. Article 184 of the constitution states thus;

- (1) National legislation shall provide for the governance and management of urban areas and cities and shall, in particular –
 - a) Establish criteria for classifying areas as urban areas and cities
 - b) Establish the principles of governance and management of urban areas and cities
 - c) Provide for participation by residents in the governance of urban areas and cities

This set the course for the preparation and enactment of the Urban Areas and Cities Act, 2012.

2.7.1 Vision 2030

The spatial and land use planning process in the country is guided by various pieces of legislation. It should on the onset be pointed out that the physical planning process was undertaken within the broad development agenda as is envisaged in the country's development blueprint, Vision 2030. The main aim of Vision 2030 is to transform Kenya into "a newly industrialising, middle income country providing a high quality of life to all its citizens in a clean and secure environment". On urbanization, this document observes that Kenya will be a predominantly urban country by the year 2030, with about 60% of the population residing in urban areas. It proposes the initiation of a nationwide urban planning and development strategies, starting with the country's major cities and towns. The vision notes that Kenya's urban areas have for a long time suffered from poor planning, resulting in chaotic urban environment. It emphasizes the need and rationale for planning for urban development to correct this depressing situation. It is observed that if the process of urbanization is not properly managed, it could bring about serious social and economic problems such as congestion, environmental degradation poor infrastructure services and the proliferation of informal settlements with extremely poor living standards.

2.7.2 The Draft National Urban Development Policy

According to the draft National Urban Development Policy, the country has not adequately addressed the current urban development realities. As a result, urban areas face numerous challenges which are a threat to sustainable urbanization and urban planning: unbalanced urbanization and haphazard designation of urban centres, uneven and skewed distribution of infrastructure, urban sprawl and decay, high costs of provision of infrastructure and services, degradation of the environment and heritage sites, non-compliance with approved plans and mushrooming of informal settlements, and insecurity" (GoK, 2011 C: 4).

Thus there is a need to recognise urban planning as an integrated process that seeks to address the numerous challenges facing our urban areas.

2.7.3 The National land Policy, Sessional paper No.3 of 2009

In Sessional paper no. 3 of 2009 on land policy, land use planning is considered essential to efficient and sustainable utilization and management of land and land based resources. It is observed that proper planning will facilitate coordinated development of urban and peri-urban areas in terms of housing, commercial, industrial and infrastructure development.

2.7.4 Physical Planning Act, Cap 286

A key legislation that governs physical and spatial planning is the Physical Planning Act, Cap 286 of the laws of Kenya. This Act outlines the main types of physical development plans and provides a legal basis for their preparation and enforcement. It establishes the office of the Director of Physical planning and vests the responsibilities of the preparation of all physical developments plans in the Directors office. Further it empowers local authorities to control plan implementation.

2.7.5 Urban Areas and Cities Act, 2011

In the Urban Areas and Cities Act, 2011 the need for the preparation of integrated development plans to guide the urbanization process is outlined. It is pointed out that an integrated urban or city development would guide and inform all planning in the country. Such a plan would be the basis for;

- The preparation of environmental management plans
- The preparation of valuation rolls for property taxation
- Provision of physical and social infrastructure and transportation
- Preparation of annual strategic plans
- Disaster preparedness and response
- Overall delivery of services including provision of water, electricity, health, telecommunications and solid waste management.

The County Government of Busia is charged with the general management of the town ranging from various activities such as control of development, collection of revenue, and delivery of services to the residents, such as water. The Physical Planning Act Cap 286 recognizes the local authorities as the sole development control bodies within their jurisdictions. Other Acts and policies that guide development include;

- County Governments Act, 2012
- Survey Act Cap 299
- The Water Act, 2002
- The Land Act, 2012
- Land Registered, 2012
- Public Health Act Cap 242
- Environment Management and Coordination Act 1999

- Integrated National Transport Policy

The above laws and others as provided in various Acts directs planning and implementation of development projects and are therefore a set of tools available to the County Government of Busia in guiding any development activity within the town and its surroundings. It is therefore the responsibility of the county governments to ensure orderly and coordinated development of the town based on the provisions of the Acts and policy documents.

In essence the policies and legal framework for land planning exists in but most cases are not fully implemented. Even though there exists administrative set up to effect legal procedures regarding orderly land use development, there is an absence of proper coordination. It was also discovered that there is inefficiency management of land information records.

2.8 Stakeholders Concern

The stakeholders of urban planning and land interventions in Busia town consist of all individuals, groups and institutions that can affect or be affected by urban planning, urban development and land management. The stakeholders include potential beneficiaries as well as those who could be adversely affected such as the County Government, the residents and other relevant institutions. These stakeholders should have greater influence over the situation, with keen interest in managing urban planning processes. The important point is for all stakeholders to make their voice heard and influence decisions.

3 CHAPTERTHREE: SITUATIONAL ANALYSIS

3.1 Introduction

The planning team analyzed the existing situation to get a starting point which led to a detailed analysis. It involved the analysis of existing literature on Busia town, observations, interviews and workshops with the stakeholders identified. The content includes stakeholders, community vision, demographics, housing, land management, urban infrastructure, urban environment, institutional settings, and management capacity.

Brief spatial analysis of the existing situation of the town was also made to appreciate the structural elements that control the growth pattern of the town including the road networks, drainage systems, markets, topographic features or historic patterns. It also helped to identify environmentally fragile parts of the town and where the slum settlements are located.

The rapid development of Busia town like any other town in Kenya has brought with it many development and planning challenges that required immediate redress. The main problems include uncoordinated development, inadequate and unsafe water supply, unplanned human settlements and encroachment into road reserves among others.

In view of the above, Busia integrated urban development plan has been prepared to guide the County Government of Busia in controlling development in order to create a friendly environment for human habitation and business investments.

3.2 Land Analysis

3.2.1 Land Tenure Structure

Land ownership within the town comes under two types of tenure system, that is, leasehold and freehold with the later being predominant with approximately 95% while the former accounting for only 5%. The land subdivision within the freehold areas has not been properly controlled. The ongoing trend of uncontrolled land subdivision has made it difficult for the town to efficiently provide basic services. This is further exacerbated by the ever increasing

land value especially along the highway. Land owners in the town, because of the assumed autonomy due to absolute ownership, seem to direct and decide on the development trends and projects within town. The resultant outcome is uncoordinated development, encroachment into road reserves and deterioration in service provision. Public land offers the best alternative for the town's development. Acquisition of the existing stock of land that is privately owned will provide the much needed options for increasing the land available for development purposes.

Field survey found out that 64% of the respondents own land in the town either through purchase, lease or inheritance. The most prominent land tenure system in the town is freehold at 97% followed by leasehold at 2% and 1% for the trust land as shown by the Figure 2.2.

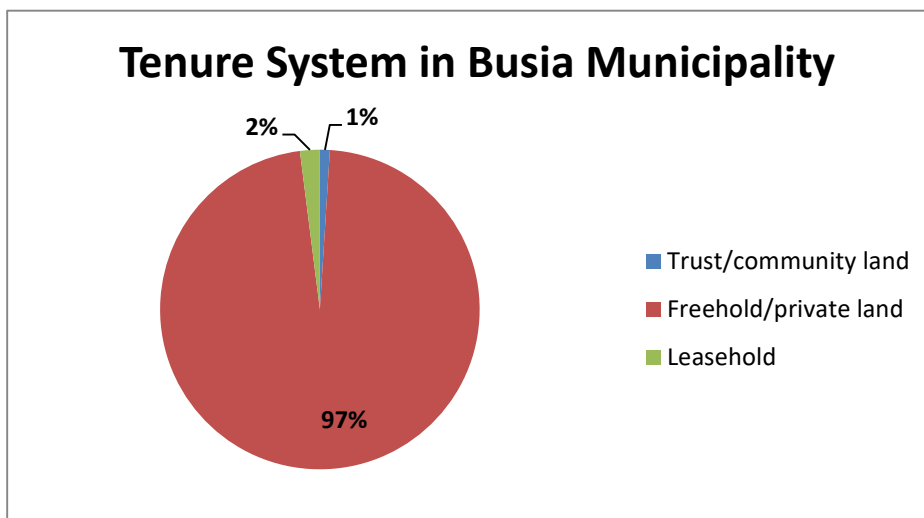


Figure 3-1: Tenure Systems in Busia Town

Source: Field Survey, October 2011

The study also found out that majority of the respondents own land sizes ranging from less than 0.125 acres to 3 acres and only 8% own land more than 3 acres. It was revealed that 94% of these lands are developed while 4% is lying fallow (not developed). Majority of these developments are permanent because of the predominant freehold tenure system. Temporary and semi-permanent developments account for 30% especially in the slum areas and those who have maintained traditional residential houses which are built with mud smeared walls and floors and grass-thatched roofs.

With a bigger rural area and under freehold, development approval by the county government is still low. This is the major cause for the spread of informal settlements in the town. The council is also not able to sufficiently levy property tax in these areas.

Land Tenure

There exist three types of land tenure systems in Busia Town namely;

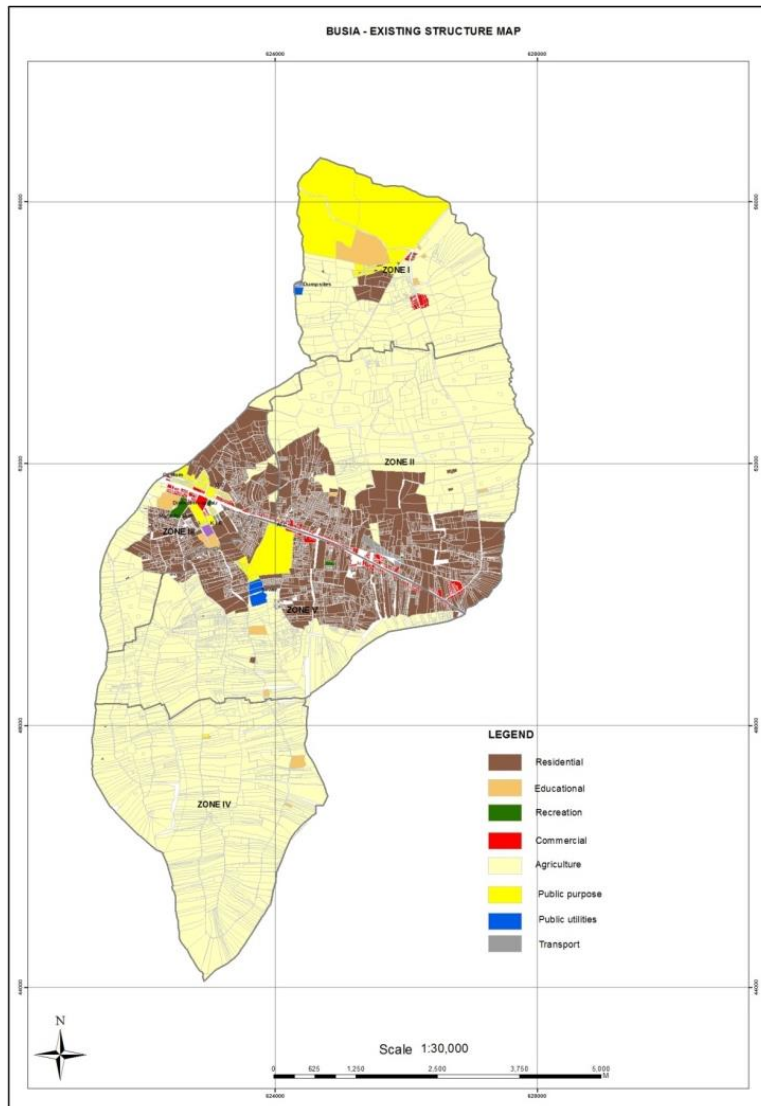
- Government Land: It accounts for five percent of the total area. There is no vacant Government land for alienation.
- Freehold land: It is the dominant tenure system in the town and accounts for 95% of the total area.

Weakness: It is only freehold land that is readily available for urban development. The Government and Trust Land are fully committed for alienation.

3.2.2 Land Use Classification and Allocation

Land uses in Busia town can be classified as Residential, Commercial, Public Purpose, Public Utility, Educational, Recreational, Industrial, Transportation and Agricultural. The existing Land Use Allocation Percentages in Busia showed a wide variation compared to the National average (Table 4.1). The variation indicates that there is need to plan for various land uses considering the rate of population increase in the town. The results in the table further shows that Agricultural and residential land uses cater for the greater percentages of 44.9% and 33.3% respectively.

Map 3-1: Busia Existing Land Use Map



Source: Syagga and Associates, 2012

Table 3-1: Land Use Classification and Allocation in Busia

Classification	Area (Km ²)	% of total area	%National Average*	Variation
Residential	15	33.3	54.64	21.34
Industrial	0.1	0.22	8.7	8.48
Educational	2.0	4.4	9.4	5.0
Recreational	1.0	2.2	5.1	2.9
Public Purpose	2.2	4.9	12.2	7.3
Commercial	1.5	3.3	6.8	3.5
Public Utilities	1.0	2.2	3.8	1.6
Transportation	2.0	4.4	-	-
Agricultural	20.2	44.9	-	-

Source: National average generated from the *Physical Planning Handbook 2002*

The distribution of residential and commercial land uses in Busia have adopted the ribbon development pattern along the main B2 or Kisumu Busia highway and major roads within the municipality like Busia-Alupe-Malaba, Public works-Ojamii-Alupe road, Stadium-Marachi-Mayenje road and Stadium-Red Cross-Mayenje road.

However, there is no formal zoning of residential land uses into low, medium or high density or planned mixed development. The only neighbourhoods exhibiting some form of order of low density and high density developments are Milimani next to the District headquarters offices and Burumba Estate respectively. Weak development control has also contributed to emergence of informal settlements as Samaki, Marachi, Maduwa, Mauko and International. Commercial land use is concentrated within the CBD and such markets as Stalls, Open Air market, Angorom market, Kasarani market, Soko maunga and Soko mjinga. There are also other unplanned small commercial centres that are emerging within the estates as corner shops. Currently, the council does not have adequate land set aside for commercial zones outside the CBD that might attract investors or help to decongest the CBD.

Public purpose land use is concentrated around the CBD and Alupe compared as to other parts of the town. It includes the District headquarters with the line ministries' offices and the Municipal hall. However, the existing public purpose land is inadequate considering the fact that the town has been elevated to the status of a county headquarters. There will be a need to identify suitable land for future public purpose use. Busia town has no well developed industrial sector hence no major spaces are earmarked for industrial land use a part from the Jua Kali sites. Lack of suitably zoned industrial areas has led to the sprouting of unplanned industrial land uses in the commercial zones and residential areas. There is need to identify suitable sites for industrial use.

Educational land uses in the town is fairly low since inadequate spaces were not reserved for schools and institutions. The most affected are the public primary and secondary schools which are few in number and are over populated. Most of the colleges are also concentrated within the CBD area a part from few like Moi University Campus in Alupe. Considering the fact that Busia town will continue to grow and attract more population, there is need to plan for adequate educational facilities. Recreational land uses in a town are important for income

generation, social interaction, tourist attraction, as breathers, preservation of socio-cultural values and environmental conservation among others.

Busia town has only two designated parks located within the developed zone. These include the arboretum near the forest offices and The Busia Green Garden is next to County Government Offices. The town also has a social hall and stadium that are considered inadequate and in poor condition. The provision of open spaces is a challenge due to lack of proper road designs and poor development control. Currently, there is only one social hall in the town against a population of over 45,000 implying a deficit of 2 more social halls. The over development of plots in Busia to more than 70% coverage denies the children spaces for play areas. The existing green area in the town falls below the required standard of 1-2 hectares per 10,000 populations. These shows that the town is in dire need of recreational facilities.

The existing public utility land uses in Busia town include the cemetery, solid waste dumping site, water and sewerage treatment works. The dumpsite is located in the Alupe area is currently adequate to reserve the town but needs proper management. The town also does not have adequate landfill collection points hence the deposit of wastes at non-designated places. The town also lack Fire station and fire engines and experiences encroachment into the international border buffer zone. Agricultural land use is spread all over the town but more pronounced in Amerikwai, Angorom, Alupe and Mayenje and beyond 500m-1km from the major roads as the Kisumu-Busia highway and Busia-Alupe-Malaba road. However, the rising land subdivision for residential purposes in reducing the percentage of agricultural land use in the town.

Land Use Status in the Town

The major land uses within the town include residential, commercial, institutional, recreational, industrial, public purpose, transportation, agricultural and public utilities. The residential land user takes the largest share (57.3%) of land within the town with no proper distinction of classes due to lack of zoning. It takes the form of unplanned mixed development. Commercial land use activities account for 8.1%. However, well established modern commercial enterprises are mainly found along the highway thus forming a linear pattern due to enhanced accessibility and include hotels/restaurants, and retail outlets among

others. However, pockets of commercial nodes are emerging within some of the estates but in unplanned manner. There are no large scale industrial establishments within the planning area. However, Busia has potential for agricultural processing plant mainly for maize and other grains. Small scale industries especially the Jua Kali industries are however flourishing in the town with some having no specific sites demarcated for their operations while the existing site for Jua Kali industry is insufficient. As shown in Figure 2.3, agriculture accounts for 33.7% of land use in the town. Agriculture is practiced mostly in the peri-urban and rural areas of the town which account for approximately 70% of the area.

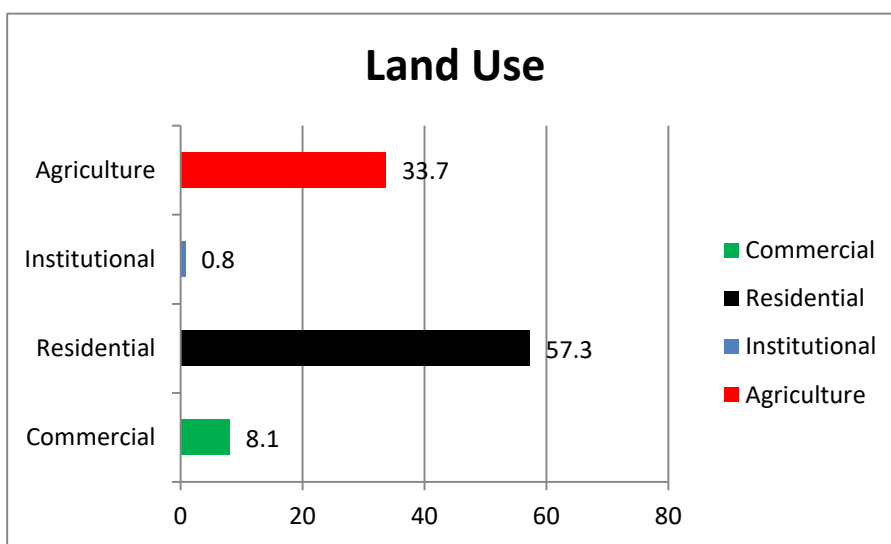


Figure 3-2: Land use in Busia Town
Source: Field Survey, October 2011

The town hosts all the administrative offices including both the local and central government offices since it is the district headquarters. The administrative offices available in the town include the, the Municipal Hall, District Commissioner office, immigration offices, Busia police station, Customs, Kenya Bureau of Standards (KEBS); the Kenya Plant Health inspectorate services (KEPHIS), KEMRI, KARI and all government ministries. These offer various services to the inhabitants of the town and its neighborhoods thereby increasing the functionality of the town as an administrative and service centre.

It is imperative to note that the town is devoid of major recreational facilities that are vital for social, physical and mental relaxation among the residents. The town has a stadium in poor condition, a small park, arboretum and other illegal open grounds in residential areas that have been used for recreational purposes but are inadequate and inconvenient for most of the town

residents. Open grounds within the existing institutions such as schools and religious compounds are also used to supplement the few available facilities. Agricultural land use is more pronounced beyond the built up areas of the town's and with kitchen gardening the residential areas. Limited space is available for public utilities due to violation of planning standards and lack of land banking by the County Government thus leading to the consumption of space that would have otherwise been used in the location of such facilities. For example, there is prevalence of blockage and encroachment into the road reserves in the town.

3.2.3 Existing Spatial Structure

The town has a general centralized distribution of services and resources. In Busia, development is haphazard and uncontrolled along the Kisumu-Busia road hence giving the town a linear structure. This linear type of structure is also developing along the Busia-Alupe-Malaba road encouraged by educational activities being promoted at Alupe. Along these two main highways, we have flourishing commercial activities with residential developments immediately behind. However, just a few metres away from the main road permanent residential developments is replaced by traditional Luhya and Teso homesteads supplemented by subsistence agricultural activities.

There is a high concentration of developments along the Kisumu-Busia road especially as one approaches the border-point. Development is densely populated on both sides of the road and even several metres into the interior.

3.3 Transportation

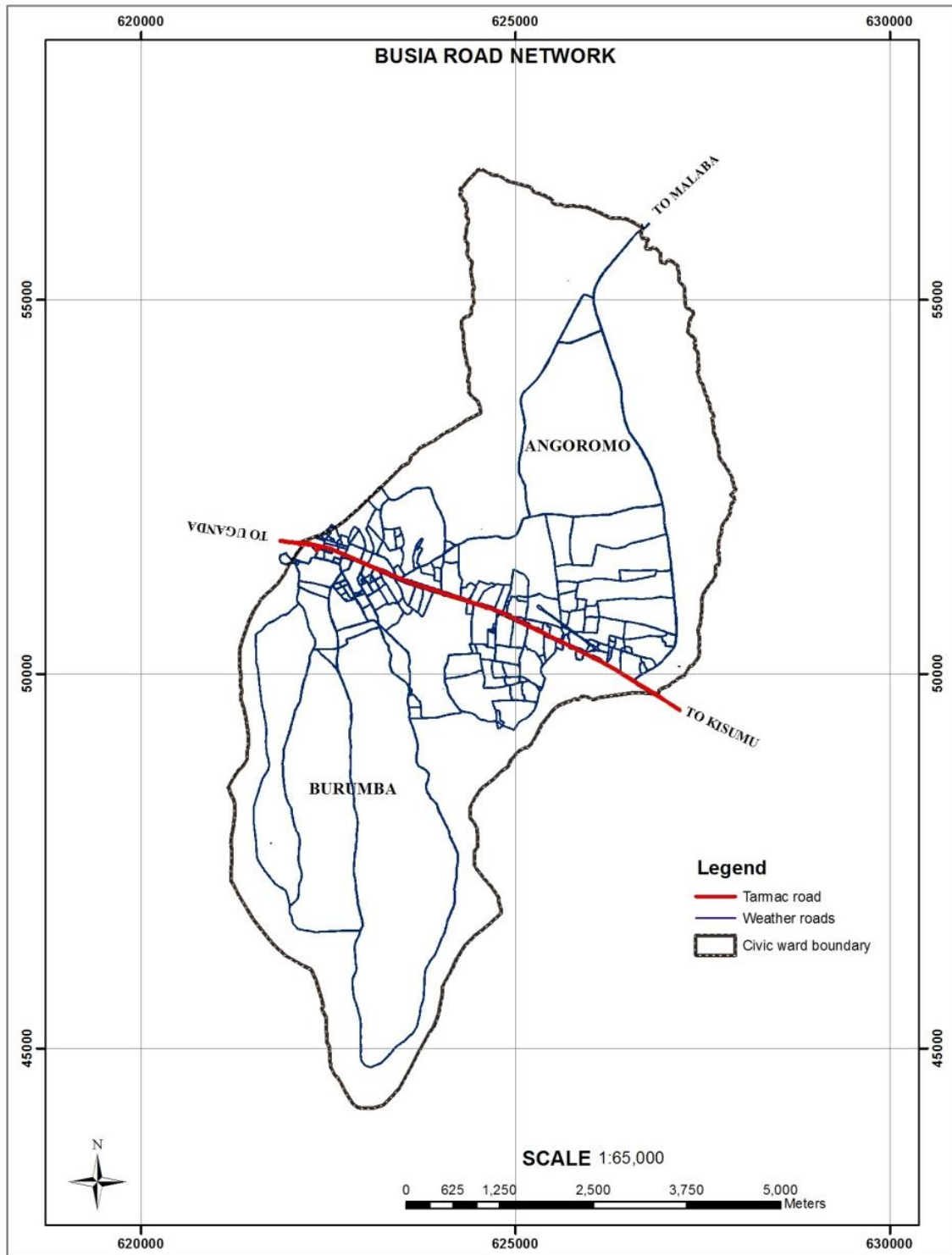
3.3.1 Introduction

This section analyses the existing transport situation in urban areas in Kenya and in Busia town. It highlights various pertinent challenges that should be addressed to improve the quality and extent of the transport system in Busia town. The proposed recommendations focus on the broad objective of improving access and mobility in addition to integrating other elements of a good transport system such as, comfort, reduced travel time, convenience, efficiency and low transport costs.

3.3.2 Overall Situation of Urban Transport in Kenya

Major urban areas in Kenya like Nairobi, Mombasa, Kisumu, Nakuru, and Eldoret have several factors in common that contribute to the severity of their transport problems. Overall population growth and increasing urbanization have led to the especially rapid growth of towns in Kenya, which have contributed to the sudden surge in urban travel demand. The supply of transport infrastructure and services, by comparison, has lagged behind the travel demand.

Public sector finances, in general, are limited that funding for transport improvements is often not a top priority within urban areas compared to water supply, provision of health services and payment of staff salaries. Funding for transport infrastructure improvements is therefore often inadequate compared to the demand. This has resulted into a situation where most transport facilities are in use far beyond their design capacity and life. Moreover, the concentration of wealth and decision-making among economic and political elite has distorted transport policies in Kenya, in the same way as other developing countries. While the poor suffer the most from severe and worsening transport problems in cities, government policies generally focus on serving the needs of an elite minority, often below 10% of the travel demand. For example, a disproportionate share of Government funds is spent facilitating the ownership and use of private cars through road infrastructure investments, while the transport needs of mostly low-income pedestrians and cyclists are ignored. Similarly, public transport infrastructure does not get the funding it needs because its role in the transport supply market is not appreciated, while provision of transport services is left to the private sector with ineffective regulation.



Rapid growth, low incomes, and extreme inequality are among the main underlying causes of transport problems in developing countries. Although the nature and extent of transport problems obviously vary from one city/town to another, virtually all major urban areas in Kenya suffer from the following challenges:

- Unplanned and disorganized land development at the sub-urban fringe without adequate infrastructure, transport, and other public services.
- Limited network of roads, often narrow, unpaved and poorly maintained.
- Congested roads with an incompatible mix of both motorized and non-motorized vehicles travelling at widely different speeds as facilities for pedestrians and cyclists are virtually non-existent or in poor state of repair.
- Rapidly increasing ownership and use of private cars and public service motorcycles.
- Inadequate dedicated infrastructure provisions for public transport vehicles and non-motorized transport.
- Outdated traffic control and management, often without even the most basic facilities like street signage.
- High and rapidly rising traffic accidents, especially among pedestrians, pedal cyclists, and motorcyclists.
- Over-crowded, uncomfortable, inefficient, and unsafe public transport, mainly supplied by the private sector. Services are often provided using low-occupancy vehicles which transport on average between 4 – 30 passengers, contributing to inefficiencies in road use.
- Poor institutional coordination and inadequate regulations governing urban transport.
- High levels of transport-related pollution, noise and other environmental impacts, especially in the medium and large cities.
- Poor/Lack of effective enforcement of the traffic laws and regulations contributing to high accident rates and congestion.
- The skill levels of planning and regulatory personnel are inadequate or non-existent in many towns.

As documented in this report, Busia town experiences most of these challenges like many other towns in Kenya. Compounded by the position of Busia as a border town, the challenges of transport become all the more apparent.

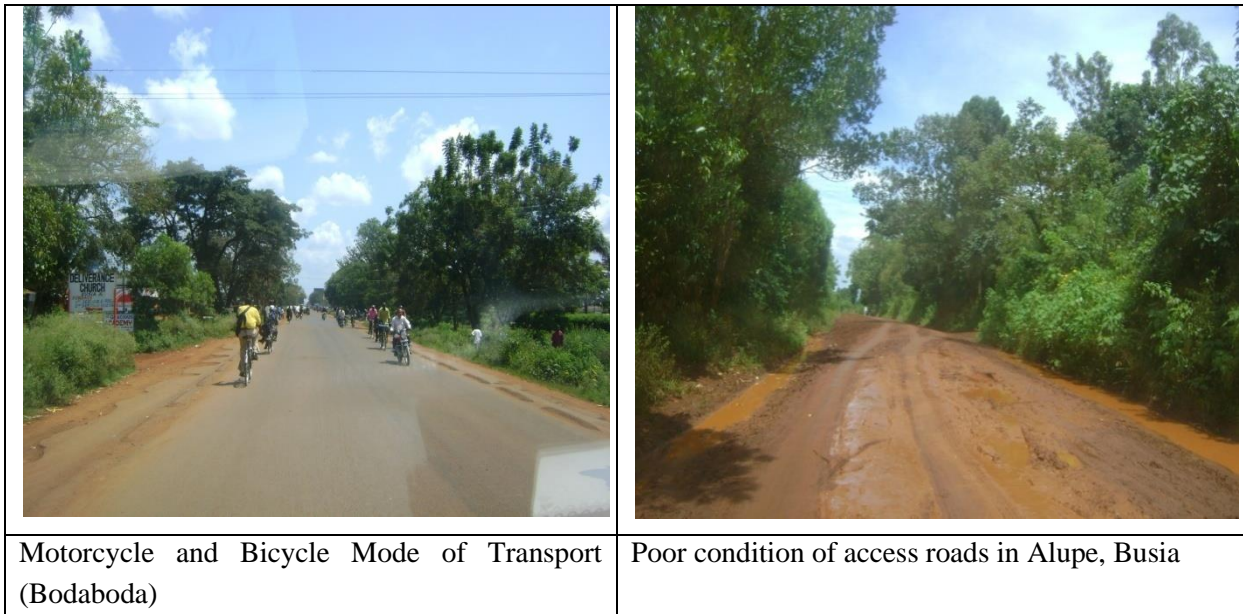
3.3.3 Current Transport Situation in Busia

Travel demand

Much of local traffic originates from and ends in the various residential clusters within the town and in the immediate hinterland. Much of the local traffic consist of matatus, motor-cycles, bicycles (*boda boda*) transporting passengers from the outlying residential estates to Busia Town, Kenya and Busia Town Uganda. The rapid population growth in Busia town has generated a correspondingly rapid growth in travel demand, overwhelming the limited transport infrastructure, which unfortunately has not been focused on more facilities to accommodate both bicycle and motor-cycles *boda boda*. Traffic is mainly generated at/attracted to the following areas:

- i. Marachi, Bulanda, Mabale residential areas, generally from the south;
- ii. Burumba and Posta Market from the south east,
- iii. Fort-Jesus, Mtongwe, Ojamii, Omeri, Airstrip, Highrock, Amoni, Amerikwai, among others from the north and the northeast.
- iv. Kenya/Uganda Border post at the end of Kisumu – Busia highway.
- v. Institutional traffic demands from Busia District Hospital and Farm-view Hotel; the Busia Municipal Stadium, various government ministries like the Ministry of Industrialization (the Kenya Industrial Estates - KIE), Government Housing, various schools like St. Teresa’s Girls’ Primary School and the Girls Secondary Schools, the Slaughter-house, among others. All these institutions are along the Kenyatta road.
- vi. In addition to the institutions there are various commercial/ shopping centres like Mauko, Bulanda and Marachi, among others, which also contribute to traffic demand, generating and receiving substantial pedestrian, cyclist and motor-cyclist traffic.

Plate 3-1: Road Conditions



Source: Field Survey, October 2011

Some regional origins and destinations include:

- i. Buses, matatus and lorries from Kisumu, Luanda, Maseno, Ugunja, Matayos, and Bumala, among others along the Kisumu-Busia Road
- ii. Buses, matatus and lorries from Bondo, Siaya, Budalangi and Bumala along the Bondo Bumala Road,
- iii. Buses, lorries and matatus from Malaba along the Malaba-Busia Road, through Alupe,
- iv. Buses, lorries and matatus from Bungoma, Mumias and Nambale, along the Busia-Mumias Road.

There is also other traffic to and from main national and international destinations. These include lorries, oil tankers and buses to and from the following destinations:

- i. Buses: Mombasa, Nairobi, Kisumu, Kampala and Kigali;
- ii. Transit trucks (mainly oil tankers): Mombasa, Nairobi, Kisumu, Kampala, Kigali and Eastern Democratic Republic of Congo (DRC),

Public Transport Infrastructure and Services

Currently, there is no dedicated public transport infrastructure in Busia and the services are provided on the same roads used by the general traffic. There is one terminal for public transport near the border post. Its condition and management is poor as it is not well designed. Informal bus stops and stages are located mainly at the intersections of the B1 road and the many access points. These include: Magharibi Petrol Station, Legio Junction, Unilever Junction, Equity Stage that leads to Busia Posta Market, Old Weighbridge junction, Korinda Junction (just off the Weighbridge at the entrance of the Busia-Mumias Road), Roadblock Junction, Airstrip Junction, and Mtongwe Junction.

Busia town being a small town, most travel is made by walking, cycling and motor cycles. Commercial cycling originated in Busia in the mid eighties then spread to other towns in western Kenya. They are popularly known as boda boda. The term boda boda is a corruption of the term of border - border and was a term used by bicycle transport operators to solicit for passengers wanting to cross the Kenya-Uganda border. Today it has become a recognised urban transport means, which is a source of livelihoods to many local communities living in urban areas. Today, boda boda is not simply about bicycles, but also includes tri-cycles and motor-cycles.

The sharp increase in the number of motor-cycle *bodaboda*, and its use in public transport in particular, have resulted in increasing levels of congestion, traffic accidents, and air and noise pollution in Busia town.

The boda boda transport also pose some opportunities, which include: (i) being a source of income to the operators; (ii) being convenient, and flexible means of transport offering door-to-door service; and (iii) providing competition with the few matatus operating town services.

Road Networks and Travel Patterns

The layout of Busia's main road system is fairly well planned, but still not developed in a systematic manner. The development of the road system is lagging behind population growth and road travel demand. The orientation remains largely linear, with the international Kisumu-Busia (B1) road being the backbone of the network. The B1 Kisumu-Busia road serves conflicting functions of a primary distributor, a secondary distributor and in some cases

an access road, all at the same time. The dual function of B1 as a road for both local and through traffic has presented the town with challenges of congestion and traffic accidents/conflicts.

Other important roads in Busia town are all earth and gravel roads. They include:

- i. The Busia – Malaba (C43) Road, which is to gravel standards and serves many residential and institutional areas in the northern parts of the town like the Alupe Hospital.
- ii. The Busia District Hospital road (partly to bitumen standards) that is in the southern part of B1 road.
- iii. Several access roads/tracks around the central parts of the town all join the B1 road at several points.

The condition of the road network is a major challenge in the town. The main characteristics of the road transport network is summarised below:

- i. The roads are narrow some only 4 metres wide
- ii. Lack of adequate parking for lorries, buses and motorcycles;
- iii. Roadside traders and hawkers occupy parts of the roads, including on Kisumu-Busia road, causing congestion;
- iv. Absence of pedestrian walkways/ cycle tracks, hence conflict of use with the vehicular traffic.
- v. Inadequate intersection designs, especially at the many T-junctions of smaller access roads that join the Kisumu-Busia road at right—angles.

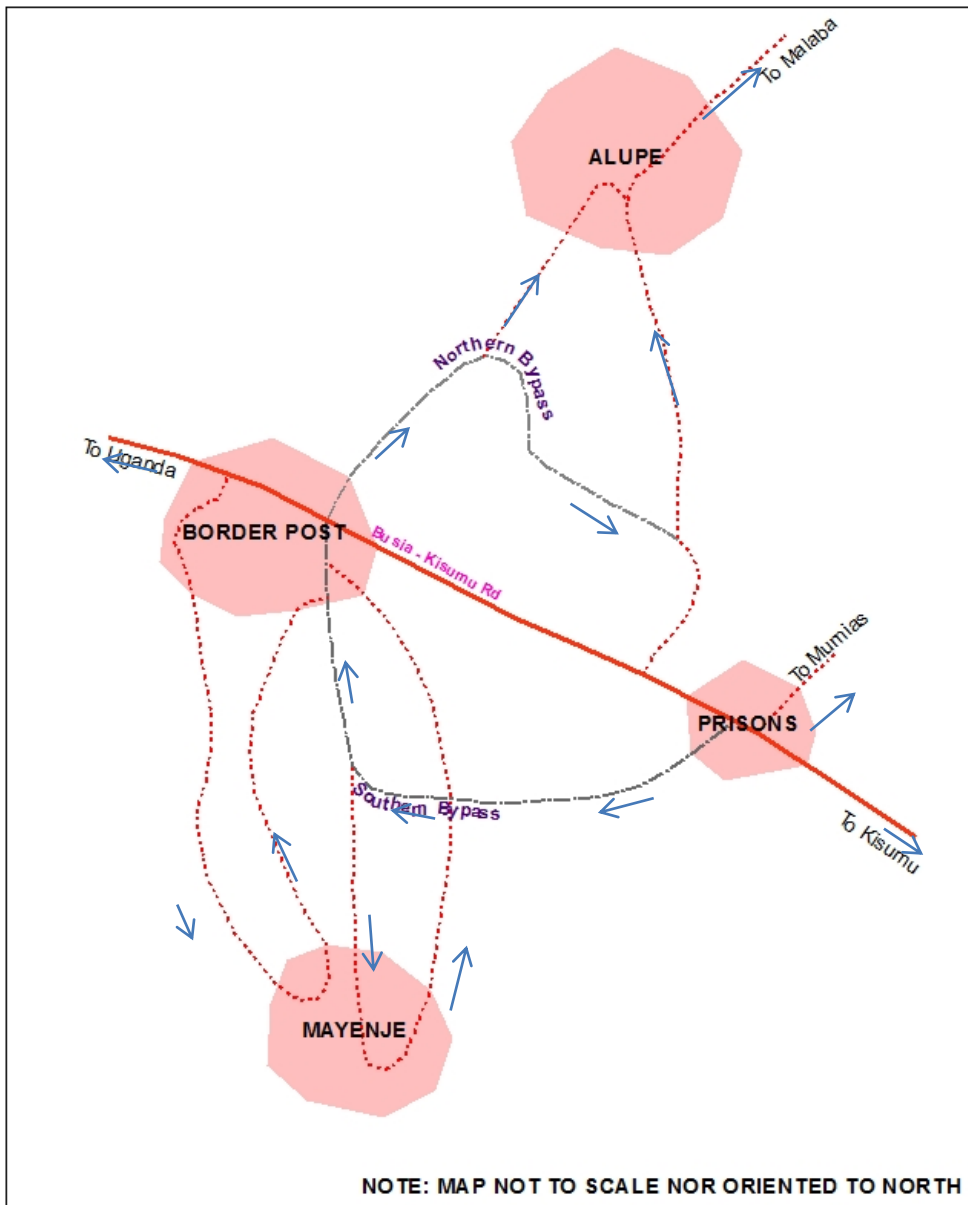


Figure 3-3: Transport Conceptual Framework for Busia Town

Air Transport

Busia Town is served by a single airstrip, which is situated within a very limited space neighbouring other incompatible uses such residential houses. The Busia Airstrip has not been in use since 2003 following an accident and there are now proposals to relocate it to a more appropriate place.

Plate 3-2: Conditions of the Airstrip



Source: Field Survey, October 2011

3.3.4 Key Transport Challenges and Opportunities

From the discussion above, the following is a summary of the main transport challenges in Busia town:

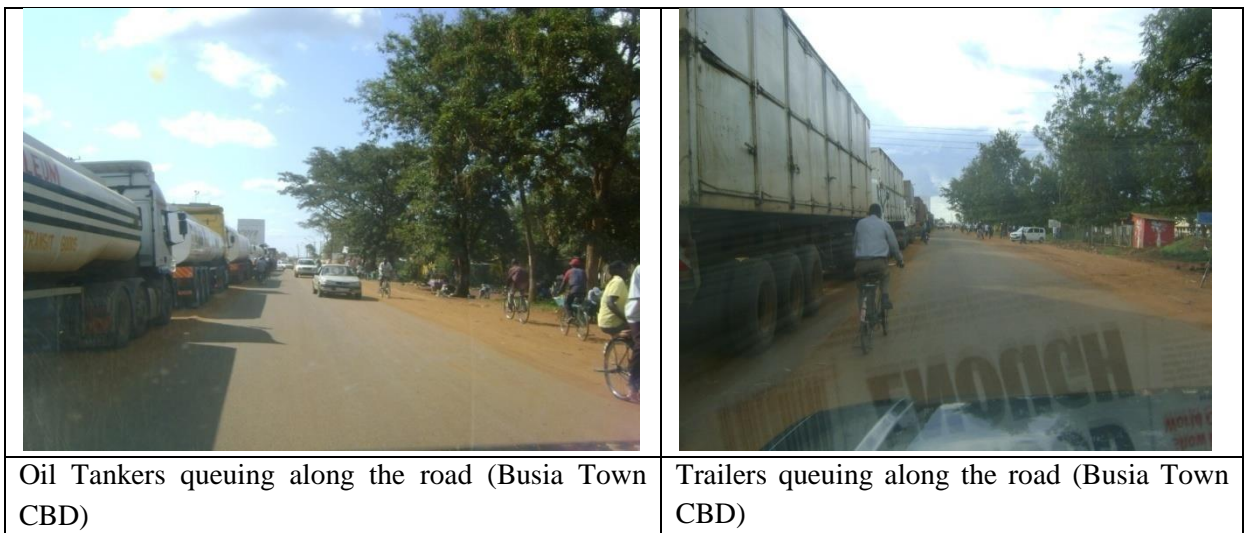
1. The only transport system available in the municipality is road-based. However, almost all the roads forming the urban road network are not classified and developed to proper engineering standards that can appropriately serve and respond to the growing travel demand. The supply of transport services is dominated by motor cycles and bicycles, which may not be sustainable in the future.
2. The roads within the town are in poor condition, leaving only the international road to Uganda as the main primary road in the town. Due to the traffic mix along this road, there are problems of congestion, traffic safety, and disorganized non motorized traffic (NMT) movements.
3. Transport and land use planning and development have not been synchronized. Without intervention, this will ultimately result into the undesired urban sprawl, increasing motorized travel demand and making the provision of public transport ineffective because of scattered development.
4. There is lack of professional approach to urban transport in the town as the problems are just emerging and have not reached levels where they are apparent. Institutional arrangements and human resource capacity should be put in place now to start addressing the issues before they become critical.

5. The operation of the border post has a great impact on the current and future transport situation in Busia in terms of the need for parking for transit vehicles, storage of transit goods, security of the transit passengers and freight, and the integration of transit and local traffic within the town.

Busia town has a number of opportunities that it can exploit to mitigate the challenges it is facing. Some of these are:

1. Busia is a gateway town and has the potential of attracting substantial cross-border trade, especially in the hospitality industry if it can provide safety and convenience of international travellers. Its location at about 100km from Kisumu International Airport can further make it exploit that potential.
2. The town can develop to the preferred border crossing to Uganda, Rwanda and the Democratic Republic of Congo due to its proximity to main growth poles in Kenya's western region including Mumias, Kisumu, Siaya and Bungoma.
3. The town has important institutions such as Moi University at Alupe, Kenya Agricultural Research Institute (KARI), Lake Basin Development Authority (LBDA), and Kenya Industrial Estates (KIE), and can attract many more with better town planning.

Plate 3-3: Traffic Condition



Source: Field Survey, October 2011

3.4 Social Infrastructure Analysis

3.4.1 Health

There are adequate health facilities in the town which are spatially distributed and cover even the farthest parts of the town such as Alupe which is served by a Sub-hospital and a leprosy medical research centre. However, County Government of Busia does not run any health facilities.

Busia Municipality has twelve (12) health facilities, fifteen (15) chemists/pharmacies and one medical research institute (CDC/KEMRI). This is currently adequate and spatially distributed to cover even the farthest parts of the town.

Table 3-2: Health Facilities in the Town

Facilities	Private	Public	Total
Clinics	8	0	8
Chemists/ Pharmacies	12	3	15
Nursing homes	2	0	2
Sub Hospitals	0	1	1
Hospitals	0	1	1
Medical Research Centre	0	1	1
Mortuary	1	1	2

Source: Busia District Public Health Office, November 2011

As shown in Table 2.12, the Town is well endowed with medical facilities. There are two referral facilities which are the Busia District Hospital and Kenya Medical Research Institute (KEMRI) Leprosy Consortium at Alupe. There is also the Alupe sub-district Hospital in Alupe. The referral medical facilities serve the residents of Busia County and other parts of Kenya and Uganda. There are two mortuaries within the town at the Level 5 Hospital and Tanaka Hospital (private).

Busia District Hospital (the only Level 4 hospital in the county) is the only referral hospital in Busia County and come the year 2030, it will be under pressure as the county's population increases. The hospital will also be treating patients from neighbouring Uganda as it has always done.

The field survey found out that 63.5% of health facilities including mortuaries are located within a distance of 1-4 Km. Majority of these facilities are provided by the private sector (80%) and government (18.8%).

There is one Public Cemetery located next to the sewer pond and it is not fenced. Busia lacks a designated burial site for the Muslim Community.

a) HIV/AIDS

Data shows that people who reside in the urban areas have a significantly higher risk of HIV infection (10 percent) than rural residents (5.7 percent). This disparity is true for both males and females, though the urban-rural difference is stronger for women than men. Rapidly increasing urbanization associated with poverty, rapidly changing lifestyles and lack of effective programmes targeting high risk and vulnerable urban poor populations are some of the reasons for the persistently high HIV prevalence in urban settings.

Most, if not all Busia slum dwellings have poor housing types and sizes and have an effect on HIV/AIDS. Shared rooms expose children to sexual activity at a very early age. The housing units are poorly planned, overcrowded and with no street lighting, exposing young people to sexual abuse like rape and defilement, which has implications for HIV/AIDS, early teenage pregnancies and other STDs. The rampant teenage pregnancy is an indication that people do not use condoms. More so, since people in slums are known to each other, there are social challenges that hinder them from accessing condoms.

Challenges Facing Health Facilities

- Insufficient drugs to cater for the big population
- Located in far distance
- Congestion in the hospitals to few/inadequate bed capacities
- Corruption among health officials
- High charges levied for treatment
- Few/Inadequate personnel
- Poor services offered in these facilities
- Inadequate equipments to treat complicated diseases

3.4.2 Education

The town has adequate ECDs and primary schools. However, the town is in dire need of secondary schools because there are only four (4) secondary schools serving the town (Table 2.13). This has forced many parents to take their children for secondary education in Uganda. Satellite campuses for various universities are scattered in the town. Moi University has a campus in Alupe and this has attracted other universities to the town such as Nairobi University which has a regional centre in the town.

Table 3-3: Educational Facilities/ Institutions in the Town

Type	Public	Private	Total
ECDs (Nursery)	16	36	52
Primary	15	11	26
Secondary	3	1	4
Tertiary/College/University	4	9	13
Children's Home and Rehabilitation Centres	0	4	4
Total	38	60	99

Source: Department of Social Services MCB, 2011

Primary schools are spatially distributed in favour of Agoloto, Burumba and Amerikwai zones at the expense of the densely populated Mjini zone. At Mjini zone where we have the Marachi informal settlement, pupils have access to Bulanda Primary school which is overcrowded. There is need for a new school to ease congestion on public school between Bulanda and Mjini zones.

The municipality is in dire need of secondary schools because there are only four (4) secondary schools serving the municipality (Table 6.16). This has forced many parents to take their children for secondary education in Uganda. By the year 2012, there was a deficit of five (5) secondary schools (Table 6.16), while nine (9) more schools will be required by the year 2030.

Table 3-4: Projections for Secondary Schools

Year	2009	2012	2017	2022	2027	2030
Current Number of Schools	4	4	4	4	4	4
Projected Number of Schools	8	9	10	11	12	13
Deficit	-4	-5	-6	-7	-8	-9

Source: Field Survey, 2011

Moi University has a campus in Alupe and this has attracted other universities to the municipality such as Bondo University College and Nairobi University which opened regional centres in the town.

Plate 3-4: Educational Facilities



School next to Soko Posta (open air market)

A Dilapidated School in Busia

The field survey found that 47.5% of nursery schools are located within a distance of less than 100m to 500m; 38.8% of primary schools are located within the same distance while 17.4% of secondary schools are located with 500m. From Table 2.14, respondents think that most secondary school are located within a distance of 1-2km. It is clear from the table that students walk long distances in search of secondary education.

Table 3-5: Distance to the various Educational Institutions

School	Nursery (%)	Primary (%)	Secondary (%)	College/Higher Education (%)
Less than 100m	25.2	18.8	9.0	4.8
100m-499m	22.3	20.0	8.3	5.2
500m-999m	28.4	26.5	11.2	11.0
1km-2km	21.6	32.2	35.8	25.7

2.1km-4km	2.5	2.0	27.4	26.1
Over 4km	0	0.5	8.2	27.0
Total	100.0	100.0	100.0	100.0

Source: Fieldwork, November 2011

The study found out that 62% of nursery schools are provided by the government while the private sector and religious bodies provide 33.2% and 4.2% respectively. In the case of primary schools 88% are provided by the government while the private sector and religious bodies account for 10% and 2% respectively. About 90% of secondary schools are provided by the government while religious bodies and private sector share the remaining 10%. The government and private individuals/institutions share the provision of colleges/higher education institutions on a 50/50 percentage ratio. Some of the challenges facing these education facilities include;

Challenges Facing Nursery Schools

- Provision of Poor services
- Dilapidated Government Nursery Schools
- Overcrowding and congestion in these facilities hence reducing the education standards as teachers attend to many pupils
- Un-trained teachers

Challenges Facing Primary Schools

- Congestion in the classrooms especially since the introduction of Free Primary Education
- High charges especially for the private schools
- Public primary schools are poorly staffed
- Un-trained teachers
- The municipality is mostly rural and therefore some schools are far and pupils are forced to trek long distance

Challenges Facing Secondary Schools

- Majority of secondary schools are far
- Higher fees charged
- Overcrowding in classrooms

- Few/Inadequate schools
- Poorly equipped schools
- Few/Poor teaching staffed

3.4.3 Recreational Facilities

These include Open spaces include Gardens, playgrounds, riparian reserves, social halls, cultural centre and stadium.

Parks

There are two recreational parks in Busia town. These are provided by the County Government of Busia and the National Environment management Authority (NEMA). These parks are within the Busia town and can only be accessed by the people in the town. In the estates, there are no parks and only a few play grounds and open spaces which are used for recreational purposes. According to the study, 30.8% of the respondents said that playgrounds are located within a distance of 0-1km, 1-2km (15.4%), 2.1 to over 4km (25.1%) while 28.7% believe that there are no playgrounds provided in the town. Table 2.15 shows the distance covered to access a park/open spaces from the respondents residence.

Table 3-6: Distance of the park from the residence

Distance	Frequency	Percentage
Less than 100m	15	4.2
100m-499m	8	2.2
500m-999m	16	4.5
1km-2km	92	25.8
2.1km-4km	93	26.1
Over 4km	78	21.9
Not available	54	15.2
Total	356	100.0

Source: Fieldwork, November 2011

Plate 3-5: Green Garden, Busia



The Busia Green Garden is next to County Government of Busia Offices, the social hall and stadium are next to one another though the stadium is not well developed and it has a worn out

Plate 3-6: Stadium Pavillion with blown-off roof



pavilion and it is only used for

Public/National holidays. There are various playfields such as the polytechnic which are frequently used for football matches.

Areas of interventions:

- Acquire more land for recreational purposes.
- Create public conveniences such as washrooms, and solid waste disposal bins in the existing recreational facilities.
- Use money from the Ministry of Youth to develop the recreational facilities from donated lands and also reposes or surrender back the grabbed spaces for recreational facilities, especially the riparian reserve which could be used as a recreation site.
- During subdivision of land the owners should surrender 4%-10% for recreational facilities (should be legislated in the councils Bylaws).
- Use LATF funds to purchase more space for recreational facilities.

- Invite private organization to provide recreational facilities e.g. Kenya railways has a lot of land; Recreation facilities should also be established in all residential estates
- There is need to construct a museum in the town
- Making use of recreation facilities found in the public in institutions, which can be a way of creation of revenue.

3.4.4 Historical Heritage Buildings and Monuments

The past is all around us. We live our lives against a rich backdrop formed by historic buildings, landscapes and other physical survivals of our past. But the historic environment is more than just a matter of material remains. It is central to how we see ourselves and to our identity as individuals, communities and as a nation. It is a physical record of what our country is and how it came to be. Building materials and styles can define region's localities and communities. Historic landscapes or iconic buildings can become a focus of community identity and pride. At a more local level a historic church or park can help define a neighbourhood and create a sense of local cohesion.

It is recognized that the retention of heritage buildings has environmental sustainability benefits. Conserving heritage buildings reduces energy usage associated with demolition, waste disposal and new construction, and promotes sustainable development by conserving the embodied energy in the existing buildings. Life-cycle analyses of building fabric: structure, envelope, interior elements and systems – and ongoing management and use – need to be considered as part of the conservation process to achieve optimum energy efficiency outcomes.

3.4.5 Communication

Communication is dominated by the use of telephone (both landline and mobile). The landline telephone lines are however not widely used due to their inefficiencies and vandalism. Most units are also not connected to this communication line. The mobile industry fuels communication within the town with the sole communication service providers being Safaricom, Zain, Orange and Yu networks. The town also has access to courier services.

Public Service Vehicles (PSV) Bus companies, security companies and Kenya Postal Corporation are the main competitors providing this service in the town.

3.5 Water, Sanitation and Environment

3.5.1 Water

Water resources in Kenya are increasingly being polluted by organic, inorganic and microbial matter. The impact of pollution on water resources is manifested by water of poor quality which gives rise to water toxicity to mammals and aquatic life loss of aesthetic value by becoming unsuitable for recreational activities, high cost of water supply as polluted water is expensive to treat, eutrophication, de-oxygenation, acid rain and habitat modification.

Kenyan urban population which has been growing at a rate of 8% per annum is now more than 27% of the country's total population (NEMA, 2004). In addition, generation of solid, liquid and gaseous wastes has been increasing at the same level as industrial development and the diversification of consumption patterns. The report by NEMA (2004) indicates that per capita waste generation ranges between 0.29 and 0.66 kg day⁻¹ within the urban areas of the country. The municipal waste generated in the urban centres, 21% emanates from industrial areas and 61% from residential areas, an indication that residential areas in the urban centres are the major sources of wastes generated.

Types of water sources

The main water sources for the town are surface water, ground water and run-off water. Other sources include protected springs, and dug wells.

Access to Water

The survey revealed that 89% of Busia town residents have access to water. Piped water in the town is provided by The Lake Victoria North Water Service Board (LVNWSB) under the Western Water Services Company (WWSC) Limited. There are also individual initiatives to provide water for domestic purpose through shallow wells and roof catchments. Water kiosks and shallow wells are the dominant sources of water in the town.

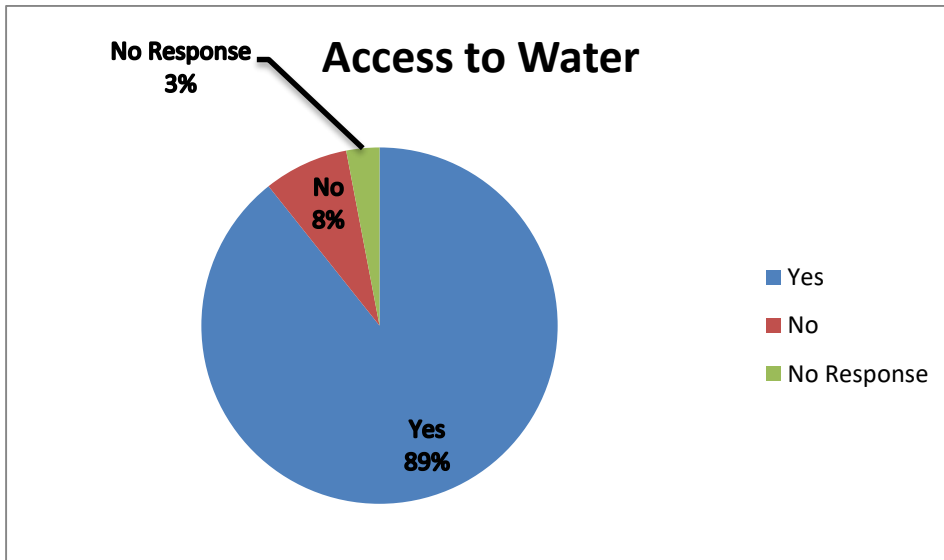


Figure 3-4: Access to Water

Western Water Service Company is a private company, incorporated in accordance with the provisions of the Companies Act Cap 486 Laws of Kenya, by four promoters/shareholders namely; Municipal Councils of Kakamega, Mumias, Busia and Nambale Town Council (WWSC Business Plan, 2010).

WWSC has the following water and sanitation facility which serves the area;

- Treatment works,
- 8 No. Boreholes,
- 1 No. sewerage works,
- Storage tanks of capacity 550m³ for Busia
- 24 km of piped network of various sizes and types, and
- 2,683 connections

Busia water scheme comprises Busia and Bumala town with a population of 96,107 and a consumption demand of 4,804.35m³. As a result of the inadequate capacity and inefficient infrastructure, the company currently operates at a coverage level of 43% of the above population, with a per capita consumption of less than 20 l/h/d especially when rationing is applied in some areas to ensure that the available supply only meets the most basic water requirements. Households consume 61% of the water supplied followed by commercial at 22% and while institutions take 17% (WWSC Business Plan, 2010).

Status and Trends of Water Sources

The occurrence of groundwater in the Busia is mainly from 1,200mm annual local precipitation and the subsequent infiltration into the sub-surface. Shallow ground water levels lie between 1.0m and 7.0m. The surface water of Busia is generally good. The quality however decreases during the rainy season with an increase in colour, turbidity and conductivity mainly due to the sediments and suspended matter transported by the river.

Currently the water production is mainly done through pumping systems; there are surface sources and ground water sources from borehole equipped with submersible pumps. Due to high sediments and micro-organisms presence in surface water treatment is mainly done using aluminium sulphate as a coagulant for aesthetic value and clarity improvement and chlorine in the form of HTH is used for disinfection. Table 2.16 shows surface water quality.

Table 3-7: Surface Water Quality Parameters

Parameters	Unit	L. Victoria	River Sio	River Walatsi	River Namwitsula	River Nzoia
PH	PH scale	6.1	7.3	7.7	8.0	7.6
Turbidity	NTU	120	64	146	168	91
Colour	Mg/L	150	300	70	5	20
Conductivity	Ms/cm	128	140	140	170	146
Iron	Mg/L	-	-	-	-	-
Manganese	Mg/L	-	-	-	-	-
Calcium	Mg/L	11	15	10	26	18
Magnesium	Mg/L	5.3	1.9	4.4	7.8	5.3
Sodium	Mg/L	18	9.5	8.4	11	13
Total Hardness	Mg/L CaCO ₃	50	46	44	96	66
Total Alkalinity	Mg/L CaCO ₃	34	50	56	54	90
Chloride	Mg/L	6	1	4	1	4
Fluoride	Mg/L	0.02	0.02	0.02	0.02	0.04
Orthophosphate	Mg/L	0.01	0.01	0.01	0.01	0.02
Sulphates	Mg/L	1.8	0.30	0.30	0.30	0.4
TDS	Mg/L	77	84	84	102	88

Source: NEMA Office, Busia District, 2011

3.5.2 Sewage and Sanitation

Sewerage involves the mechanisms for handling domestic and industrial liquid wastes. In Busia town, the disposal of domestic (human waste) is done through the conventional sewer,

cesspools, septic tanks and pit latrines. Busia has one sewerage treatment plant. The sewered area of the town is less than one-third. The sewer reticulation therefore serves only about 7.8% of the total population (Table 2.17). Areas served include the CBD, the Provincial Administration areas and some residential area next to the CBD and the sewer ponds. According to the Lake Victoria South Water Service Board there are areas within the town which have been connected to the main sewer line but are yet to connect their houses to the main network.

Table 3-8: Percentage of Population Connected to Sewer Line

	Frequency	Percentage
Yes	43	7.8
No	511	92.2
Total	554	100.0

Source: Field Survey, 2011

Plate 3-7: Sewerage Ponds



Sewerage ponds in Busia

Source: Field Survey, 2011

3.5.3 Wetlands

Busia town has a number of wetlands which receive surface runoff and its sediment load from the adjacent sloping areas. These support the wetland vegetation. The vegetation cover of papyrus and phragmites tend to be the most dominant along the river channel increasing in density downstream. Other vegetation types include *vossia*, *sesbania spp.*, *typha*, *duom* palm, sedges and other grasses. Most of these wetlands are permanent in nature.

3.5.4 Dumpsite

Throughout history, mankind has used dumps to solve solid waste problems. In the past, when waste streams were simple and land constraint was not a challenge, open dumping was used as an inexpensive and often appropriate solution. It served the purpose of keeping waste separated from the populace, hence limiting exposure to disease vectors, as well as odour and other direct effects. However, the introduction of more and more complex products into the waste stream (complicating disposal), increasing urbanization and population growth have all resulted in a huge increase in the impacts of open dumps in many situations.

From today's point of view the use of open dumps is not in line with the increasing public awareness of environmental issues and the demand for environmental improvement, including the current focus on sustainability and global climate change. Closing, or alternatively upgrading, open dumps is therefore a key issue for many communities, particularly in developing countries. Such upgrading is an essential step in reducing future environmental impacts and impact on public health, as well as avoiding future costs caused by the ongoing waste disposal mismanagement evident at open dumps.

Plate 3-8: Uncollected Garbage at the collection site



The Busia Municipal dumpsite is an open land disposal site where the indiscriminate deposit of solid wastes from Busia takes place with no measures to control the operation and to protect the surrounding environment. This dump site is visually characterized by widely spread un-covered wastes and is located in the Alupe area. The wastes are dumped into a land bought by the council. All garbage from hotels, restaurant, and residential areas are dumped here.

Plate 3-9: Designated Dumpsite in Alupe Area, Busia



3.5.5 Household Solid waste Management

The household survey revealed that only 8% of the residents of Busia town have access to municipal garbage collection service. The bigger percentage of the residents lack where to dump their wastes. This has resulted into indiscriminate dumping of wastes within the estates. The study found that 69.7% of garbage collection services are provided by private sector. That is, through households disposal methods such as burning, burying or just throwing away. Other private sector includes groups in residential areas next to the CBD collecting garbage at a fee. Busia County Government accounts for 30.3% of garbage collection services. This is mostly undertaken in the markets, bus parks, government offices, and the CBD.

3.5.6 Environmental Hazards and Disasters

Natural and human induced hazards pose a threat to human life, property and environment. Natural hazards include dry spells, soil erosion, drying-up of water sources, lightening and hailstorms, among others. Disasters occur when natural hazards interact with vulnerable people, property, and livelihoods causing varying damage depending on the level of vulnerability of the individual, group, property or livelihoods.

Anthropogenic factors causing land degradation; deforestation of catchment areas, poor agricultural practices, inappropriate land use systems and changing living conditions, among others contribute to increased impacts from the various natural hazards. In the recent past these hazards have increased in number, frequency and complexity. The level of destruction has also become more severe with more deaths of people and animals, loss of livelihoods,

destruction of infrastructure, and environmental degradation among other effects resulting in losses of varying magnitudes. Environmental disasters in the district are climate or weather related. Most of them are natural rather than man-made and a few cases have been reported to have led to loss of life, livelihoods and environment.

In the past years, lightening has been a major threat in the district due to frequent rainfall, nature of rocks and thunderstorms. There have been cases where lives are lost especially in leaning institutions. It is however, important to note that since rain is a natural phenomenon a number of institutions and individuals have installed lightening arrestors. This however, needs to be intensified in learning institutions, health facilities and churches.

In addition, anthropogenic factors causing land degradation such as deforestation of catchment areas, poor agricultural practices, and inappropriate land use systems and changing living conditions are potential natural hazards. Floods often occur, causing gullies and soil erosion, which has an effect on soil fertility.

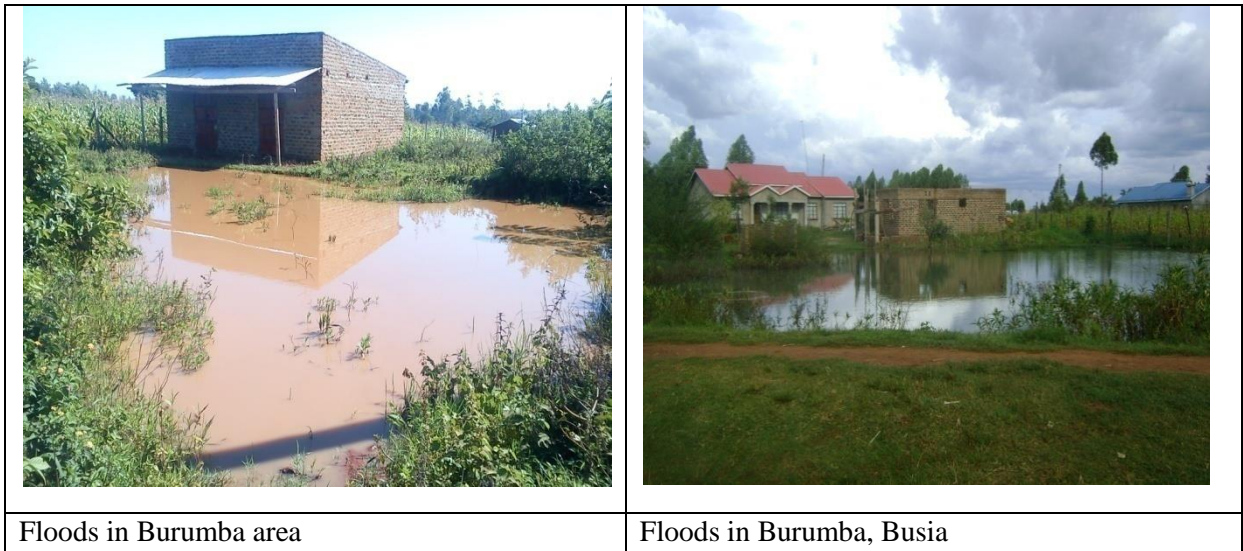
3.5.7 Extend and Trends of Environmental Hazards and Disasters

According to the Busia District Development Plan- 2002-2008, there are four frequent recurrent forms of disasters in the town namely floods, fires, lightening and drought. Floods occur mainly during heavy rains due to poor storm drainage system.

3.5.8 Floods

Floods are mostly experienced during the high rainfall season. The main causes of floods are deforestation, land degradation, poor environmental planning, inappropriate soil and water conservation measures, poor agricultural practices and climate changes related issues. Impacts of floods in the town are loss of lives and property, outbreak of water borne diseases infrastructure destruction, displacement of people ,soil erosion that will result in silting of rivers and blockage of drainage systems. The flooding creates the stagnant water which in turn provides a breeding site for mosquitoes that cause malaria.

Plate 3-10: Floods in Busia



Source: Field Survey, October 2011

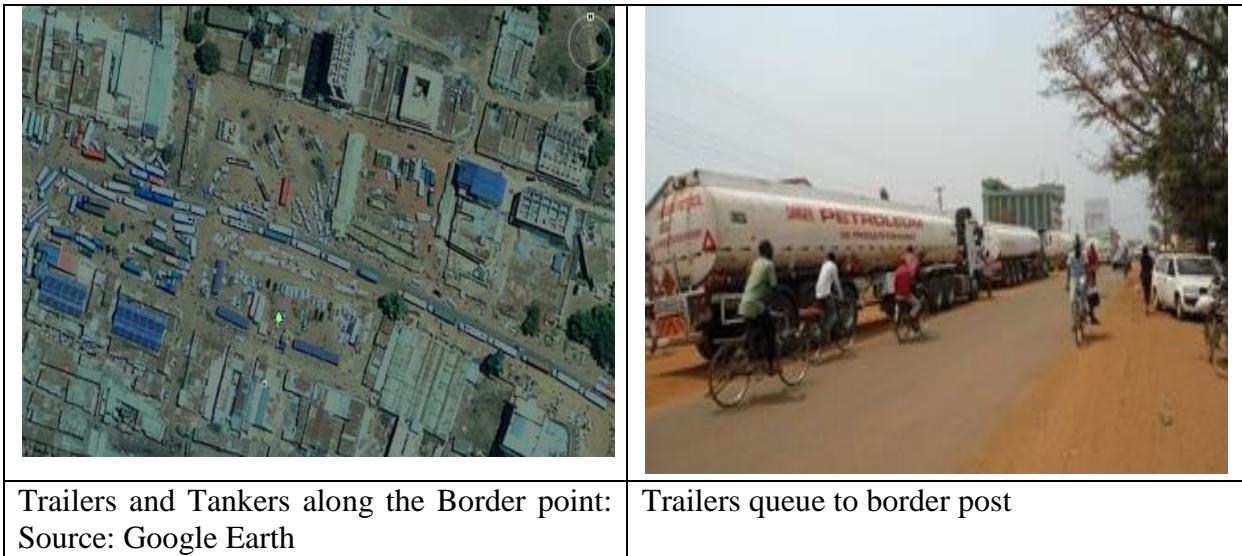
Accidents

Most of the accidents in Busia town are as a result of numerous cyclists sharing the same roads with motorists. Bicycles (Bodaboda) are the main mode of transport in Busia district. Due to congestion on the roads, accidents do occur frequently. There is also a potential fire hazard due to petroleum tankers that line up the narrow road with occasional oil spills.

Human and Natural Hazards

Both human and natural risks must be considered when urban planning is concerned, as they both can endanger the sustainability of the physical and social environment. Disaster preparedness in the town is low, despite regular floods and heavy rains. In addition to possible weather hazards, Busia is exceptionally ill-prepared to cope with the increased risk of fuel tankers and trailers that queue along the main highway. Some parts of slum areas are also inaccessible due to either blocked or narrow roads. An assessment of people living at risk of fire, natural disasters and tankers indicates that a number of people that can potentially be affected in case any tanker or a house catches fire. Busia does not have any fire engine and mostly seek for assistance from Mumias Sugar Company in Kakamega County or from the neighbouring country Uganda in case of a fire.

Plate 3-11: Oil Tankers and Trailers



Source: Field Survey, October 2011

However some of these risks could be lowered greatly through an integrated planning accompanied with planning regulations and building codes that can easily be followed and/or implemented.

Key Environmental Challenges

- Poor environmental sanitation
- Low public awareness on sanitation and hygiene
- Poor waste management
- Inadequate coverage of the sewerage system within the municipality
- The existing sewerage system is ineffective since there is no complete treatment of effluents which are then discharged into the aquatic environment
- Encroachment of wetlands
- Waste water from municipal sewerage treatment system.
- Soil erosion due to poor land use practices
- Contamination of water sources
- Poor waste disposal
- Littering of polythene wastes
- No waste recycling
- No separation of wastes at source
- Flooding

- Loss of biodiversity
- Soil erosion
- Lack of equipments and early warning systems
- Low awareness on disaster preparedness
- Outbreak of diseases
- Land degradation
- Disruption of household routine and social functions

3.6 Housing and Informal Settlements

3.6.1 Existing Housing Situation

According to 2009 population and Housing Census (GOK, 2010), Busia had a population of 61,715 with a growth rate of 2.54%. Thus projected population will be 107,102 in the year 2030. The population density has increased from 836 persons per square kilometre in 1989 to 1,391 persons per square kilometre in 2009, and this will rise to 2400 persons in the year 2030. This high population growth will require adequate housing and reasonable standards of sanitation as provided for under economic and social rights in Kenya Constitution 2010.

The 2009 census showed that housing condition in Busia town is unsatisfactory. For instance, in terms of construction materials only 55% of the houses had permanent floors, 67% has permanent walls and 15% had grass thatched roofs. A survey carried out for this study in 2012 indeed showed that only 52% of the houses were constructed of permanent materials (Table 2.18). Some 40% of the houses had mud walls, 33% had mud floors and 13% had thatched roofs.

Table 3-9: Housing Typology

Housing Typology		N	Percent
	Permanent	317	52.0%
	Semi-Permanent	189	31.0%
	Temporary	104	17.0%
Total		610	100.0%

Source: Field Survey, October 2011

Housing within the town stands as the most prominent problem that requires immediate attention. This implies not only to the housing quality but on the development trend as well. Absolute land ownership in the town has led to difficulties in controlling the development trend and the type of housing required in the town. This has led to construction of substandard housing and encroachment into road reserves. The housing conditions are characterized by mud walled, rusty mabati roofing and small houses with poor drainage and careless disposal of household wastes. This exposes the people living in these areas to inhuman conditions prone to diseases. Typologies of some houses in Busia town are depicted in the photographs below:

Plate 3-12: Housing Typology in Busia

	
<p>Mixed Housing in Marachi, Busia</p>	<p>Housing Typology in Busia</p>
	
<p>High income residential area in Burumba</p>	<p>High income residential area in Busia</p>

Source: Field Survey, October 2011

As shown by plate 2.9, it is not only the housing structures that are poor, but lack of planning has led to poor environmental conditions. As a result most of Busia town is largely occupied by informal settlements.

3.6.2 Informal Settlements

Busia town has several informal settlements namely;

- a) Marachi/Maduwa estate being the largest in town extending to Sofia estate,
- b) International estate (in particular Fort Jesus area), and
- c) Some parts of Mauko (Suburbs area), Samaki in Burumba estates.

Like in most urban areas in Kenya, Busia has a fair share of informal settlements. In recent years, there has been dramatic growth in the number of human populations in the town at an average annual growth rate of 2.54% since 1989, mainly attributed to natural increase and rural urban migration. But its growth and expansion has been associated with inadequate infrastructure, social services and has posed planning and environmental problems.

Marachi/Maduwa estate is the largest slum in the town and has approximately 1000 households exhibiting both a nucleated and linear type of settlement. It has a mixture of housing topologies ranging from temporary, semi-permanent to permanent structures but the dominant is the semi-permanent ones in which most of the houses are predominantly single-room and the building materials included mud walls, iron sheets and earthen and /or cemented floors. These structures are built in such a way that there is virtually no space between them. Clusters of shelters are just separated by a corridor or verandah. In this type of housing, a single room acts as a bedroom, sitting room, store and so on. Pathetically, four people and in some circumstances more than four may share a single room. The foundation of the dwelling units is poor, leading to many houses assuming slanting postures, without ventilators and characterized by breaking walls and wearing away.

Other small slums in the town are found in International estate (Fort Jesus area in particular), some areas of Mauko (Suburb), Samaki and Burumba estates. They have scattered type of settlement which are found in isolation in which the neighboring homesteads are well build houses (Permanent) and have adequate services such as sanitation and piped water. Most of

the houses in these slums are predominately semi-permanent single-room with poor sanitation and solid waste management and lack decent toilets, bathrooms and water drains. In Burumba area, the houses are permanent though the problem is poor sanitation, poor drains and poor maintenance of the houses.

Plate 3-13: Informal Settlements in Busia

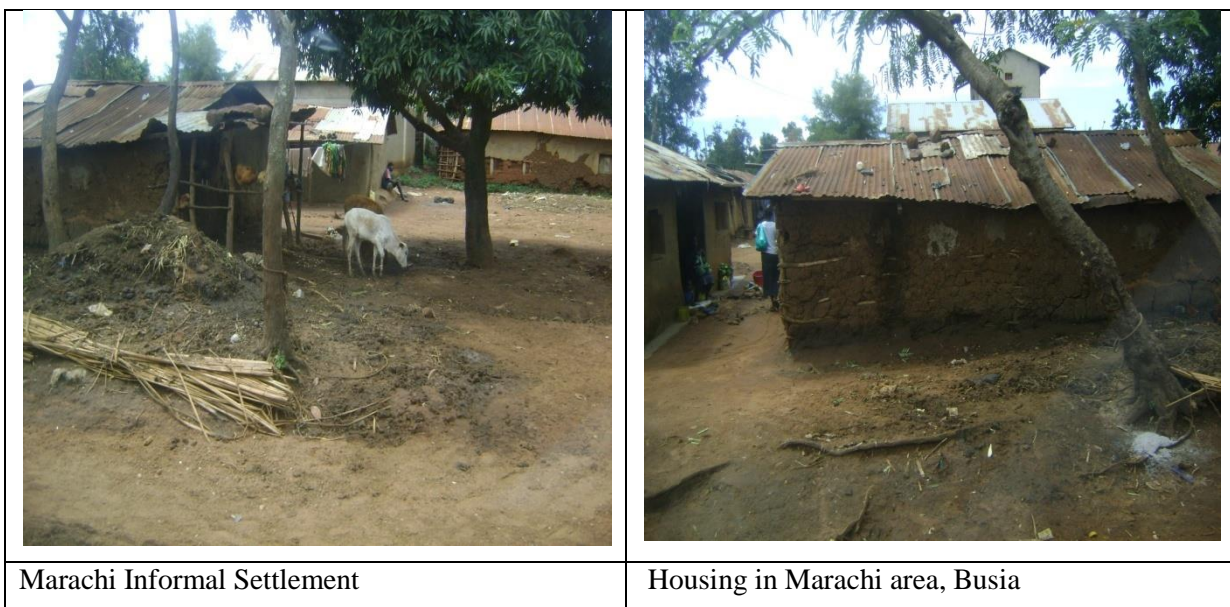


Plate 4.13: Informal Settlements in Busia

Source: Field Survey, October 2011

Besides poor structures, many households lack domestic water supply especially in the lower Marachi and Mauko estates and as a result depend on community managed water kiosks. These kiosks are crucial to the provision of water in the absence of other alternatives, but they are not also problem-free.

Plate 3-14: Waste Disposal



Waste Disposal in Burumba Estate

Source: Field Survey, October 2011

Waste disposal is also a big problem in Busia Kenya slums as most of the waste is just dumped behind the houses posing a major hazard to the small children and entire household. Also when it rains, most of the waste is washed to the water sources while some of the waste blocks the water channels, in such a situation floods are inevitable because it complicates the flow of storm water. It also pollutes the entire land especially the littering of plastic bottles, plastic papers and other wastes.

Most of the areas in Marachi slum experiences persistent stagnant storm water leading to flooding of homes, a condition that provides an excellent habitat for disease vectors. They do not have drainage channels to take away the storm water.

Plate 3-15: Homes flooded caused by the storm and domestic water in the Marachi Busia



Source: Field Survey, October 2011

Table 3-10: Types of house occupied

		Responses	
		N	Percent
	Bungalows (3 bed rooms)	132	20.9%
	Flats	3	0.5%
	Double roomed	241	38.0%
	Single rooms	257	40.6%
Total		633	100.0%

Source: Field Survey, October 2011

This housing shortfall places heavy responsibility on Busia town requiring co-ordination of efforts from all concerned in the public and private sector. It requires definite housing development strategies incorporating the principles of the Constitution, Vision 2030, Millenium Development Goals and the National Housing Policy.

Challenges facing Busia slum dwellers

- The ever increasing population and increasing demand for shelter, against a back drop of poor or lack of urban planning, diminishing resources, high house rents and insecure land tenure system.
- Technical difficulties of infrastructure extension and specifically physical conditions of the settlements, which are marked by a random and haphazard development pattern and overcrowding.
- Poor governance in the management of slum areas and inadequate capacity by the municipal
- Unemployment and underemployment in the slums
- Insufficient health facilities
- Poor state of roads, most of the roads were narrow, muddy and have poor drainage channels
- Increased rates of urban poverty and social upheavals
- Inadequate infrastructure (sewerage services, water drains e.t.c)
- The level of investment is low in the town

3.7 Economy

3.7.1 Introduction

Busia town does not have major industries. It is a transit town: a gateway to East and Central Africa. This being the case many economic activities in the municipality revolves around the transportation sector. Transportation activities such as bodaboda, track driving, and bus and matatu operations dominate the economic sector. These activities have thrust into limelight other supporting economic activities such as hotel, bars and lodging activities and middlemen/women assisting track drivers at the border point. Hotel and lodging activities has been growing tremendously and is rivalling the transport sector in creation of job opportunities in the municipality.

3.7.2 Commerce

Other major commercial activities in the manufacturing, service and trade sectors were: manufacturing sector included among others, posho mills, carpentry, tins/black smith, welding, saw mill, tailoring, shoe making. The service sector included among others: bars and restaurants, hotels, cyber cafes, surveyors, laundry, salons/barber shops, shoe repairing, bicycle repairing, garages, slaughter houses, clearing and forwarding, telephone bureaus and electrical shops while those in the trade sector included among others: wholesale, general retail, cereal; dealers. Dairy mild shops, butcheries, tire dealers hardware shops, electronics shops, auto spare parts, video libraries, mobile phone and phone accessories shops, computer accessory shops, chemists Pharmacies.

Emerging opportunities for investment, development and value-adding exist in trade, tourism, manufacturing, ICT, transportation, real estate and food-related industries.

The field survey found out that trading/business contributes 37.2% of job opportunities available in the town and this is due to the rampant cross-border trading that has been made possible by the free movement of people allowed by the East African Community. Other job opportunities includes service industry/hotel/food industry (17.6%) and this is also due to the high demand for these services by the high number of trailer and track drivers, tourist travelling to other East and Central African countries; *Bodaboda* (14.9%); Jua Kali (11.7%) among others as shown in Table 2.20.

Table 3-11: Main Sources of Employment in Busia and Their Percentage

Source of Employment	N	Percentage
Trading/business	302	37.2%
Service industry/Hotel/Food Industry	143	17.6%
Jua kali	95	11.7%
Boda boda	121	14.9%
Employment(NGO,GOV)	67	8.3%
Farming	65	8.0%
Building and construction	18	2.2%
Total	811	100.0%

Source: Field Survey, 2011

3.7.3 Financial Institutions

Various financial institutions including micro finances operate in the municipality and the business community utilizes them for both business financing and savings. Ever since Co-operative bank established its branch in Busia, it has raised the level of competition for banking services. This also increased the number of banks operating in the town. The town now boasts of having Co-op, KCB, NBK, Barclays, Faulu, Equity, and Family Bank. However, the strigent conditions of these banks limit people' access to them.

Micro finance institutions operating in the municipality includes, Micro Opportunity Loan International, KIE, ICDC, KWFT, K-REP, PLATINUM AND FSAs. All these contribute well to the growth of the town.

3.8 Revenue base

3.8.1 Introduction

The fiscal management of the town comprises revenue mobilization and expenditure administration/transactions. This depends on the revenue generated either locally or from external sources. The current devolved process calls on county governments to be responsible for their financial management. This is a challenge to all the local authorities within the county to improve their revenue generation mechanisms for smooth development of the county government.

The major sources of revenue available to Busia can be grouped into two:

- Internally Generated Fund (IGF)
- Grants / allocation from the National Government

The main sources of the internally generated funds (in a descending order) comprise of:

- Trailers Park Fees,
- Single Business Permits,
- Produce Cess
- Bus Park Fees and

- Market Fees
- Site Value Rates among others fees.

Table 3-12: Revenue Sources for Busia Town (2010-2011) Financial Year

Source	Amount (Ksh.)	Percentage (%)
Trailer Park Fee	17,470,280	24.5
LATF	17,186,877	24.1
Trade License	10,042,958	14.1
Produce CESS	9,790,581	13.7
Bus Park Fee	7,258,393	10.2
Site Value Rates	2,610,262	3.7
Clothing	1,504,430	2.1
Market Fee	803,140	1.2
Approval of Plans	739,500	1.0
Sale of Fish	668,060	0.9
Slaughter Fee	658,776	0.9
Others	2,582,762	3.6
Total	71,316,019	100.0

Source: Adopted from Busia Municipal Council Receipts, 2011

The trailer park is inadequate for almost 300 trailers passing through the town weekly and which usually park along the road waiting for clearance at the border point. The council has acquired land around Road Block area for a new trailer park, however, there are efforts to convert the current airstrip as a trailer park to avert danger posed by oil tankers lining up along the road in the CBD. The council can also increase its revenue if land can be allocated for a new bus park to avoid PSVs that pick and drop passengers along the road and making it impossible for the council to collect fees from them.

Ten major revenue sources account for 96.4% of the total revenue generated by the council while other revenue sources account for 3.6%. these others revenues includes, private rental, transfer and subdivision, kiosk rent, stall rent, office rent, house rent, land rent, hire of chamber, change of user, parking fee, clumping fee, impounding fee, burial ground fee, hides and skin, nursery fees, advertisement fee, group registration fee, clearance fee, tree/flower and general sales and extract of council minutes.

Apart from site value rates, approval of plans and office rent, the council generates minimal revenue for land based taxes which is contrary to other urban areas which generated more funds from these sources. High rate of urban growth should spur increased revenue from these rates especially approval of plans (1%) and change of use (0.004%) in a congested town like Busia. The town also has few markets and subsequently few market stalls, majority of these markets are located in the CBD at the expense of the peri-urban and rural areas. Revenue from advertisement especially modern type of advertising using street lights is lucrative and improves the aesthetic of the town especially at night.

3.8.2 Challenges facing investors in the municipality include;

- High taxes levied by the council
- Inadequate trading spaces and inadequate government land that can attract big investments
- Low Profit returns due to low purchasing power and high cost of living
- Limited capital due to high interest rates
- Harassment by council askaris
- Poor road conditions hinders movement of goods and services
- Competitive market as many Kenyans prefer importing cheap goods from Uganda
- Insecurity created by free border movement and a porous border
- Black market/brokers/Illegal business along the border
- High rents necessitated since the municipality lacks land and therefore cannot provide these facilities and have left them to private individuals who are profit oriented
- Poor markets and marketing skills to attract investors to the municipalities

3.8.3 Markets (Permanent and Temporary)

Busia town has six (6) markets which generates approximately Ksh. 800,000 annually (FY 2010/11). The municipality has three (3) permanent and three (3) temporary markets spatially distributed in favour of the CBD due to the presence of the border point. The following are the markets found in Busia and their status:-

- Stall market (permanent)

- Open Air market (permanent)
- Angorom market (permanent)
- Kasarani market (temporary)
- Soko maunga (temporary)
- Soko mjinga (temporary)

The study revealed that 64% of the respondents feel that the markets are located between 1-4 Km, while 17.6% felt that the markets are located between 0-1 Km and over 4 Km (18%).

About 30% of the shopping facilities are located less than 100m from their residential areas, 100-499m account for 27.3%; 500m-999m (22.3%) while 20.4% of the respondents trek for between 1 to over 4 Km to access shopping facilities. The study revealed that 75.4% of the shopping facilities are provided by private individuals while the municipal and religious organizations account for the rest.

Plate 3-16: Markets



Source: Field Survey, October 2011

Challenges facing the markets in the municipality include;

- Long distance since they are spatially distributed in favour of the Busia Town’s CBD
- Most markets lack shades and are in bad state
- The markets are few and are inadequate to cover the whole municipality

- Dumping of waste from the markets pollutes the environment

About 30% of the shopping facilities are located less than 100m from their residential areas, 100-499m account for 27.3%; 500m-999m (22.3%) while 20.4% of the respondents trek for between 1 to over 4 Km to access shopping facilities. The study revealed that 75.4% of the shopping facilities are provided by private individuals while the municipal and religious organizations account for the rest. Some of the challenges facing these shopping facilities include;

- Inadequate shopping facilities
- Harassment from council askaris
- Low purchasing power hence low profit
- Insecurity which hinders increased investment

4 CHAPTER FOUR: INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN FOR BUSIA TOWN

4.1 Spatial Planning for Busia Town

The main objective of the spatial planning exercise was to prepare an integrated strategic urban development plan for Busia Municipality for the years 2010-2030. Considering the planning challenges in Busia and the community's vision, the following concepts guided the spatial planning for the town;

- The need for minimizing urban sprawl due to inadequate public facilities, land tenure, high segregation, diminished aesthetic appeal and environmental management.
- Promoting neighborhood livability-sense of a community, safety, convenience, attraction and affordability
- Better access and less traffic-through clustered development
- Concentrating development on built up areas-with adequate access to public services
- Preserving natural areas-open spaces
- Kenyan New Constitution- The section on the Bill of Rights that advocates for housing and clean environment; Vision 2030's goal-ensuring high quality of life: National Land Policy 2009- ensuring sustainable use of resources.

In order to achieve this, smart growth model was found to be the most appropriate for Busia since it incorporates communities' integration, improvement on service provision and minimization of costs on plan implementation. The model promotes more compact, mixed, multi-modal land use that minimizes sprawl. The main model's benchmarks considered relevant to Busia town's spatial plan included its support for;

- Self-contained, distinctive and attractive communities with strong sense of place.
- A planned mix of land uses and housing types

- Transportation diversity and transit oriented development, including non-motorized travel conditions, maximization of connectivity and street design that efficiently accommodate all modes of transport.
- Preservation of green-spaces and Historical sites
- Incorporation of green and brown agenda-in terms of energy use
- Application of strategic planning strategy

Busia town is an economic center serving as growth engine that would continue to absorb population, generate employment and provide necessary services to its people and the region. Planning for its future was therefore guided by the community’s vision and the smart growth model’s benchmarks. The community’s vision for Busia town was: *To be a vibrant, sustainable and competitive gateway to Kenya with an edge in the areas of hospitality, safety, housing and efficient infrastructure*. In order to plan according to this vision, it was imperative to first examine the different types of land use models that could guide the growth of Busia town. The factors considered included the existing spatial structure, institutional framework and the key sectoral strategies. The three alternative models examined were:

1. Busia as a Agricultural town
2. Busia as a Service town (Tourism and Education)
3. Busia as a Commercial town

These alternative models are discussed below:

4.1.1 Busia as Agricultural Town

Busia can develop as an agricultural town considering its fertile land, topography and good climatic conditions. Most of the food crops can be grown in Busia and perform well. The municipality also has large tracts of land that is not fully cultivated but is suitable for agriculture. The stakeholders also revealed that the town imports food from other regions including Uganda.

Already the community had proposed an industrial park around Mundika which is along Busia-Kisumu road outside the Municipal boundary.

The town has a potential for horticulture that can be practiced along the wetlands from Alupe to Burumba and Mayenje then to Marachi. Agriculture can also be practiced in Angorom towards Alupe. Similarly, the abundance of water with undeveloped parcels in between the developed areas can be used for kitchen gardening. The existence of agricultural training and research institutions can also be beneficial to urban farming. There are also adequate wetlands that are suitable for fish farming in the town.

The existence of electricity and class B2 and C roads can also promote the location of agro-based industries. This implies that the town will have potential for attracting investors interested in agro-based industries and intensive farming.

Promotion of the dairy farming sector can also provide products for related agro based industries to be set up within an Industrial park near Mundika Area.

In order to plan Busia as an agricultural town, the following should be undertaken;

- Delineate agricultural land uses in the town
- Stop urban sprawl and restrict development within the currently built up areas between the CBD, Milimani, Marachi, Ojamii, Burumba, Airport area, up to Alupe junction/road block.
- Improve access to farm implements, on infrastructure and farming methods.
- Provide adequate space for agricultural produce and livestock market in Airport area and towards Alupe.
- Improve on development control in the usage of the land particularly residential developments that are encroaching into agriculturally potential areas.

4.1.2 Busia as a Service Town

This model considers Busia as a border town attracting people from different parts of Kenya and neighbouring countries. As a service centre, the town can attract tourist and educational activities that is presumed to ignite its growth. Service enterprises are considered as key components in the development of sustainable communities and can increasingly contribute to their success, employment and skill levels and in improvement of the quality of life of the residents.

The existing spatial structure of “Alupe Centre, Hotels and lodges, surrounding wetlands, education demand from the region will be beneficial to the town as an educational and tourism hub. However, this does not hinder the growth of other sectoral development since they boost the growth of these two sectors which are envisaged to act as key development drivers for the town. The following will have to be considered;

- a) Conserve and develop wetlands that are almost surrounding the town as golf courses, interspersed with planting of indigenous trees, constructing fish ponds aimed at bringing sports tourism.
- b) Develop Alupe zone into an educational centre by relocating key institutions to the area. This will attract development since many investors will be interested either in the form of real estate or general merchandise to serve the student and lecturers population.
- c) Allow the town to form part of educational centre and a tourist circuit in the western region at large.
- d) Provide necessary infrastructure including sewerage treatment works particularly towards the eastern side of the shopping centre.
- e) Delineate and preserve the wetlands.
- f) Improve on the conditions of the exiting road networks linking various activity zones in the town including B2 and class C roads.
- g) Improve on the street lighting and the overall cleanliness of the town.
- h) Provide adequate space for educational facilities like in Alupe, Burumba area, Marachi and FTC and or Mayenje area.
- i) Increase the coverage of the area under sewer, water reticulation system and electricity supply.
- j) Improve all other roads to all weather standards.

- k) Provide better hospitality facilities with adequate security and parking areas by both the public sector and the PPPs.

4.1.3 Busia as a Commercial Town

This was the preferred model and it postulates Busia as a leading commercial Centre in the county. The model considers the commercial role of the town considering that it is the major commercial hub of the region and the gateway to Kenya from East and Central Africa. The other supportive factors considered include:

1. Adequate and cheap land for investment
2. Existing financial institutions and other relevant agencies making loans available to suitable entrepreneurs.

This model will function best if the following are undertaken;

- Control urban sprawl by enforcing strict development controls as per the zoning regulations proposed.
- Zone land uses according to the set standards
- Improve any of the classified roads near the wetland to bitumen standards.
- Open and improve roads to all weather standards.
- Provide spaces for Business Park within the CBD and ATC area.
- Provide spaces for markets and commercial nodes within the planned zones.
- Improve class B2 road to dual carriage way with adequate road furniture.
- The County Government and the governor to adopt Public Private Partnerships approach to keep the town clean and attract investors.
- Improve the financial sector by attraction banks and financial institutions by providing adequate security suitable sites for their location.
- The financial institutions to be encouraged to provide loans to potential entrepreneurs.

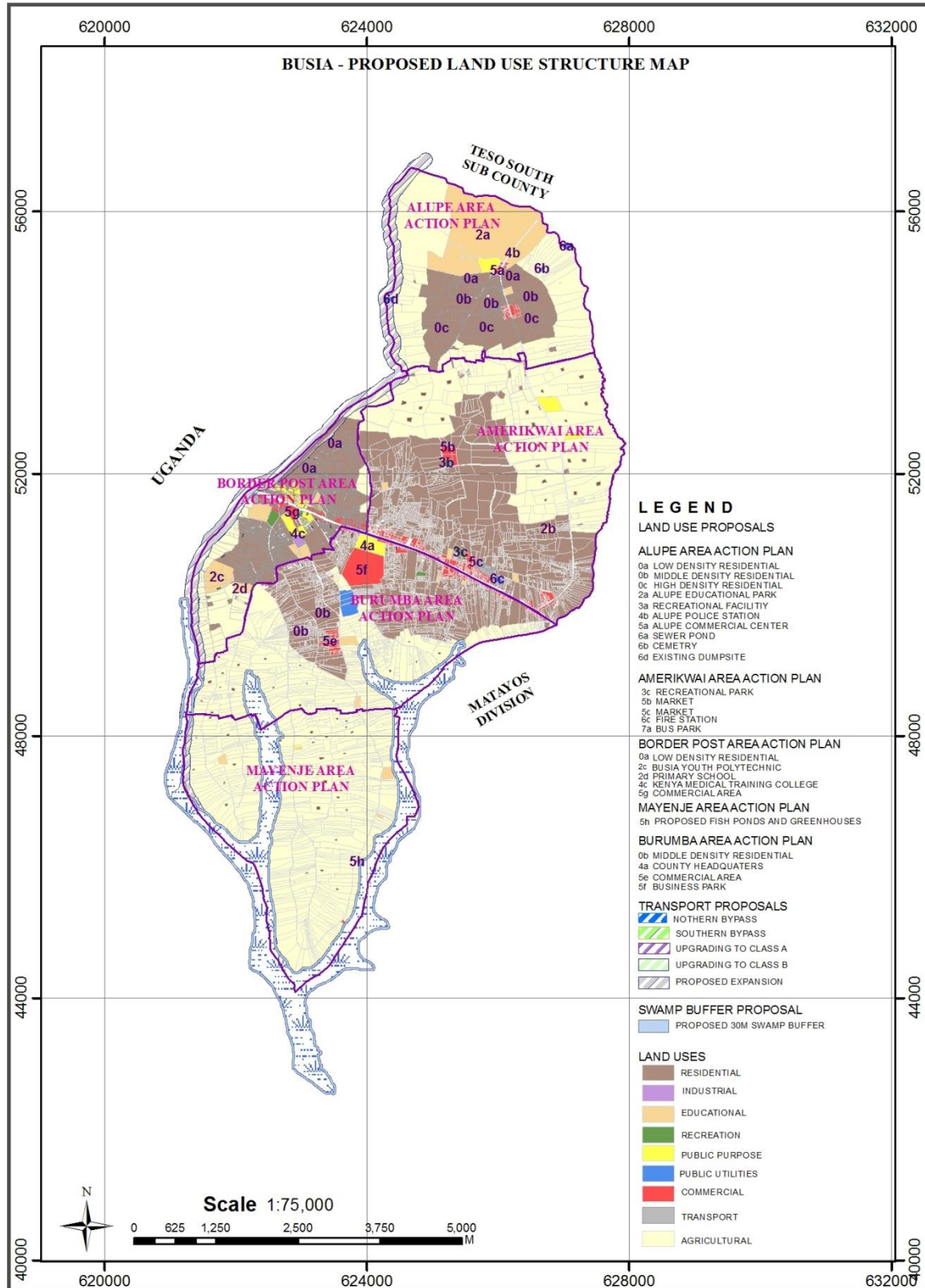
4.2 Busia Strategic Structure Plan

The ISUDP presents the long term development framework for Busia town. It indicates broad land use classifications, transportation corridors in relation to land uses, location of utilities and services. The plan in total shows the form, shape, urban development limits, trends and pattern in developments that Busia town will take.

Structure plan contains broad land use proposal covering environmental, social and economic considerations for the planning period (2012-2030). However, it is characterized by intersectoral coordination. Key Issues include:

- Controlled Development-Land use-Structure Plan
- Residential Development – Planned Mixed use
- Promotion of Investment-Education, commerce, housing
- Improved infrastructure
- Relocation of the Air Strip
- Mixed Use of ATC site to incorporate the county government offices
- Environmental Conservation-reservation of wetlands

Map 4-1: Busia Proposed Structure Plan Map



4.3 Land Use Proposals

4.3.1 Residential

Density of Development

In recommending gross residential densities care has been taken to ensure a spatial and functional system of the built-up services, recreation and communication network. For the purpose of controlling the intensity of development, Table 6.4 gives a range of densities that can be adopted. These may be varied depending of the type of waste disposal, availability of piped water, and the level of building technology to be applied.

Site Planning

i. High Density Residential

Areas earmarked for high density housing include: Marachi, International, Ojamii, Amerikwai and part of Burumba areas. These are the areas already 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. This will consist of mainly multiple residential developments. The total area earmarked for high density residential neighbourhoods is 1579Ha.

ii. Medium Density Residential

Areas proposed for high density housing include Alupe, Burumba, Angorom, Amerikwai, and Bulanda. The total area earmarked for medium density residential neighbourhoods is 1339ha. These areas are projected to have a combination of single and multiple dwelling units but with the latter being more dominant.

iii. Low Density Residential

Proposed low density residential areas include areas such as Alupe, Angorom, Amerikwai, Mayenje, Bulanda and Burumba. The total area earmarked for low density residential neighbourhoods is 2975ha. The delineation of parts of these areas into low housing areas was significantly influenced by the current low population levels. Low density residential areas have been proposed for the larger rural hinterland in order to encourage agriculture. Urban agriculture is expected to take place given the large plot sizes.

4.3.2 Industrial

i. Light Industrial Areas/Jua Kali shed

Approximately 5 hectares, of land have been earmarked for juakali development. This is mostly land that is currently occupied by the existing juakali sheds and the Kenya Industrial Estates (KIE) within Busia town. Also furniture workshops with adequate infrastructure and services have been proposed next to the airstrip to address the needs of town carpenters. The activities expected are often non-offensive and can easily coexist harmoniously within or adjacent to commercial and residential neighborhoods.

ii. Industrial Area

By the year 2030, it is anticipated that Busia town will take advantage of its status as gateway to Kenya and have at least two heavy industries. An area for heavy industry occupying 40 Ha is proposed outside the town in Mundika. It is proposed that by the years 2030 the boundary of Busia town will have reached Mundika. The location of the industrial area is to take advantage of the airstrip which has been proposed to be located in Bumala.

4.3.3 Educational

This plan has proposed Alupe Education and Research Park located in Alupe covering approximately 200Ha. Currently the area houses several research institutes such as KARI, KEMRI, Lake Basin Development Initiative and a campus of Moi University. It has been proposed that the Farmers Training College be relocated to the education park. Other universities and research institutions are to be attracted to this area through offer of free land. With a projected population of 107,162 by the year 2030, approximately 100 primary schools will be required (an additional 1 school) and 13 secondary schools will be required (an additional 9 schools). The plan proposes the development of a secondary school in Amerikwai and a primary school in Bulanda. The plan also proposes development of vocational training facilities to absorb primary school drop outs. It is proposed that Busia Youth Polytechnic be relocated to Marachi where there is enough land for expansion. Approximately 20 acres has been allocated for the polytechnic.

4.3.4 Recreational

There should be four (4) additional recreational parks a small area of recreational space within walking distance of all areas with a residential density above 50 persons per hectare. 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, Busia town and its environs are required to have approximately 40Ha if 1Ha of land is taken to be the minimum land requirement. One of the proposals is to reclaim the border line (security buffer) as a recreational area. Other proposals include a recreational area in Alupe for the Education Park, another in Amerikwai (including the riparian reserve) to cater for increased residential areas; the third park will be at the old airstrip while the fourth will be at Busia Youth Polytechnic along the Kisumu-Busia road. The Busia Municipal Park will be expanded by demolishing the residential houses nest to it. At the arboretum (Ministry of Forestry Park) a cultural centre has been proposed there. A stadium is proposed at Suneka Township. Busia stadium needs to be improved.

4.3.5 Public Purpose

The development of land for public purposes is generally expected to be entangled within the residential and commercial developments. As result no broad zones for public purposes are expected. Existing administrative centers at Busia town are to be maintained. However it is proposed that 20Ha at the Farmers Training College be zoned for the county functions. These include the County offices and the Governors residence. The town requires 5 Police posts by the years 2030 (an additional of 2 police posts). These have been proposed at Alupe (next to the DOs offices), and another at Mayenje commercial node to reduce the distance covered in search of peace and order.

4.3.6 Commercial

The plan proposes that the maximum number of 2 floors in Busia town especially at Border Post Area. In the rest of the town, the floor can go up to 4 and above that for those who will be installing electric elevators. The plan stipulates that buildings will have to provide for underground parking or subsequent floors. Also other commercial nodes are to be created within

market centers in order to ease congestion in the CBD. This includes Amerikwai, International, Burumba, Red Cross area, Alupe, Ojamii and Omeri. Alupe, Angorom and Mayenje commercial nodes should be developed and expanded to discourage linear growth in Busia town. A business park has been proposed at the Farmers Training College covering 50Ha to encourage entrepreneurship.

4.3.7 Public Utilities

a) Cemetery

It is proposed that the existing cemetery is to be expanded and demarcated to separate the Christian and Muslim areas. A new cemetery has been proposed at Alupe measuring 4.5 Ha.

b) Fire Station

It is proposed that the site for the fire station be developed at the old airstrip.

c) Dumpsite/ Sanitary Land Fill

It is proposed that the town's dumpsite/ land fill at Alupe be fenced to reduce pollution.

d) Sewer Pond

It is proposed that a new sewer pond will be developed at Alupe to cater for the Education Park. This will also enable Amerikwai, Angorom and Alupe are connected into the sewer line.

4.3.8 Transportation

The plan proposes changing the existing transport facilities. In order to decongest Busia town and especially the border area, the bus park has been relocated. A new bus park has been proposed at the old airstrip. Two bypasses have proposed as: the Northern bypass; Public Works-Omeri-Ojamii-Amerikwai centre connecting to Busia-Malaba road and connecting back to Kisumu-Busia road and southern bypass; Level 5 hospital-Red Cross-Burumba-Prisons. The B2 (Kisumu-Busia) be expanded and upgraded to class A road (international standard). Busia

Airstrip will be relocated to Bumala. The plan proposes that approximately 15% of the planning area will be used for transportation.

4.3.9 Urban, Peri-Urban and Rural Agriculture

Practice of agriculture should be in harmony with aesthetics of the town and should not be allowed to be a nuisance. In order to promote urban agriculture in the area, there should be adequate provision of infrastructural services to enhance easy access to the markets among other related factors. The agricultural potential that exists within the peri-urban and areas of the municipality must be exploited to the benefit of the residents.

Table 4-1: Busia town and environs proposed land use structure

No.	Land Use	Approximate Size (Ha)	% of Total Land Area
1.	Residential:	5893	43
	Low Density	2975	
	Medium Density	1339	
	High Density	1579	
2.	Industrial	78	0.6
3.	Educational	168	1.2
4.	Recreational/Conservation	344	2.5
5.	Institutions /Public Purpose	76	0.6
6.	Commercial	220	1.6
7.	Public Utilities	22	0.2
8.	Transportation	1086	7.9
9.	Agriculture	5937	43
	Total	13824	100%

4.4 Action Area Plan

Action area plan was prepared in order to give different land use priorities set for different sections of the planning area. It was undertaken by considering specific land use characteristics and limitations within the planning area, including sections' suitability for certain uses, sensitivities or vulnerabilities.

The key benchmarks of area action plan considered for Busia town included:

1. National priorities, policies and strategies the Vision 2030, Planning standards, sustainable development strategies, and other sectoral strategies like Environmental management strategy, housing policy and energy policy among others.
2. Identification “immovables” those uses that require a very specific area and cannot be moved to alternative locations e.g. the fixed infrastructure such as bus parks, major routes and sewerage treatment works. They helped in delineating the planning space for other uses.
3. Allocation of space in such a way that they are as suitable as possible for the proposed use with less negative impact during the planning period.
4. Spatial categories as:
 - Priority areas which are reserved for a specific form of use.
 - Reserved areas where certain uses are given priority over others.
 - Areas suitable for particular uses, available to defined uses which are then excluded from all other areas e.g. sewerage treatment works.

Five (5) Area Action Plans were identified in based on the development trends. However, each action area had different spatial categories or land use proposals based on the land use suitability assessment made. The action area plans had interventions (actions) to be implemented in different periods. The interventions were categorized into:

1. Short-term Intervention (2012-2017)
2. Medium-term Intervention (2017-2022)
3. Long-term Intervention (2022-2030)

4.5.1 Alupe Areas Action Plan

Alupe Area is more critical to development of the Municipality considering its key role as the educational centre. It houses a satellite campus of Moi University, KARI, KEMRI/CDC, Lake Basin Development Authority, Nile Basin Initiative among other research institutions. It has the potential of developing into a major educational centre that will serve the municipality and the whole region. However, it lacks the necessary infrastructure and services like sewerage treatment works, housing and a commercial node to enable it function efficiently. The road network in it is

in poor condition and design while some have not been planned for or opened. In order to ignite its functionality, the following actions should be undertaken:

Short-Term Interventions

- Zone the areas for residential and other compatible land uses.
- Grade the Road Block-Malaba road and Alupe-Ojamii-Public works road to all weather status.
- Provide street lights along the Busia-Malaba road.
- Improve on the drainage and condition of the internal road network linking various activity areas in the zone.
- Provide security and Revitalize the commercial node in the area.
- Provide solid waste disposal bins at the Angorom commercial node
- Build market shades at the Angorom market centre
- Encourage Public Private Sector partnership in provision of housing.
- Fence off the designated dumping site

Medium-Term Interventions

- Acquire land and construct a police post next to the District Officers Offices
- Acquire land for a public cemetery

Long-Term Interventions

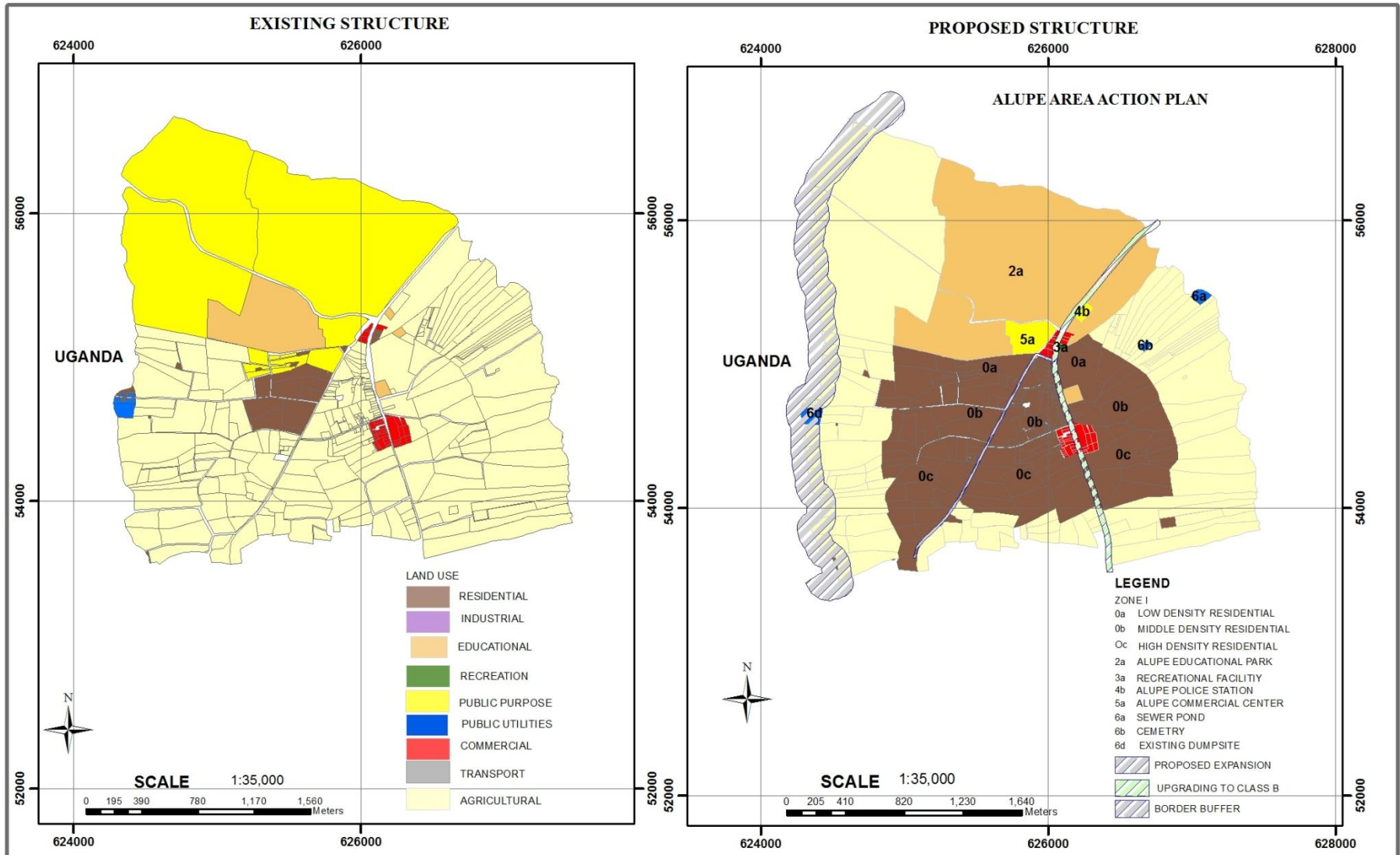
- Construct sewerage treatment works to serve the population
- Provide sites for recreation facilities

Table 4-2: Planning Standards and Regulations for Alupe Area

Area	User	Minimum Land Size	Maximum Coverage	Services Required
LBDA/University/ Polytechnic, Farmer Training etc	Educational	100 Ha	40%	Water, Sewerage and roads (not less than 9m), Open Spaces/Recreation
Hospital	Public Purpose	15Ha	50%	Sewerage, Incinerator, Recreational site

Housing	Medium and Low density Residential	0.10Ha	65%	Sewerage, Adequate building line, Incinerator, Recreational site,
Ojamii Area	High density Residential-Multifamily	0.025Ha	50-60%	Recreation, community facilities, road/streets reserves minimum 9m, sewerage,
Market Area	Commercial	1Ha	100%	Open space, drainage,
Towards Border	Agricultural	2.5Ha	100%	Adequate Access, riparian reserves
Solid Waste Dumping site	Public Utility	2ha	90%	Adequate buffer, suitable collection units
Sewerage Ponds	Public Utility	2Ha	85%	Buffer Zone, Security/Fence
C-Busia-Malaba road	Transportation	-	40%	Adequate reserve (30m), proper drainage, planted strip, street lighting.
Along the Swamp	Agricultural	2.5Ha	100%	Riparian reserves, service lanes, environmental management
Deliverance Church Area	Commercial	0.2Ha	90%	Roads and Lanes, Recreation, electricity, Parking areas, solid waste dump pits
Club Afrique area	Recreational	0.25Ha	100%	Social Hall, Fence, environmental protection, planting of indigenous trees,

Map 4-2: Alupe Area Action Plan



4.5.2 Amerikwai Areas Action Plan

Amerikwai is instrumental in the development of Alupe since it hosts residential houses that have been proposed for various research experts and it will also benefit from Alupe since it will attract high-income residential houses. The area also links Alupe with the main highway that connects to the rest of the country. However, the area is faced with poor road networks and inadequate infrastructure services such as electricity, water, sewerage, and recreational facilities.

Short Term Interventions

- Fence off the Air strip land and demarcate as planned
- Open and grade the road serving the old airstrip to required standard
- Start beautification programme for the airstrip green zone
- Start an agricultural produce market on the proposed site at the old airstrip area
- Approve only business cum residential apartments around old airstrip area.
- Fence off the zoned area for bus park and start process of tendering for its construction
- Intensify development control measures like subdivision schemes, change of users, lease renewal etc
- Open storm drains to avoid flooding
- Open registered roads and paths to required standards
- Discourage bungalow residential developments within the Amerikwai but encourage apartments.
- Encourage well designed business cum residential developments with adequate green area around the old airstrip area
- Delineate, design and start beautification of the proposed site for recreation around the old airstrip
- Provide adequate solid waste disposal bins in each neighborhood
- Expand and improve the Public Works-Ojamii-Alupe road
- Ensure all commercial premises along the highway have fire fighting equipments
- Provide solid waste disposal bins at the Amerikwai commercial node
- Encourage Public Private Sector partnership in provision of housing

Medium Term Interventions

- Construct the fire department offices at the old airstrip site, acquire fire fighting equipments and recruit fire brigade personnel.
- Connect the area to the sewerage network

Long Term Interventions

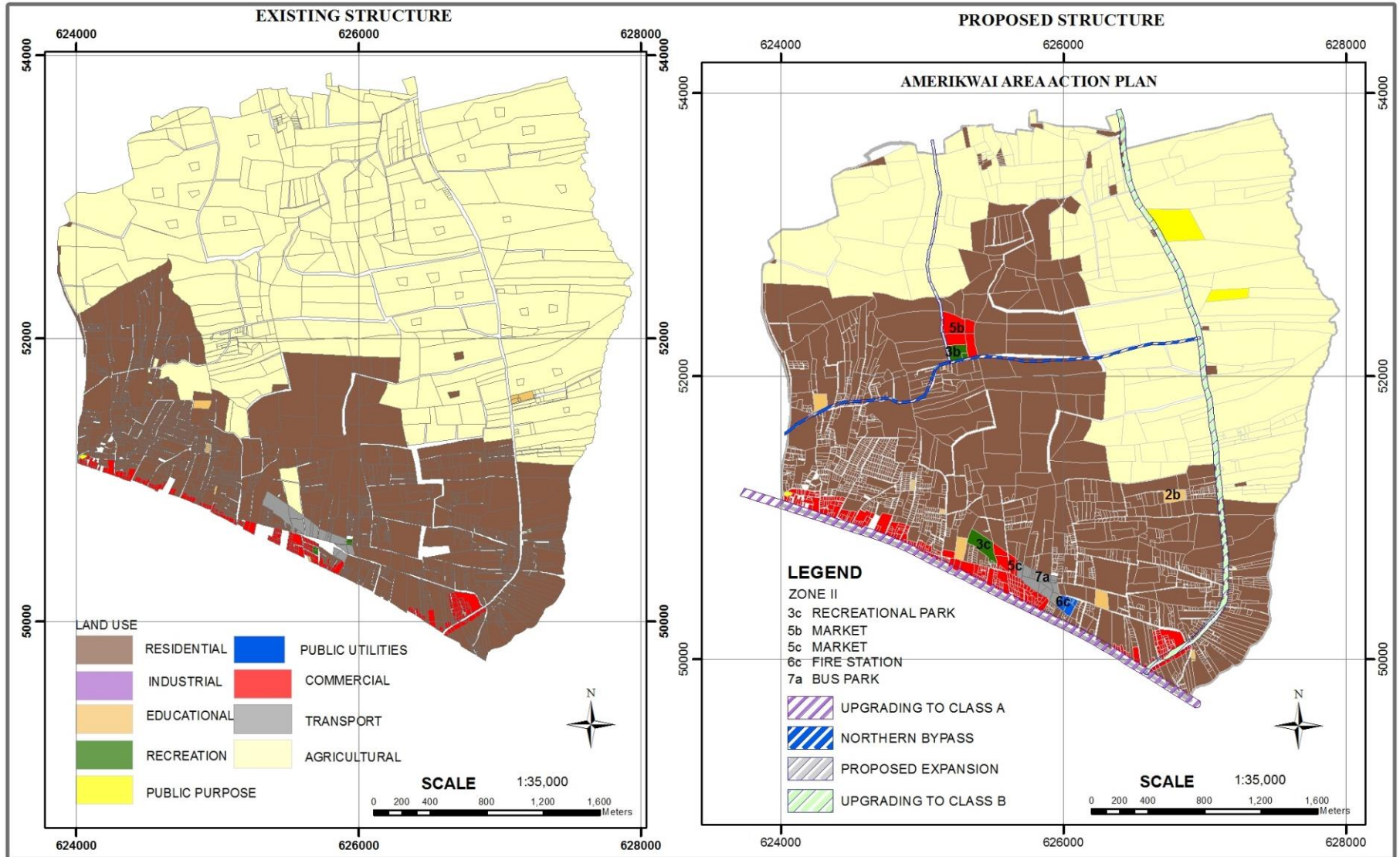
- Identify and acquire land for public secondary school along the Road Block-Alupe road past Amerikwai commercial centre.
- Suitably design the Northern By-pass from Public Works junction to Ojami, Omeri linking to Busia-Malaba road and back to the highway to minimize possible clogging of traffic

Table 4-3: Planning Standards for Amerikwai Action Area Plan

Area	User	Minimum Land Size	Maximum Coverage	Services Required
Air Strip	Commercial (Market)	0.10Ha	90%	Service Lanes, Parking, storm drainage, kiosks
	Recreational (Green Park)	0.20Ha	100%	Planted area, solid waste dumps, service lanes, fence
	Transportation (Bus park)	0.20Ha	100%	Parking, Storm drainage, suitable access point, waste collection site, ablution block, planted strip along the highway
	Public Utility (Fire station)	0.10Ha	100%	Clear Access, Water hydrants, adequate road reserves, Sewerage, road reserves (minimum 9m)
	Business-cum residential (Flats)	0.025Ha	70%	
Air Strip	Transportation	5.0Ha	20%	Relocate air strip to less populated area, low height developments, adequate runway
Ojamii Area	Medium and High density Residential-Multifamily	0.025Ha	50-60%	Recreation, community facilities, road/streets reserves minimum 9m, sewerage,
Salome Academy area towards Alupe	Sub Health centre	2.0Ha	50%	Land, water, incinerator, ambulance, access to higher level hospital
	Commercial centre	1.0Ha	90%	Service Lanes, Parking, storm drainage, kiosks, Planted area, solid waste dumps, service lanes, fence, electricity
	Recreation	1.0Ha	100%	Green park, community hall, sports area
	Residential(Low density and Medium) Semidetached &apartments	0.01Ha	75%	Recreation, adequate roads/streets, community facility, sewerage, electricity
	Public Secondary School	8Ha	50%	Common Sports facility, nursery school, water, electricity

Public Works Offices to Ojamii and Omeri	Northern By-pass	40m reserve	-	<ul style="list-style-type: none"> ▪ Design the bypass ▪ Compensate the affected residents according to economic, environmental and social assessments.
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Map 4-3: Amerikwai Area Action Plan



4.5.3 Border Post Area Action Plan

Border Post action area is instrumental in the development of Busia since occupies the border point and the CBD which are the economic backbone of the municipality. The area hosts the main markets in the town and majority of storey buildings. It also hosts the main government office such the DC, County offices, County Government offices among other government agencies. The area occupies the only biggest informal settlement in the town. However, the area is faced with poor road networks which are narrow and inaccessible whenever it rains. It is congested and poorly planned to project a positive face of Kenya as outlined in vision.

Short Term Interventions

- Start beautification programme for the border-bus park area and B2 road (plant trees along Kisumu-Busia B2 Road)
- Open all roads and service lanes to standard sizes not less than 9m and 6m respectively
- Design drainage system in liaison with Busia-Uganda and open clogged drainage system to minimize flooding
- Design and mark taxi-car parks to standards
- Allow operation of only marked and registered taxis (both motor vehicles and cycles) and international transit vehicles to serve at the border area.
- Install municipal solid waste dumping bins with signage
- Relocate mobile kiosks along the highway to designated points based on products sold.
- Discourage more than two storey commercial building within the border post commercial zone.
- Intensify health regulation and environmental audits for all commercial premises within the town
- Initiate regular painting of commercial buildings as part of beatification programme.
- All new commercial storey buildings must provide adequate parking and passage to the rear/service lanes
- Discourage any development along the security zone and maintain the planned buffer along the border
- Stop construction of pit latrines but encourage septic tanks.

- Provide street lights along the Kisumu-Busia Road for security
- Expand public primary schools within the zone by building additional streams
- Improve structures with the stadium and provide shades
- Start beautification programme for the border-bus park area and B2 road
- Open all roads and service lanes to standard sizes
- Adopt specific architectural designs for low and medium density residential developments to be constructed.
- Discourage any developments on the riparian reserves
- Intensify solid waste collection and disposal
- Expand the Milimani Low Density residential area towards the northern side of the municipality
- Provide street lights within the residential areas

Medium Term Interventions

- Improve the Bus park-Farm view road to bitumen standard.
- Initiate construction of modern buildings along the border post area
- Initiate slum upgrading programme in Marachi
- Maintain suitable height of 2 floors for all commercial buildings around the customs area
- Provide cycle lanes, parking and footpaths
- Improve the conditions of existing schools
- Install parking booths for control and revenue collection at the border

Long Term Interventions

- Upgrade B2 road to class A international highway
- Suitably design the Southern By-pass from Magharibi to Red cross linking to Burumba and back to the highway next to Busia Prisons to minimize possible clogging of traffic
- Relocate the polytechnic to proposed site at Marachi area
- Extend and expand the municipal park to the current polytechnic site
- Grade and tarmac all roads serving the residential areas.
- Relocate the country bus stop to the Air strip site.

- Relocate the Customs trailers clearing office towards Mundika
- Provide a dual carriage way from the border post to Mumias junction
- Provide well designed shade/lounge for passengers on transit at the border post.
- Provide a social hall, communal water points and prepaid electricity service in Marachi
- Set up a police booth in Marachi area for community policing.
- Extend sewerage system to whole of Mjini zone
- Relocate kiosks to the airstrip area and discourage hawking at the border post.
- Relocate the country bus stop to the airstrip site
- Design a modern medium size suitable horticultural market at Marachi area and control sale of horticultural products along the roads.

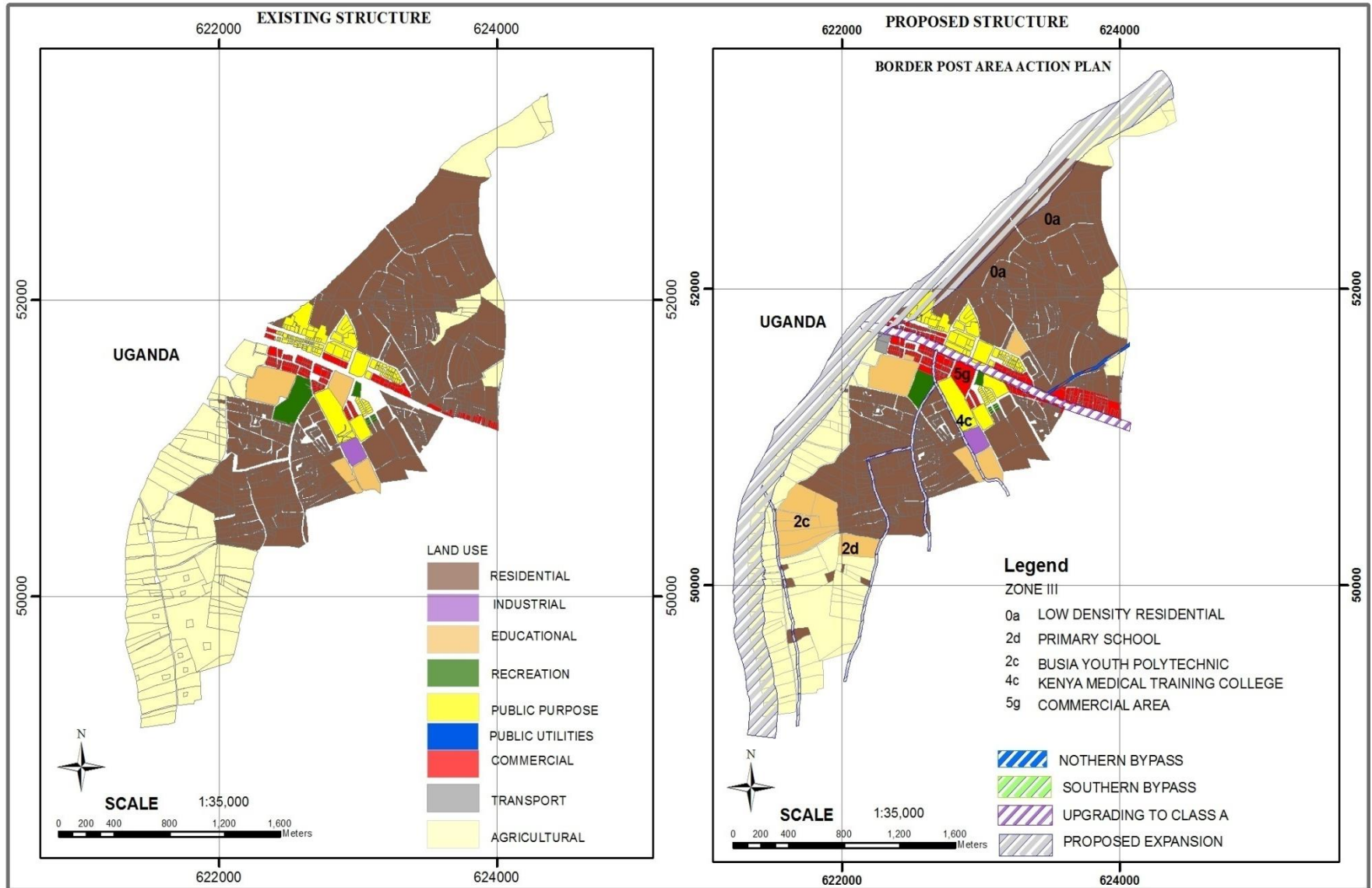
Table 4-4: Planning Standards for Border Post Area Action Plan

Area	User	Minimum Land Size	Maximum Coverage	Services Required
International Border	Public Utility(border)	100m	-	<ul style="list-style-type: none"> ▪ Maintain Riparian reserve free from any development ▪ Improve on Access and drainage ▪ Improve extension services for farmers ▪ Maintain strict development control ▪ Improve the commercial premises ▪ Improve on esthetics ▪ Relocation of <i>kiosks</i> to planned sites, ▪ Maintain building height at 2 floors ▪ Improve internal circulation, Maintain existing commercial nodes ▪ Encourage tourist hotels
	Agriculture	2.5Ha	100%	
	Commercial	0.25-0.05 Ha	75%	
Customs	Transportation	0.3Ha	90%	<ul style="list-style-type: none"> ▪ Redesign parking for buses on transit ▪ Improved aesthetics ▪ No parking of trailers on transit ▪ Remove of unplanned developments ▪ Construct passenger waiting ramps ▪ Improve storm drainage, Provide parking for bicycles and motor cycles ▪ Provide cycle lanes and footpaths ▪ Segregate trailer lanes
Taxi Park/CBD	Transportation	0.25Ha	100%	<ul style="list-style-type: none"> ▪ Redesign the taxi park-flush or angle ▪ Allow registered and marked taxis only ▪ Allow international transit buses/vehicles only ▪ Beautify Taxi parks ▪ Relocate hawkers ▪ Re-plan for mobile stalls, Improve on surface and drainage ▪ Install parking revenue booths

				<ul style="list-style-type: none"> Open service lanes Provide green spaces
DCs Office, County Council area	Public Purposes	0.1Ha	65%	<ul style="list-style-type: none"> Protect the existing government facilities through-issuance of titles Improve infrastructure
Milimani Area	Residential Low density	0.1Ha	75%	<ul style="list-style-type: none"> Extend the coverage Provide recreational facilities Improve on storm drainage Improve on Existing schools
	Educational	3.5Ha	50%	
Polytechnic Area & Government Houses	Educational	10.2 Ha, 3.9 Ha	65%	<ul style="list-style-type: none"> Relocate the polytechnic to lower side of Marachi provide all necessary facilities, Provide a primary school with adequate classes for the institutions schools. Improve on roads, bicycle, motorcycle and footpaths with adequate storm drainage, boulevards, planted strip etc Extend the existing park to cover part of the polytechnic Plan part of the polytechnic and government houses as business park
	Public Park	0.4 Ha	100%	
	Business Park	0.1 Ha	75%	
B2 Road	Transportation-Expressway	Maintain 60 m reserve	-	<ul style="list-style-type: none"> Buffer of Planted strip not less than 10 m
Stadium to Magharibi PSS	Southern By-pass	40m reserve	-	<ul style="list-style-type: none"> Design the bypass Compensate the affected residents according to economic, environmental and social assessments.
Marachi	Residential	0.02 Ha	60%	<ul style="list-style-type: none"> Upgrade the settlement Improve on storm water drainage Provide sewerage and solid waste dump site Open, Grade and Tarmack streets

				<ul style="list-style-type: none"> ▪ Provide adequate pedestrian, bicycle and motorcycle lanes Improve on security through streets lighting and community policing. ▪ Provide community hall, communal watering points, and prepaid electricity lines
Past Proposed Polytechnic site	Agricultural	2.0Ha	100	<ul style="list-style-type: none"> ▪ Discourage uncontrolled land subdivision ▪ Subject developments to thorough environmental impact assessment.

Map 4-4: Border Post Area Action Plan



4.5.4 Burumba Area Action Plan

Burumba area action plan is instrumental in the development of Busia since occupies the proposed county headquarters. This is a major development node for the town as well as the county. Activities of the county government will greatly influence the development of this area. Burumba is currently dominated by medium density residential areas. However, the area is faced with flooding due to its proximity to the marshy areas hence hindering expansion. It also experiences uncontrolled development, and narrow roads.

Short-Term Interventions

- Start beautification programme for B2 road
- Maintain suitable height of 4 floors for all commercial buildings in the zone
- Open all roads and service lanes to standard sizes
- Provide street lights along the B2 road within the secondary roads in the zone
- Install solid waste dumping bins in each neighbourhood
- Intensify collection of solid waste on regular basis
- Alienate part of the ATC land for the County headquarters offices and a business centre.
- Discourage encroachment into the sewerage treatment's buffer
- Discourage development on the wetlands around Burumba
- Undertake Environmental Impact Assessments/ Audits (EIAs) for proposed fish ponds and green houses along the Burumba wetlands
- Intensify solid waste collection and disposal
- Zone the Youth Polytechnic land for commercial and recreational purposes
- Remove developments within the Busia Municipal Council Park (give the parks naming rights to an investor who will be paying advertisement rights to the council)
- Discourage encroachment into the wetlands
- Open all roads to standard sizes of not less than 9m wide
- Maintain suitable height of 4 floors for all commercial buildings

Medium-Term Interventions

- Provide cycle lanes, parking and footpaths
- Remove the residential houses between the councils park and the youth polytechnic and expand the park
- Construct a cultural museum with the Arboretum (including a cultural restaurant/bar)
- Acquire additional vehicles for solid waste collection
- Acquire the undeveloped land next to the District Hospital for its expansion
- Construction/expansion of the District Hospital Mortuary
- Introduce fish farming along the wetland
- Introduce irrigation for urban agriculture (green houses) along the wetlands

Long Term Interventions

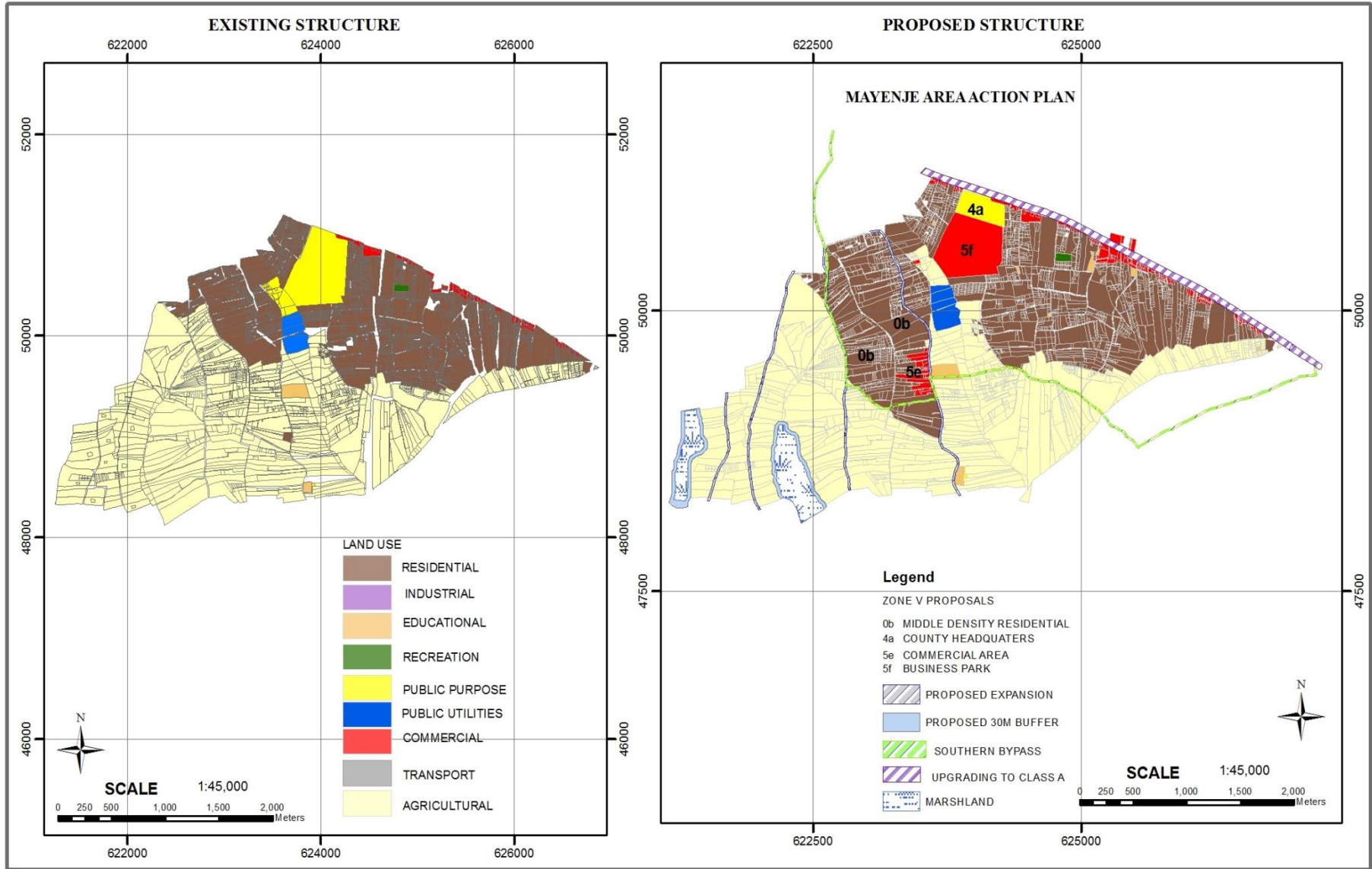
- Extend the sewerage network to serve the zone (ATC to Burumba)
- Adopt the PPPs strategy in solid waste management
- Construct slip roads and zebra cross/flyover on B2 road near ATC
- Move part of ATC activities to Mayenje or Alupe for better utilization of the land.
- Construct a shopping mall at the Youth polytechnic with recreational area in front. The recreational area should have children playing facilities.
- Provide cycle lanes and parking and footpaths
- Acquire land and construct a new public primary school
- Improve on the conditions of the existing schools and other public facilities

Table 4-5: Planning Standards for Burumba Action Area Plan

Area	User	Minimum Land Size	Maximum Coverage	Services Required
ATC	Educational	50.0Ha	100%	<ul style="list-style-type: none"> ▪ Storm Drainage, relocate some functions to Alupe or Mayenje ▪ Adequate roads and lanes ▪ Sewerage network ▪ Solid waste disposal sites ▪ Constant electricity Supply ▪ Adequate parking ▪ Recreational facilities ▪ Electricity and water supply
	Public Purpose-County Headquarters	10Ha	60%	
	Commercial Park	0.2Ha	75%	
Sewerage Treatment Works	Public Utility	2.0Ha	90%	<ul style="list-style-type: none"> ▪ Buffer-planted, fencing, maintenance
Burumba Estate	Residential-Medium and Low density	0.05Ha	60%	<ul style="list-style-type: none"> ▪ Maintain minimum road size to 9m ▪ Open roads and stop encroachment ▪ Improve road condition and sewerage network ▪ Intensify development control ▪ Provide both Primary and secondary school ▪ Provide sporting facilities Provide nature park
	Educational	6.0Ha	60%	
B2 Road	Transportation	Maintain 60m	-	<ul style="list-style-type: none"> ▪ Design and construct slip road serving the County Headquarters ▪ Provide zebra crossings, sinages, flyover and or underground passes

Satellite academy to Mosques area	Agricultural	2.5Ha	100%	<ul style="list-style-type: none"> ▪ Demarcate/define buffer and maintain wetlands ▪ Irrigate land
Busia Dispensary to Bwamani Primary school	Agricultural	2.5Ha	100%	<ul style="list-style-type: none"> ▪ Demarcate/define buffer and maintain wetlands ▪ Irrigate land
Red Cross Area	Residential-Low and Medium Density	0.5Ha	50%	<ul style="list-style-type: none"> ▪ Open up and maintain roads to required standards ▪ Provide proper storm drainage ▪ Provide spaces for recreation ▪ Expand sewer connections, Improve existing educational facilities ▪ Site and prepare solid waste holding grounds ▪ Provide adequate parking
	Commercial Park	0.1Ha	70%	
Past Bulanda Primary	Educational	4 Ha	50%	Common sports facility, water and sanitation, electricity

Map 4-5: Burumba Area Action Plan



4.5.5 Mayenje Areas Action Plan

Mayenje area is instrumental in the development of Busia since it occupies a bigger portion of the wetland. The area is slow in development due to poor road network, distance to the CBD and marshy areas which have hindered development.

Short Term Interventions

- Encourage the development of low density and medium density residential developments around Mayenje
- Discourage encroachment into the wetlands
- Open all roads to standard sizes of not less than 9m wide
- Install solid waste dumping bins
- Minimize residential developments in the zone.
- Discourage development along the streams riparian reserves
- Intensify solid waste collection and disposal
- Acquire land for the relocated ATC

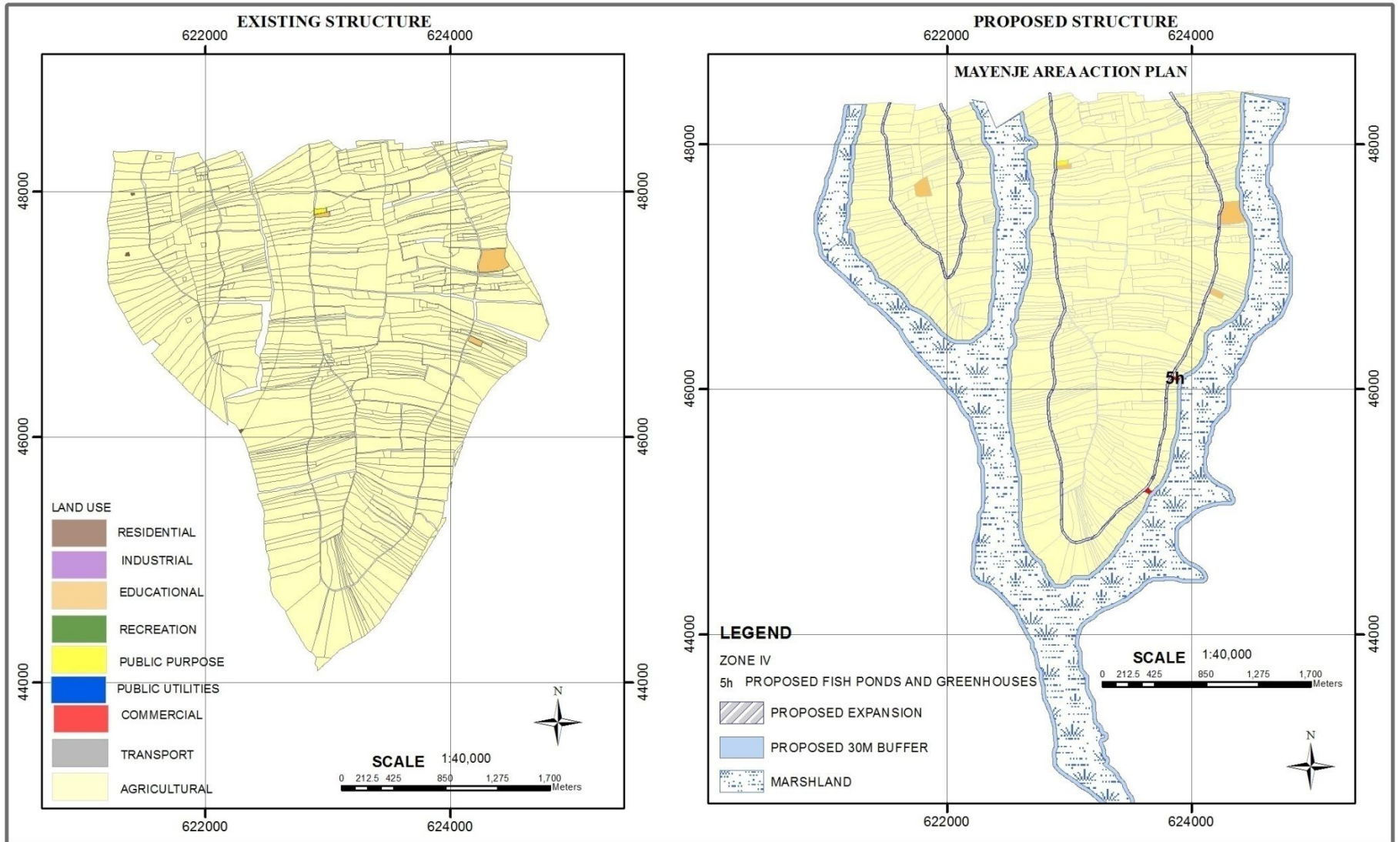
Long Term Interventions

- Introduce fish farming and green houses for commercial purposes
- Introduce a commercial node around Mabale Primary School
- Provide cycle lanes, parking and footpaths
- Improve on the conditions of the existing schools and other public facilities
- Construct a modern ATC with improved facilities.
- development of a police post

Table 4-6: Planning Standards for Mayenje Area Action Plan

Area	User	Minimum Land Size	Maximum Coverage	Services Required
KAG church towards Steko Primary school	Agricultural	2.5Ha	100%	Irrigate land, define buffer, maintain wetlands
Mabale Primary School	Education – Relocate the ATC	50 Ha	100%	Storm drainage, common sports facility, water and sanitation, electricity, accommodation
Marshy Areas	Agricultural – Greenhouses	2.5Ha	100%	Irrigate land, define buffer, maintain wetlands
	Commercial – Fish ponds			

Map 4-6: Mayenje Area Action Plan



5 CHAPTER FIVE: DEVELOPMENT PROPOSALS AND STRATEGIES

The purpose of this chapter is to provide for strategies and their specific measures/actions and creating a framework for implementation.

5.1 Housing and Settlement Upgrading Strategy

This section touching on housing and settlement upgrading strategy looks at various ways of increasing housing stock in the municipality. This includes analyzing housing demand and supply, upgrading informal settlements and then projection of housing needs up to the year 2030. The 2020 vision for housing and urbanization is “an adequately and decently housed nation in a sustainable environment”. The objectives are to increase housing units supply from 35,000 to 200,000 by the year 2012 and undertaking high quality urban planning especially low-cost housing and providing mortgage finance.

5.1.1 Vision

The vision for this strategy is to be: *A county headquarter with adequate and decent housing in a conducive environment by the year 2030.*

5.1.2 Objectives of the Strategy

- To improve accessibility within the informal settlements
- To improve security in Marachi Estate
- To improve housing condition within Marachi Estate
- To increase access to water within the informal settlements
- To reduce flooding incidences in the informal settlements
- To connect the informal settlements with the sewer system
- To improve solid waste management

5.1.3 Housing Strategies

Housing strategies encompass a variety of actions that include development of formal housing as well as settlement upgrading. Both aspects involve the development of infrastructure and the necessary facilities conducive to human habitation. As provided for by the United Nations under the International Covenant on Social, Economic and Cultural Rights adequate housing includes the following elements:

- Legal security of tenure
- Availability of services, materials, facilities and infrastructure
- Affordability
- Habitability
- Accessibility
- Location
- Cultural adequacy

It is therefore imperative that interpretation of the right to accessible and adequate housing in the Kenyan Constitution will have to take these elements into account. In order to provide for these, it is important that land use planning precedes housing activities.

Principles for the provision of formal housing will be guided by planning standards and building regulations operating in Kenya, while slum upgrading strategies will be governed by the Kenya Informal Settlements Improvement Programme (KISIP).

5.1.4 Residential Planning Standards for Busia Municipality

Planning for residential settlements involves designation of housing estates. An estate is a spatial planning unit, which is adequately provided for in terms of basic community facilities bordered by principles through roads and has an identity. The service center which forms the focal point of estate satisfies the maximum walking distance from the perimeter. The population of the estate

should be able to support the services within the physical entity. It is recommended that an estate shall have 100 households on the average.

The principles in estate planning include the following:

- Land use distribution
- Density of development
- Site planning

5.1.5 Land Use Distribution

Residential areas are seen as integral parts of the overall built-up area (dwelling plots) together with day to day services, recreation and communication network. Table 6.2 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.

Table 5-1: Average Observed Land Use Allocations in Residential Neighborhood Development

Number	Land use	Percentage of Developed Area		
		High Density	Medium Density	Low Density
1	Dwelling plots	40-60	64-74	80-90
2	Recreation	21-29	7-16	-
3	Community Facilities	5-20	9-20	0.1-1
4	Roads and streets	4-15	6-7	8-8.8
		1-7	3-4	0-2.2

Source: Physical Planning Handbook, 2008

5.1.6 Density of Development

In recommending gross residential densities care should be taken that they create in spatial and functional meaning an independent system of the built-up services, recreation and communication network. For the purpose of controlling the intensity of development, Table 6.3 gives a range of densities that can be adopted. These may be varied depending on the type of waste disposal, availability of piped water, and the level of building technology to be applied.

Table 5-2: Recommended Densities for Residential Development

Type of Dwelling	No. of dwelling per Hectare	Allocation per dwelling (M ²)
Detached Bungalows		
(i) Low density	10	1000
(ii) Medium density	16	500
(iii) High density	35	285
Semi-detached and Row Housing		
(i) Low density	20	417
(ii) Medium density	32	333
(iii) High density	70	250
Multi-family Dwellings		
(i) Low density	50	200
(ii) Medium density	60	168
(iii) High density	70	143
(iv) Special density	133	75

Source: Physical Planning Handbook, 2008

5.1.7 Site Planning

Table 5-3: Recommended minimum plot frontage by type of housing

Type of Residential Frontage	Minimum Frontage in Metres		
	Detached	Semi-detached	Row housing
1. Slum upgrading schemes	70	75	75
2. High density housing	70	75	75
3. Medium/low density housing	60	60	70

Table 5-4: Recommended minimum plot sizes for different housing schemes

Type of housing	Minimum plot size in square metres		
	Detached	Semi-detached	Row Housing
1. Slum upgrading schemes	223.2	148.8	111.6
2. High density housing	334.8	223.2	167.4
3. Medium/low density housing	465	309.7	232.5

Table 5-5: Minimum plot coverage recommended

Type of residential development	Maximum plot coverage		
	Detached housing	Semi-detached housing	Row housing

1. Slum upgrading schemes	50	65	65
2. High density housing	50	60	65
3. Medium/low density housing	40	50	60

Table 5-6: Minimum setback of dwelling from plot lines

Type of residential development	Minimum set-back in metres		
	Front	Side	Rear
1. Slum upgrading schemes	2.5	1.5	3
2. High density housing	3	1.5	4.5
3. Medium/low density housing	4.5	3	6

Table 5-7: Minimum street width per given number of plots

Number of plots	Street width
1 – 20	9m
21 – 50	12m

Source: Physical Planning Handbook, 2008

5.1.8 Slum Upgrading for Busia Municipality

According to Acioly (2007), Slum Upgrading is a process of intervention in the physical, social, economic and juridical structure of an existing human settlement or simply defined as economic, organizational and environmental improvements undertaken cooperatively and locally among citizens, community groups, businesses and local authorities. Actions typically include; installing or improving basic infrastructure; water reticulation, sanitation/waste collection, storm drainage and flood prevention, electricity and security lighting.

5.1.9 Objectives of Slum Upgrading

Slum Upgrading Strategy is primarily driven by recognition that actions related to slum-upgrading, environmental management, infrastructure development and service delivery at large cannot be achieved unless there is a direct recognition that slums are a development issue, which needs to be faced. This is a direct response to a number of policies namely:

- Achieving poverty reduction and contributing to the Millennium Development Goals (MDG) specifically; Goal 7 “Ensure Environmental Sustainability”, Target 11 which

articulates the commitment to improve the lives of at least 100 million slum dwellers by the year 2020;

- Responding to Kenya Constitution 2010 (Article 43,1(b) that provides for the right to accessible adequate housing and to reasonable standards of sanitation
- Kenya Vision 2030 which aims to provide the country's population with adequate and decent housing in a sustainable environment. Improvement in the quality of life of all Kenyans, the supreme goal of Vision 2030 cannot be achieved if large sections of rural and urban population are inadequately housed.

Slum Upgrading Strategy as provided for in Kenya Settlement Upgrading Programme (KENSUP) and Kenya Informal Settlements Improvement Programme (KISIP) generally entails participatory planning and implementation guided by the following principles and considerations;

- (i) Provision of land tenure security and housing tenure security to enhance investments in slum areas
- (ii) Flexible legal and institutional framework that allows local initiatives in Slum upgrading
- (iii) Availability of appropriate urban planning framework that recognizes slums and slum dwellers / residents as resources.
- (iv) It is essential that an integrated approach to slum upgrading is designed.
- (v) Mobilization and coordination of stakeholders and resources for slum upgrading initiatives locally, nationally and internationally
- (vi) Slum upgrading needs to be complemented with preventive actions that stall the emergence of new slums. Hence the need for a twin track approach towards existing and potential future slums.

5.1.10 Strategies for Slum Upgrading

The following modes of development are proposed:

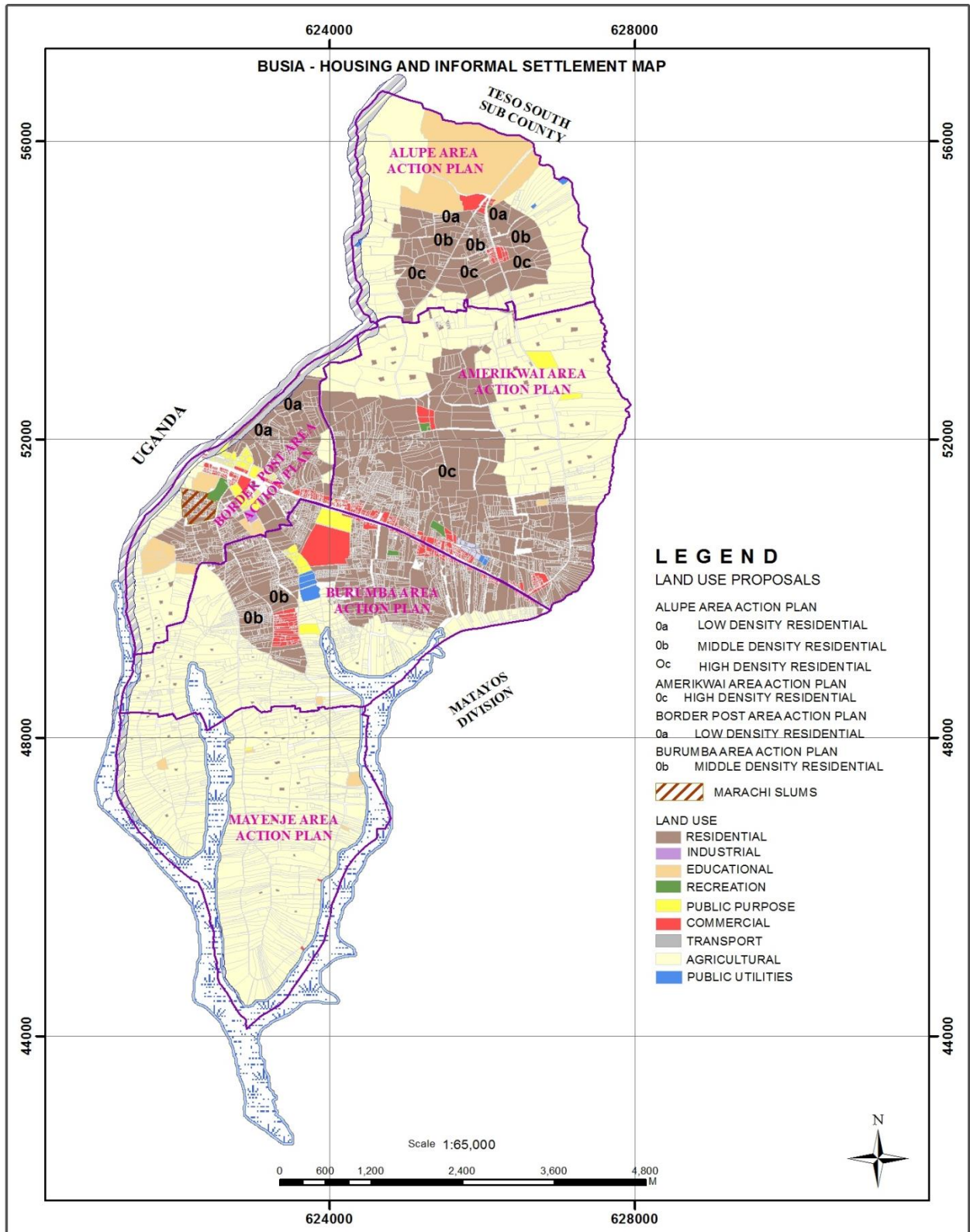
1. Provision of site and service plots with core units (kitchen and shower/toilet, or kitchen, shower/toilet and one room) to be incrementally upgraded as the owner completes the house.
2. Provision of serviced residential plots with secure tenure and slab(infrastructure and social facilities and a foundation slab),while the owner completes the building process
3. Provision of serviced residential plots with secure tenure, while the allottees carry out housing development on their own.

In order to achieve the above proposed strategies it is necessary that the County Government of Busia undertakes the following steps:

- i. Preparation of physical development plan for Busia
- ii. Mobilization of resources - mobilize financial resources from the public sector, development partners, private sector, civil society and beneficiary settlement communities and individuals.
- iii. Institutional arrangements for slum upgrading implementation
- iv. Undertaking social and economic mapping about who will be affected
- v. Preparation of digitized base maps for each informal settlement to aid planning
- vi. Planning for residential estates/neighbourhoods
- vii. Acquisition of land for infrastructure provision
- viii. Execution of construction works

Map 6.1: Housing and Informal Settlement Upgrading Strategy

Map 5-1: Housing and Informal Settlement Strategy



5.2 Environmental Management Strategy

With the development, the urban areas are growing into bigger agglomerations with ever increasing influx of people creating demand for support services viz. water supply, transportation, drainage/sewerage, garbage collection and disposal etc. that is far exceeding the supply of these services. While taking up developmental activities, the assimilative capacities of the environmental components i.e., air, water and land pollution are rarely considered. Also, lack of proper land use control is resulting in poor land use compatibility. The haphazard and uncontrolled developmental activities leading to overuse, congestion, incompatible land use and creating high risk environment to the city residents in the form of deterioration of the natural and socio-economic living conditions which specifically includes overcrowding, congestion, lack of sufficient water supply, unhygienic living conditions, air and noise pollution etc.

However, in large urban agglomerations, the problems cannot merely be solved by pollution control measures such as control of pollution at source, providing sewage treatment facilities etc. The environmental aspects are not usually considered while preparing master plans or budget plans to produce well co-ordinated and balanced developmental plans right at the planning stage itself. The best use of the land needs to be assessed in terms of not only the economic aspects but also the environmental aspects. There is need therefore to integrate environmental concerns in the planning for urban development.

5.2.1 Vision

The vision for this strategy is to be: *A city with quality of life through sustainable management of the environment and natural resources.*

5.2.2 Objectives of the study

The overall objective of the study is to come up with an environmental management strategy for the Busia town.

The specific objectives of the study are:

- To come up with proposals for upgrading trunk infrastructure within Busia Municipality

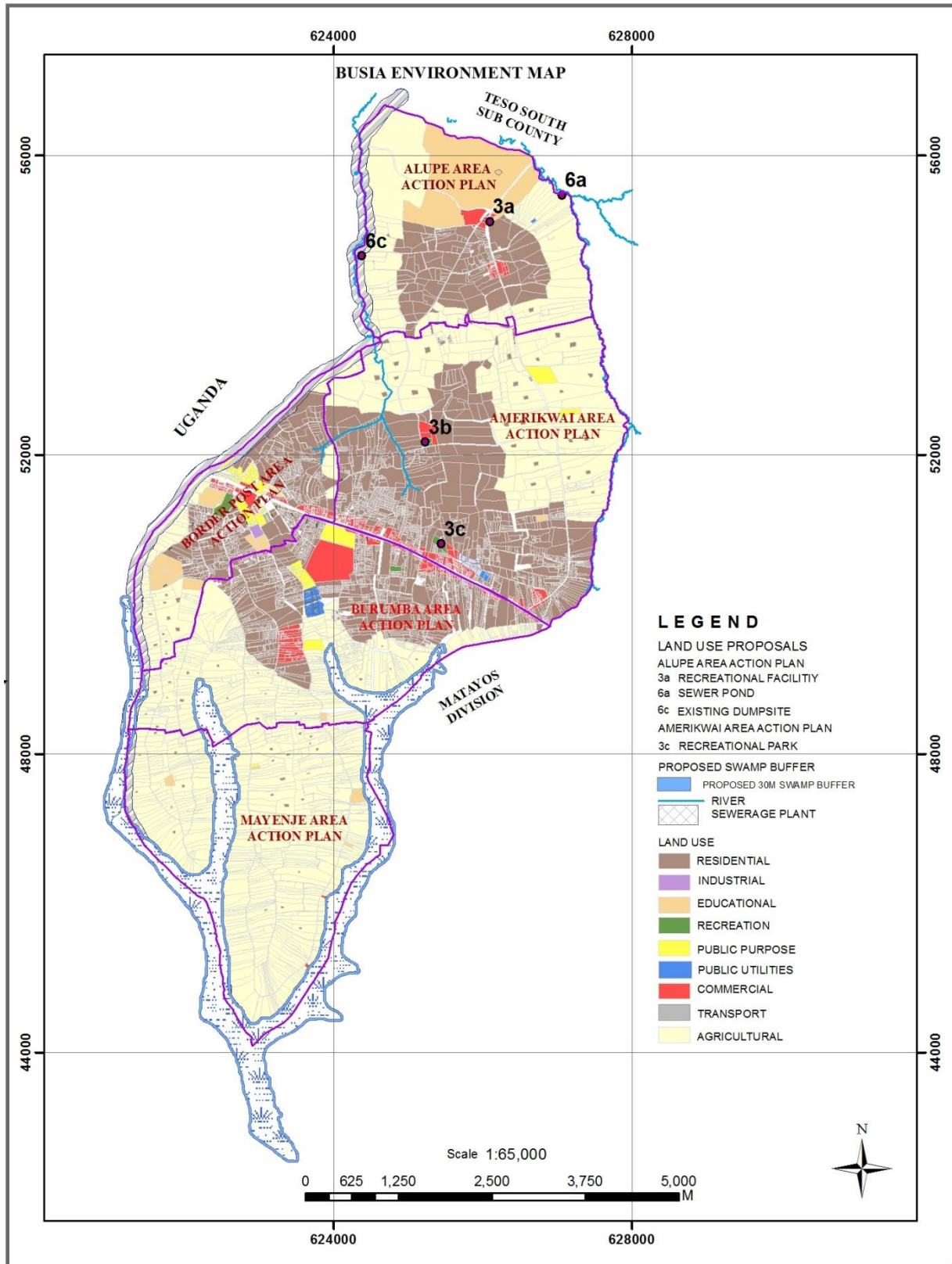
- To propose protection measures for catchment area of major water resources
- To come up with plans for preservation of historical heritage buildings and monuments
- To provide proposals for conservation of natural water courses from pollution
- To provide proposal for the improvement of the environment and ecology of the region.

Strategies

- Protecting and preserving natural water courses
- Improving access to portable water
- Expanding sewer coverage
- Provide solid waste management
- Provide recreational parks in Busia town
- Reducing environmental hazards and disasters

Map 6.2: Environmental Management Strategy

Map 5-2: Environmental Management Strategy Map



5.3 Transportation Strategy

5.3.1 Introduction

Transport is one of the major challenges within the planning area. This strategy is based on pertinent challenges that should be addressed to improve the quality and extent of the transport system in Busia Municipality. The proposed recommendations focus on the broad objective of improving access and mobility in addition to integrating other elements of a good transport system such as, comfort, reduced travel time, convenience, efficiency and low transport costs.

As documented in this report (chapter four), Busia town experiences most of these challenges like many other towns in Kenya. Compounded by the position of Busia as a border town, the challenges of transport become all the more apparent.

5.3.2 Key Transport Challenges and Opportunities

From the discussion above, the following is a summary of the main transport challenges in Busia Municipality:

1. The only transport system available in the municipality is road-based. However, almost all the roads forming the urban road network are not classified and developed to proper engineering standards that can appropriately serve and respond to the growing travel demand. The supply of transport services is dominated by motor cycles and bicycles, which may not be sustainable in the future.
2. The roads within the town are in poor condition, leaving only the international road to Uganda as the main primary road in the town. Due to the traffic mix along this road, there are problems of congestion, traffic safety, and disorganized non motorized traffic (NMT) movements.
3. Transport and land use planning and development have not been synchronized. Without intervention, this will ultimately result into the undesired urban sprawl, increasing motorized travel demand and making the provision of public transport ineffective because of scattered development.
4. There is lack of professional approach to urban transport in the town as the problems are just emerging and have not reached levels where they are apparent. Institutional

arrangements and human resource capacity should be put in place now to start addressing the issues before they become critical.

5. The operation of the border post has a great impact on the current and future transport situation in Busia in terms of the need for parking for transit vehicles, storage of transit goods, security of the transit passengers and freight, and the integration of transit and local traffic within the town.

Busia town has a number of opportunities that it can exploit to mitigate the challenges it is facing. Some of these are:

1. Busia is a gateway town and has the potential of attracting substantial cross-border trade, especially in the hospitality industry if it can provide safety and convenience of international travelers. Its location at about 100km from Kisumu International Airport can further make it exploit that potential.
2. The town can develop to the preferred border crossing to Uganda, Rwanda and the Democratic Republic of Congo due to its proximity to main growth poles in Kenya's western region including Mumias, Kisumu, Siaya and Bungoma.
3. The town has important institutions such as Moi University at Alupe, Kenya Agricultural Research Institute (KARI), Lake Basin Development Authority (LBDA), and Kenya Industrial Estates (KIE), and can attract many more with better town planning.

5.3.3 Transport Strategies for Busia Town

Previous sections gave the current transport challenges in Busia, the ideal transport situation for any urban area, and strategies Kenya has proposed to apply in its urban areas. This section draws lessons from these discussions and makes specific strategies for Busia.

Road Classification

There is need to have a functional classification of the existing roads so that adequate reserves may be acquired and preserved to allow for their development into the correct geometric layout that will ensure effective service to the town, by serving the main attraction and production of travel as described above.

The Highway Capacity Manual classifies urban streets as either Principal (Primary) or Minor (Secondary) Arterial, and specifies four design categories: High Speed; Sub-urban; Intermediate and Urban.

Principal arterials are very important for mobility and have very minor function for access. They connect important activity centres of major transport generators and relatively long trips within and through a town. Service to adjacent land is subordinate to the function of moving through traffic. Minor arterials connect and augment the principal arterial system. They are important for traffic mobility, access points along them are substantial, and serve trips of moderate length within relatively small geographical areas.

The urban street is further classified by its design category as summarised in Box 1.

Box 1: Urban Street Design Categories

High-speed design represents an urban street with a very low driveway/access-point density, separate right-turn lanes, and no parking. It may be multilane divided or undivided or a two-lane facility with shoulders. Signals/intersections are infrequent and spaced at long distances. Roadside development is low density, and the speed limit is typically 70 – 90 km/h. This design category includes many urban streets in suburban settings.

Suburban design represents a street with a low driveway/access-point density, separate right-turn lanes, and no parking. It may be multilane divided or undivided or a two-lane facility with shoulders. Signals/intersections are spaced for good progressive movement (up to five signals/intersections per mile). Roadside development is low to medium density, and speed limits are usually 65 – 75 km/h.

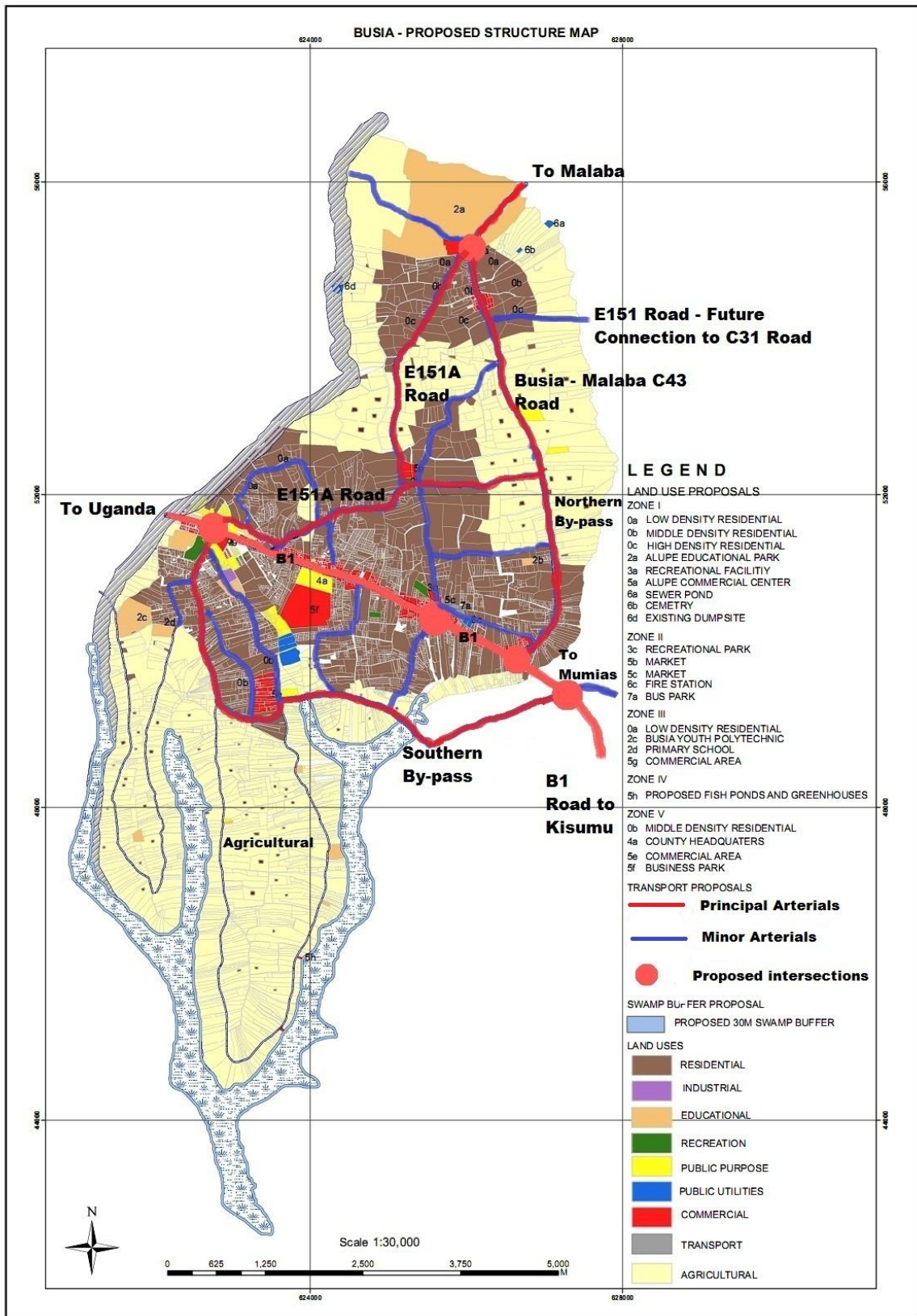
Intermediate design represents an urban street with a moderate driveway/access-point density. It may be a multilane divided, an undivided one-way, or a two-lane facility. It may have some separate or continuous right-turn lanes and some portions where parking is permitted. It has a higher density of roadside development than the typical suburban design and usually has four to ten signals/intersections per mile. Speed limits are typically 50 to 65 km/h.

Urban design represents an urban street with a high driveway/access-point density. It frequently is an undivided one-way or two-way facility with two or more lanes. Parking is usually permitted. Generally, there are few separate right-turn lanes, and some pedestrian interference is present. It commonly has six to twelve signals/intersections per mile. Roadside development is dense with commercial uses. Speed limits range from 40 to 55 km/h.

Source: Adapted to Kenyan situation and based on the Highway Capacity Manual, 2000, Transport Research Board, USA.

The hierarchical classification proposed for Busia town is shown in Figure 8.1 and discussed below.

Map 5-3: Proposed Functional Road Classification of Busia Town Roads



Principal/Primary Arterials

These roads are shown in colour “red” and include:

1. Section of the Kisumu – Busia (B1) Road from the Mumias road junction to the Border Post. This road should have no direct access to the adjacent properties, except at designated intersections shown in Figure 6.1. The design category should be intermediate as defined in Box 1 above. To ensure that it works effectively, two-way service roads should be provided on each side of the road for access to the various developments, on-street parking, and Non-Motorized Transport provisions. The designated intersections should be improved to medium sized roundabouts in the short/medium term, but in the long term to traffic signal control.
2. Two by-pass roads should be planned for as Principal Arterials to intermediate design category: (i) A Northern By-pass through the C43 Malaba road with a connection to the E151A road and intersecting with the B1 road at the Busia Teachers Cooperative Building; and (ii) A Southern By-pass starting near the Border Post on B1, through the Busia Stadium, St. Andrews Academy, Kenya Red Cross, and to the B1 again at the Mumias junction (Figure 6.1). The Southern By-pass should be designated as the default route for traffic that is destined to the border post, especially international freight transport. In addition, the Southern by-pass will form the necessary “urban land use boundary” between commercial/residential areas and the agricultural lands in the southern part of the town. The remaining parts of C43 and E151A roads should also be developed to the level of principal arterials to suburban design category.
3. In the long term future, the E151 road should be developed to a by-pass road connecting the Alupe area to Kemondo on the Mumias Road (C31). An outer southern by-pass may also be developed from Mayenje through Kwastore to Mundika on the Kisumu – Busia Road.

NMT facilities along the principal arterials should be separated for safety and comfort for the users. Appropriate facilities (footbridges and level crossing) should be provided at intervals not exceeding 0.5 km.

Reserves for the principal arterials should not be less than 30m wide to allow for future expansion as the traffic increases.

Minor/Secondary Arterials

These roads are highlighted in “blue” in Figure 1 and include all the major roads that connect to the principal arterials from the residential and commercial areas within the town. There are many more which should be identified, ideally at an average of 1 km separations.

NMT facilities should be provided along all minor arterials, either separated because of high motorized traffic volumes, or for mixed use.

Other Urban Streets

Other urban streets will be required for access to the various individual developments. Since the main function is access, adequate facilities for pedestrians and parking for non-motorised and motorised vehicles should be provided as a matter of priority. Street lighting will also be required to ensure safety at night.

5.3.4 Public Transport system

One of the basic challenges in urban transport is to ensure a sustainable balance between public and private modes of travel. This can be achieved by adopting two general categories of measures, that is, public transport incentives and automobile disincentives. Since it will be too sensitive to adopt any automobile disincentive measure given the low level of auto ownership in Busia, the focus for ensuring a balanced development of urban transport should concentrate on providing public transport incentives and priorities. Some of the broader strategies that Busia should consider in the medium/long term future include:

1. Provision of public transport priority measures, which include: (i) in the short term – well designed and sited bus stops which are at least 500m from the main origins and destinations; and, bus terminals with booking offices and covered passenger waiting areas, and well lit. In the medium/long term – road lanes for the exclusive use of buses; and, priority intersection controls for public transport vehicles.

2. In the long term, encourage the use of higher capacity public transport modes in the central parts of the municipality for better usage of road space and increases public transport supply.
3. Allow for controlled competition for routes by organized private transporters to reduce wasteful competition by operators who use very large numbers of small capacity and low-cost matatus and motor-cycles inconsistent with travel demand. In its extreme form, the wasteful competition can lead to inefficient use of the road network.

The model described above will require reforms with clear division of responsibilities between the public and private sectors. The public sector should develop and maintain the public transport network, and legislate and regulate transport services. The private sector should provide the transport services on the allocated routes. The new roles of the Council, through the new Transportation Unit, should be responsible for overall planning and regulation, including:

- Planning the route network in the best interests of the town and passengers;
- Providing the necessary infrastructure such as bus stops, bus ways, and terminals;
- Negotiating with and sub-contracting operators for routes or route packages in a competitive bidding process, and;
- Monitoring and controlling (quality) the performance of such operators.

This model has the strongest merit as it presents a combination of transport authority planning and control of public transport services on the one hand and competition between independent operators for the operation of public transport services on the other.

Public – private partnerships (PPP) in the transport sector should be for the development, management, and maintenance of terminals and stages should be under an appropriate PPP arrangement to release public funds for other urban infrastructure development and ensure operators pay for the service offered. The Municipality should also encourage the many small-scale operators to form associations in order to pull together their resources to purchase standard vehicles, with capacities of between 30 and 60 passengers, to reduce the over-reliance on individual boda boda operators. The large operators will be easier to regulate for better public transport services.

Air Transport

A new location for an airport should be identified and reserved for the development of an airstrip in the short term, but should be adequate for a regional airport in the long term. It should be located at least 15 km from the town centre to allow for the natural expansion of the town.

Walking and Cycling

Since walking and cycling are essential for the use of public transport, streets must be made safe from crime, friendly to disabled, and include public amenities, such as shops and restaurants, and planned street trading. These conditions can only be fulfilled if special attention is given to speed-reducing measures on streets where mixed traffic cannot be avoided or is allowed.

Parking

On-street parking should be provided on the minor and urban streets, but not on principal arterials. Development of off-street parking should also be encouraged by the Municipality as part of commercial and office space developments.

5.3.5 Action Plan and Monitoring and Evaluation Framework

In the short term, say within 2 - 3 years, the Municipality should:

1. Adopt/amend the proposed transport strategies with the participation of all key stakeholders and the Busia town community, prioritize investments, and mobilize funds for their development;
2. Establish a transportation unit within the Municipality to plan, supervise development and operation of the urban transport system;
3. Enact traffic by-laws consistent with the proposed strategies and for effective use of road space, including those for on-street trading, garbage dumping, and illegal settlement on road reserves, and parking in the central area;
4. Acquire land for the development of the airstrip, for truck parking, public transport reserves and other proposed transport provisions;

5. Undertake, in cooperation with the national urban roads authority, road classification as proposed in this report, and acquire the necessary land reserves.
6. Liaise with the relevant national road authority in the design and development of the proposed by-passes;

In the medium/long term, from 3-10 years, the Municipality should:

1. Continue the development of the principal arterials, especially the by-passes;
2. Develop the minor arterials and the urban streets to all-weather roads;
3. Re-structure public transport to allow for the introduction of high occupancy vehicles in the town;
4. Develop frameworks for transport user charges for terminals, parking, operation of businesses within road reserves to allow for injection of private finance in transport infrastructure investment;
5. Encourage private finance investment for the development and maintenance of transport infrastructure – public transport terminals, parking areas, and advertisement on road reserves; and,
6. Further equip and strengthen the transportation unit to effectively manage travel demand.

5.3.6 Implementation Risks and Mitigation Measures

As Busia Municipality embarks on the implementation of the proposed strategies, its leadership must be aware of the risks that can derail their implementation. Of all the risks to more sustainable urban transport, the lack of political commitment is particularly important. When the political will is lacking, the problems can be recognized, but may not be deemed important enough to warrant attention. Chaotic transport system is often the outcome, with the consequence of high transport costs, environmental degradation, and poor mobility. Poor urban transport system is unattractive to investors and a significant barrier to the development of other sectors of the urban and regional economy.

Other main obstacles to sustainable urban transport are:

- Lack of national policy framework prioritising financing of urban transport;
- Poor land use policy integration and co-ordination with transport development;
- Public resistance to policies, if they are not involved in their development or are not clearly explained them;

- Weak and unsupportive legal or regulatory framework;
- Poor data quality and quantity to enable informative decisions to be made;
- Unsupportive individual behaviours and choices of transport suppliers and consumers, in terms of habits and circumstances like perceptions on the mode to use, time, price, comfort and safety.

These risks and obstacles can be minimized, or completely eliminated, through having a common vision shared and accepted by the community. It should be a vision that will serve the values of the community. The challenge, however, is to have a cohesive community that has a common responsibility to make the town a better place to live in. The emergence of residents' and professional associations in Kenya is a positive step towards the achievement of this goal in the long-term. More work is required in the poor neighbourhoods to encourage the formation of such associations and participation in urban planning matters. Participation of all neighbourhood associations will increase the range of ideas on the table, and ownership of results.

In addition, there is need to have leaders that can accurately name the problem, see the connections between interests, and inspire the community to be better than they are currently. The future will be in coalitions between the leaders and members of the communities, and the leaders of the future will be those able to create the partnerships and collaborations needed to advance overall community values.

5.4 Social Infrastructure Strategy

Vision 2030 aspires for a country firmly interconnected through a network of roads, railways, ports, airports, water and sanitation facilities, health facilities, education, recreation, energy and telecommunications. The government therefore has given the highest priority to investment in the nation's infrastructure. The government is also determined to improve security in order to lower the cost of doing business and to provide Kenyans with a more secure living and working environment.

5.4.1 Health

There is need to acquire more land for future expansion of the District Hospital. As compared to Alupe Sub-Hospital, Alupe has more land that can be used for future expansion.

Strategies

- Improving health facilities in the municipality
- ✓ Acquiring more land next to the District Hospital for expansion.
- ✓ Upgrading the District Hospital to a Level 5 Hospital.
- ✓ Posting of adequate medical personnel to the health facilities.
- ✓ Constructing and expanding the public mortuary at the District Hospital.

There is one Public Cemetery located next to the sewer pond and it is not fenced. There is also a private cemetery called Malingu in Bulanda area. The municipality lacks a designated burial site for the Muslim Community. Currently, where Muslims are interred is full and inadequate.

Strategies

- Expanding the cemetery facilities
- ✓ Acquiring land and expanding the cemetery at the sewer pond.
- ✓ Fencing the cemetery at the sewer pond to demarcate between Muslim's and other religions.
- ✓ Acquiring land in Alupe for a public cemetery.

5.4.2 Education

Two of Vision 2030's flagship projects for education and training projects for 2012 are to build and fully equip 560 new secondary schools to accommodate the increasing number of students graduating from primary schools and create "Centres of Specialization" for each of the Vision 2030's economic growth sectors. As shown in Table 8.16, the municipality has more than enough ECDs/pre-primary facilities which can serve the population up to the year 2030. The only concern may be the condition of these facilities and the quality of education being offered. Some facilities are located in a small land thus discouraging children from playing. However, these can be improved through supervision. Some of the facilities are dilapidated and should be closed.

Strategies

- Improving pre-primary/ECD education in the municipality
 - ✓ Regular monitoring and supervision to ensure education standards are maintained.
 - ✓ Improving facilities for the public pre-primary facilities.
- Improving access to primary education in Busia Municipality
 - ✓ Building additional more classrooms at Bulanda Primary School to increase the number of streams.
 - ✓ Acquiring land and building a new primary school within Bulanda and Mjini zones.
- Providing facilities for secondary education
 - ✓ Building a new secondary school within Amerikwai along the Busia-Malaba road.
 - ✓ Expanding and increasing the number of streams in the existing secondary schools.
- Promoting Busia as an educational and research hub
 - ✓ Zoning land in Alupe as an education and research park.
 - ✓ Attracting public/private and international universities and research centres to establish campuses/offices in Alupe.

5.4.3 Recreational Facilities

These include Open spaces, Gardens, playgrounds, riparian reserves, social halls, cultural centre and stadium.

Parks

There are two recreational parks in Busia town. These are provided by the County Government of Busia and the National Environment management Authority (NEMA). These parks are within the Busia town and can only be accessed by the people in the town. In the estates, there are no parks and only a few play grounds and open spaces which are used for recreational purposes. There is need to establish green parks away from the CBD to cater for other parts of the municipality.

Areas of interventions:

- Acquire more land for recreational purposes.
- Create public conveniences such as washrooms, and solid waste disposal bins in the existing recreational facilities.
- Use money from the Ministry of Youth to develop the recreational facilities from donated lands and also reposes or surrender back the grabbed spaces for recreational facilities, especially the riparian reserve which could be used as a recreation site.
- Encourage land owners to surrender between 4%-10% of their land for recreational facilities during subdivision (should be legislated in the councils Bylaws).
- Acquire land for recreational facilities.
- Invite private organization to provide recreational facilities e.g. Kenya railways has a lot of land; Recreation facilities should also be established in all residential estates
- There is need to construct a museum in the municipality
- Making use of recreation facilities found in the public in institutions, which can be a way of creation of revenue.

Strategies

- Improving and Providing recreational facilities in the municipality
- ✓ Erect structures and shades in Busia stadium
- ✓ Demolishing developments that have come up within the Busia Municipal park
- ✓ Acquire land for establishing four (4) new green parks; in Amerikwai along the Public Works-Alupe road, at the Busia Airstrip, Busia Youth Polytechnic and next to Alupe Shopping centre.
- ✓ Establishing a cultural museum at the Busia Arboretum.
- ✓ Source for an investor to put up a shopping mall at the Youth Polytechnic's land (with children services).

5.4.4 Communication

Communication is dominated by the use of telephone (both landline and mobile). The landline telephone lines are however not widely used due to their inefficiencies and vandalism. Most units are also not connected to this communication line. The mobile industry fuels communication within the town with the sole communication service providers being Safaricom, Zain, Orange and Yu networks. The municipality also has access to courier services. Public Service Vehicles (PSV) Bus companies, security companies and Kenya Postal Corporation are the main competitors providing this service in the municipality.

5.4.5 Security

Busia Municipality has one (1) police station, Divisional Offices in Alupe with Administration Police (AP) Camp and several Chief camps. Police Patrol Base in Mundika also assists the municipality with security issues even though it is located outside the municipality's jurisdiction. Busia Prison is also located in Mundika which is just a walking distance. The United Nations recommend a ratio of 222 police officers for every 100,000 people (1 police officer: 450 people). Busia Police Division with a population of 430,000 has three (3) police stations, two (2) police posts and four (4) patrol bases.

There is need for a police post in Alupe because of increasing number of education and research institutions operating in that area. This Police post will also secure activities that will be created by the proposed Alupe Education Park. Busia Municipality should have three (3) police stations/posts by the year 2012 which should increase to five (5) by the year 2030 (Table 6.17).

Table 5-8: Projected number of Police Facilities and Personnel for Busia Town

Year	2009	2012	2017	2022	2027	2030
Police Station/Post	3	3	4	4	5	5
Deficit	-	-	1	1	2	2
Police Officers	137	152	172	195	221	238

Source: Field Survey, 2011

Strategies

- Improving security facilities in Busia town
 - ✓ Acquire land for building a police post in Alupe.

- ✓ Acquire land for a police post in Mayenje
- ✓ Increasing the number of police officers to 200.
- ✓ Improving police houses to increase their morale.
- ✓ Developing friendly community policing strategies.

5.4.6 Electricity

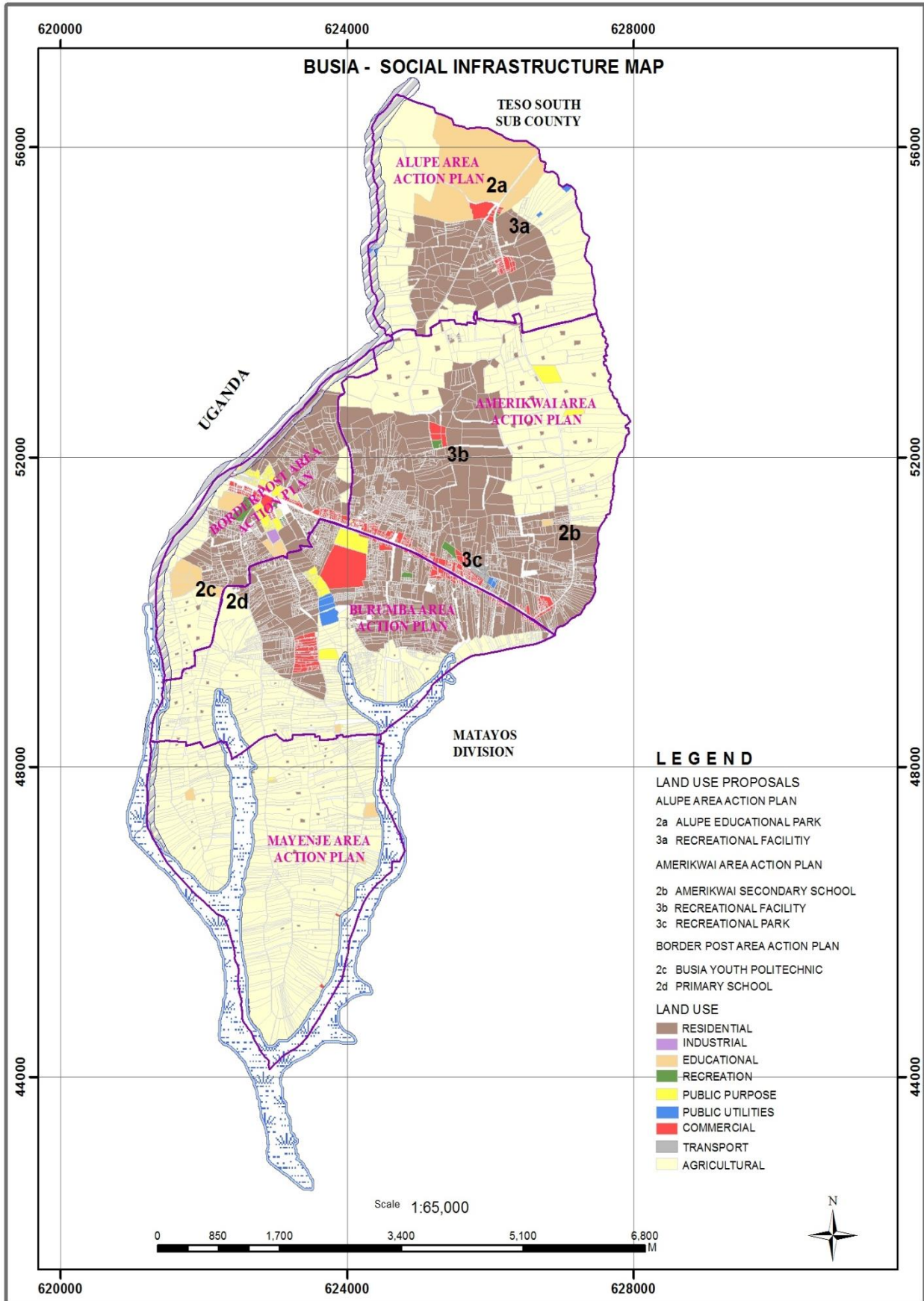
Development projects recommended under this strategic urban development plan will definitely increase demand on Busia's electricity supply. Currently, Busia experiences regular power cut which is not good for investors. Approximately 15% have access to electricity in Busia Municipality. This is skewed in favour zones closer to the CBD.

Strategies

- Expand electricity distribution within the municipality
 - ✓ Expand road reserves to accommodate electric lines
 - ✓ Increase electricity network within the council
 - ✓ Connect the town to Rang'ala-Mumias sub-station

Map 6.4: Busia Social Infrastructure Strategy

Map 5-4: Busia Social Infrastructure Strategy Map



5.5 Busia Economic and Investment Strategy (BEIS)

5.5.1 Vision, Objectives and Goals of the Strategy

The main objective for preparing a detailed Busia Economic and Investment Strategy as per the TOR is to guide actual economic and investment particularly those that were prioritized by local stakeholders and the Busia County Government. Other objectives include:

- Preparation of long and short term development strategies for management of wholesale markets and hawkers.
- Evolution of the industrial location policy for Busia and its hinterlands by adopting complimentary policies for promoting investment and rapid industrialisation by taking advantage of the Trans-African highway and tapping opportunities across the borders.

Vision

A City that Promotes Sustainable Economic and Investment Development in Busia County through Diversification and Expansion of Investment Opportunities

This vision statement has been derived from various sources including stakeholder consultations, government policy documents and institutional objectives dealing with economic and investment development in the country that are currently being implemented.

Main Objectives of the Strategy

- To create a conducive economic and investment environment by alleviating major constraints.
- To enhance Regional Competitiveness of Busia as an economic and investment hub.

Objectives of Busia Economic Investment Strategy

As a result of the consultation process with business and industry representatives, key economic and investment sectors have been identified, each with strategies and actions that aim to achieve the BEIS. It is expected that Council's major focus will be on these identified sectors over the next twenty (20) years.

The objectives of the BEIS are to:

- Create an environment that is attractive and conducive to business and industry development.
- support existing business and industry
- build on the region’s competitive advantages
- encourage sustainable and innovative practices
- ensure infrastructure meets industry needs
- encourage partnerships, business networks and alliances
- coordinate the promotion/marketing activities of the region
- Plan and facilitate economic development.

The anticipated outcome of the implementation of the BEIS will be the retention and generation of employment and investment opportunities and the further development of identified industry sectors across the region. This will be achieved through Council’s leadership in guiding and resourcing the facilitation of the BEIS and the commitment to creating and sustaining strategic partnerships across the country and internationally.

5.5.2 Strategies

In order to achieve the overall objective of Busia Economic and Investment Strategy, Vision, mission and strategic objectives, the following goals have been developed.

- I. Goal 1: Improve the economic and investment environment.
- II. Goal 2: Building Capacity of the community to spur entrepreneurship.
- III. Goal 3: Support entrepreneurship and indigenous

Table 5-9: Goals and Strategies

Goal	Strategy
Improve the economic and investment environment	Improve infrastructure particularly roads, electricity, water and sanitation as catalyst for the Northern transport corridor.
	Reduce legal, regular and bureaucratic red tape
	Development of a Busia town Industrial Park at Alupe
	Enhance and promote Public-Private sector participation

	Promotion and advertisement of Busia as a Trade and Investment Hub
	Improve measures for combating crime and insecurity
Building Capacity of the community to spur entrepreneurship	Development of an educational park
	Development of education and industrial partnerships to improve the skill base of the municipality
Support entrepreneurship and indigenous economic development	Develop a strong support system for the retention of entrepreneurs and small businesses.
	Promote the development and retention of urban and peri-urban agriculture and livestock
	Promote tourism activities

Goal 1: Improving the economic and investment environment

The outcome of this goal will be rising economic and investor confidence, long-term planning and investment by the private sector. Investor confidence is the outcome of several factors including security of persons and property, reliable infrastructure, efficient administrative, legal and regulatory framework. The goal is supported by several strategies such as the following:

Strategy 1: Improve infrastructure particularly roads, electricity, water and sanitation as catalyst for the Northern transport corridor.

The main aim of this strategy is the improvement of basic infrastructure such as roads, electricity, water and sanitation and drainage systems. This strategy will be supported by the following actions.

- Construction of new and quality roads around the municipality and the wider Busia County considering that Busia Town is the proposed county headquarters.
- Maintenance of access roads to increase mobility which is a hindrance during rain seasons.
- Increase electricity supply to the municipality including the rural and peri-urban areas. This will reduce the number of black-outs experienced in the municipality.
- Increase of water supply to the municipality to cover areas that have inadequate water supply.
- Construction of sanitation facilities such as public toilets

- Improvement of drainage systems in the municipality which is a hazard during rainy season.
- Improve access to housing loans to improve housing development in the municipality.

Strategy 2: Reduce legal, regular and bureaucratic red tape.

The main aim of this strategy is the reduction of bureaucratic red-tape experienced by investors and the community while in search of service delivery. This strategy will be supported by the following actions.

- Review, develop and implement a regulatory framework that reduces the time taken to acquire development permits.
- Put up measures that are geared towards reducing corruption incidences.

Strategy 3: Development of a Busia Industrial/Business Park

The aim of this strategy is to enable wholesale and retail traders/SMEs in the municipality have a zoned plan where they can start their business. In support with Busia County Government it is proposed that traders are facilitated to acquire workspaces through the construction of modern sheds. The current markets are located next to the border, which are congested and untidy. The target group is SME traders and other economic associations in the municipality such as the Cross-Border Trade Association. The following actions will be implemented.

- Expansion of the Jua Kali shed to accommodate small-scale industries
- Develop and supply basic infrastructure to the park
- Seek proposals from interested investors

Strategy 4: Enhance and promote Public-Private sector participation

In Kenya, the government policy is to encourage partnership between the Public and Private Sectors in policy formulation and implementation. The use of PPPs as a tool for development in Kenya is constrained by the lack of clear regulatory framework, absence of comprehensive incentive regimes for the Private Sector to participate in PPPs and a lack of harmonisation on the application of best PPPs practice in both the Public and Private Sectors. Actions to be implemented include:

- Opening dialogue between government agencies and private developers

- easy access of information on investment opportunities in the municipality

Strategy 5: Promote and advertise Busia as a Trade and Investment Hub

The actions to be implemented include:

- Institute a transparent, trusted and effective governance and regulatory framework to support the town's business environment.
- Host financial and business roundtable meetings between the private and private sector.
- Propose to host financial and business roundtable meetings in the municipality for the nation and East African region.
- Improve access to financial loans from the many financial banks in the municipality.

Strategy 6: Improve measures for combating crime and insecurity

- Install and extend street lights along the Kisumu-Busia road from the border point to Mundika and along the Busia-Malaba road upto Alupe.
- Increase police patrols in the municipality.
- Purchase one (1) police patrol car to be used at the Alupe area.
- Create a police base/station at Alupe area.
- Institute and enforce community policing in the municipality and especially in the rural and peri-urban areas.

Goal 2: Building Capacity of the community to spur entrepreneurship

The outcome of this goal will be development and availability of young, skilled and industrial-based labour of which can attract investors to the town. Innovation and entrepreneurship tendencies through skilled labour is the outcome of several factors including development of an educational park, development of education and industrial partnership, and increased employment opportunities. The goal is supported by several strategies such as the following:

Strategy 1: Development of a Busia-Alupe Educational Park at Alupe area.

To spur development in the northern section of the municipality, another growth zone will be created in Alupe area. This zone will primarily to host educational and other research

institutions so that they can share their research hence creating synergy. Actions earmarked for this strategy include:

- Develop a master plan for the Busia-Alupe Educational Park
- Transferring the Agricultural Training College to Alupe
- Transferring the Youth Polytechnic to Alupe area.
- Create more land in Alupe to attract new universities and research institutions willing to open branches in Busia.
- Zoning of land in Alupe education park for building of student hostels

Strategy 2: Institution of educational and industrial partnerships

This strategy aims at creating industrial attachments for Busia-Alupe Education Park graduates. The partnership will be between these educational institutions and research firms at Alupe and industries around the western Kenya region such as Mumias Sugar Company and Pan Paper Mills Limited among others. Actions to be undertaken in support of this strategy include:

- Create dialogue between educational institutions and industries in the region.
- Organize for graduate industrial attachments in companies in the region such as Mumias Sugar Company, health and other public or private institutions.
- Instituting an international student exchange programme by creating dialogue with these international education institutions.

Goal 3: Support Entrepreneurship and Indigenous Economic Activities

Strategy 1: Develop a strong support system for entrepreneurs and small businesses.

A critical aspect of building sustainable economic competitiveness is building a strong support network that will encourage entrepreneurs to create new businesses and help small businesses thrive. The stimulation of entrepreneurship through the formation and development of new commercial businesses and social enterprises can play a key role in employing underutilized resources in the region.

Entrepreneurs are the economic engines of a community, as are small businesses in general. They are employers, people who mobilize economic resources and stimulate further economic activity because of their efforts, and serve as stabilizing factors in a community. The following actions have been proposed:

- Improve access to financial loans for the SMEs.
- Establish new and permanent markets in the municipality
- Relocate the Bus Park from the border point to the current Busia airstrip.
- Create another fresh food market at the current Busia airstrip.
- Encourage marketing groups such as co-operatives among different economic sectors.
- Gazette and expand areas to locate jua kali enterprises.
- Promote ICT related SMEs
- Organize regular capacity building workshops to strengthen SMEs in the municipality.

Justification

Busia County Government has a weak economic base in addition to lack of industrial activities. The town relies on transportation activities and its related activities such as the hotel and food industry. These SMEs operate haphazardly especially the transport sector which employs majority of the youths. Improving access to credit to these SMEs is critical for their development. Most of the biggest commercial banks in the country have opened branches in the municipality, in addition, the Agricultural Finance Corporation, Micro-Finance institutions and savings and credit co-operative societies also have offices in the town.

Jua Kali sheds are available in the municipality which is critical for development of entrepreneurial skills. This is supported by the presence of the Kenya Industrial Estates in the municipality. The municipality can supplement the efforts being undertaken by Konza Technology Park being implemented under the Vision 2030 to operate a business park or depot for supplying these products to East and Central African countries.

Strategy 2: Promote the Development and Retention of Urban and Peri-Urban Agriculture and Livestock

One of the major challenges to Urban and Peri-Urban Agriculture and Livestock (UPAL) is the non availability of adequate land. Areas that have been gazetted urban areas have been converted to commercial plots encroaching into agricultural land. This is worsened by legislations which are not supportive to UPAL farming giving other developments an upper hand. Other specific challenges include:

- Competition between agriculture and construction of buildings for commercial purposes is on the increase due to rapid urbanization. Agricultural land is slowly diminishing and the resultant effect is less production. Urban land use planning and development does not take into consideration of agricultural activities while the exploitation of open spaces has not been assessed to determine their potentiality.
- Space for disposal of waste from UPAL activities.
- Access and use of available spaces in urban areas.

Actions/Activities

- Promote use of appropriate agricultural and livestock technologies that are suitable for reduced land for agriculture e.g. use of hydroponics, high value and land intensive crops and livestock enterprises.
- Promote the establishment of kitchen gardens and green houses.
- Promote the development of fish farming along wetland.
- Organize at least two fish farming training workshops annually for capacity building.
- Support coordination between fish farmers and financial institutions for easy access to credit.
- Integration of UPAL as a component of urban land planning by the Local Authorities and central Government. For example, land should be zoned so that irrigation activities can take place next to treatment plants to allow use of treated sewage.
- Development of a framework for improving access and use by farmers to idle/unutilized land for agricultural production.
- Strengthen crop and livestock disease surveillance and control of livestock movement.
- Modernize existing and build additional markets specifically meant for food commodities.
- Strengthen existing and promote formation of new commodity based producer and consumer organizations.
- Review, development and implementation of regulatory framework that is supportive of UPAL by relevant public and private institutions.

Justification

The climatic condition in Busia town is suitable for agricultural purposes which can be used to promote horticultural farming and small-scale agricultural activities. In addition, the municipality is surrounded by a long wetland moving from the north to the south and also from the center of the town. Availability of these natural resources is in contrast to food insecurity affecting people and which has forced them to source for food from neighbouring regions and country. The presence of this long wetland is an opportunity for promoting green houses, fish farming in the municipality. The weather is also conducive for urban agriculture especially kitchen gardens which can supply the town with some of the re-known traditional vegetables associated by the Luhya and Teso communities.

The few food commodities produced in the municipality (Teso South District) mostly maize is sold at the weigh bridge junction along the Busia-Malaba road (Road Block Estate). This maize is sold at an illegal market where middlemen/women buy fresh maize corn. This is justification for construction of a fresh foods market at the current airstrip which is approximately 200 m from that junction. In addition, the only fresh foods market is located in the CBD and is inadequate to accommodate more traders.

Strategy 3: Promote Tourism Activities.

International (tourist) arrivals peaked at 1.8 million in 2007. However, the sector was severely impacted by the post election violence resulting in a steep decline in international arrivals to 1.2 million in 2008. Since then, the sector has been on a steady recovery with 1.6 million arrivals in 2010. Majority of regional tourists originate from the Busia and Malaba borders because many people from the Eastern and Central Africa use the two border points as compared to Namanga and Isibania border points. The following actions/activities will aid in improving tourism activities in the municipality:

To develop and support the tourism and lifestyle industries through the development of the region's infrastructure, tourism product and marketing programs will encourage increase visitation to the region.

- Promote conference tourism in the municipality
- Create land for the construction of a community hall in the town
- Promote Busia Municipality as a regional conference/workshop hub

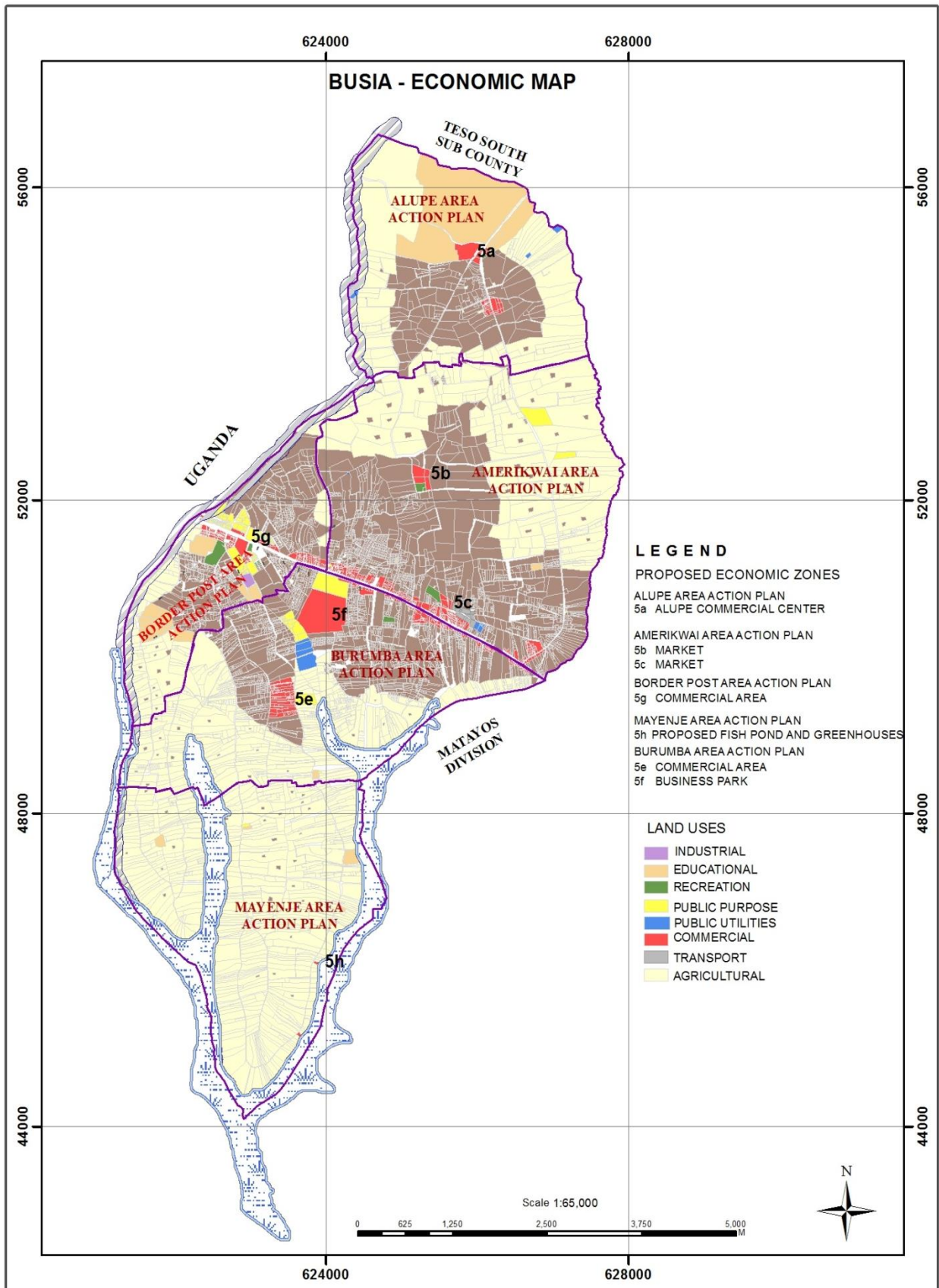
- Promote culinary tourism (Luhya and Teso traditional foods)
- Promote eco-tourism along the border by landscaping the no-man's-land for tourists who would like to have a feel of a foreign country.
- Create land for the construction of a cultural centre/museum
- Preservation of heritage sites
- Promote the development of sports tourism
 - ✓ Promote sports activities that will attract people to the stadiums
 - ✓ Organize for sports championships between Busia County regions or even Busia Kenya and Busia Uganda.
- Improve infrastructure in the green parks, playgrounds, stadium and other recreational facilities.

Justification

Approximately 50,000 people pass through Busia town on their way to East and Central African countries for business and tourism activities. Majority of these tourists can be tapped to be spending days in Busia before crossing to the East and Central African Countries if tourism activities can be promoted in the town. Busia is home to the Luhya and Teso communities who are known for their enticing cultural activities which can also be harnessed into tourism activities. The culinary activities of the two communities such as *ingoho* (chicken), *ing'eni* (fish), *obusuma* (ugali) and traditional vegetables such as *mrenda*, *esuga*, *seveve* (pumpkin leaves), *evuvi* (Kunde) *edodo*, *emboga*, *esaka* among others can promote cultural tourism. In Kenya, western Kenya is known for producing sporting athletes in the fields of football, rugby and volleyball which is lacking in the town.

Busia Municipality is generally green and can be converted into beautiful green parks and nature trails especially along the wetland. These eco-tourism activities can be extended to the area along the border point (no-mans-land) which can be landscapped into a beautiful green park. Map 6.5 shows the Economic and Investment Strategy for Busia.

Map 5-5: Busia Economic and Investment Strategy Map



5.6 Revenue Enhancement Strategy

Busia County Government faces many challenges in serving the needs of its community and citizens. The council has for a long time been facing challenges on revenue generation and ineffective fiscal management in a growing economic climate. To date, Busia municipality has funded its budget through different sources, including locally generated funds and central government funds other sources include donors and projects from individuals. The council is faced with the challenge of balancing the existing funds which outweighs services to be delivered. Working in environment with limited and traditional funding sources, Busia town must enhance its revenues and wisely manage its expenditures.

Revenue Enhancement Strategy will analyze 5 (five) critical areas/goals with a view of achieving its objectives. These include:

- i. Revenue raising,
- ii. Asset Management,
- iii. Financial Management,
- iv. Capital financing, and
- v. Operational financing

5.6.1 Objectives of the Strategy

The main objective of Revenue Enhancement Strategy is to stabilize the financial and economic base of Busia town. Other specific objectives of the strategy include:

- To broaden the income base and council's increase revenue.
- To reduce the proportionally high cost expenditure to affordable levels.
- To create an environment which will enhances development, growth and service delivery

5.6.2 Strategies

BRES developed strategies from the objectives to assist in revenue enhancement. These strategies include;

- Improve market stalls

- Construct new markets
- Improved collection of property rates
- Develop a business park
- Develop a trailer park
- Develop a bus park
- Promote advertisements in the town
- Undertake a job evaluation study to trim the workforce
- Introduce ICT to reduce paper work
- Promote waste management within the markets

6 CHAPTER SIX: IMPLEMENTATION PLAN

6.1 Communication Strategy

The rationale for formulating this communication strategy is to disseminate information, promote dialogue and generate feedback concerning the present problems and constraints that hinder the development of Busia town, analyze the existing as well as possibly derived potentials that can be exploited to enhance development, and identify areas/sectors for interventions. It also creates awareness on the roles and expectations of every stakeholder in assisting the plan its goals and objectives by monitoring and evaluating future development of the town through identified development themes, strategies as well as priorities.

In summary the strategy intends to:

1. Obtain support for the implementation, monitoring and evaluation of the Busia ISUDP 2011-2013,
2. Involve other stakeholders in the development process,
3. Create a sense of urgency about implementing Busia ISUDP 2011-2013,
4. Solicit feedback about the implementation, monitoring and evaluation of Busia ISUDP 2011-2013.

The communication strategy targets relevant government ministries, development agencies, private investors and other groups that are concerned with economic and related development activities in Busia County. It also targets community leaders and other opinion leaders to dissemination information/ programmes outlined in the plan to the community.

Key Development Messages

This Communication strategy contains key development messages that it intends to convey, these include:

1. The programmes/actions earmarked by the plan and how various stakeholders can contribute to the success of these programmes.

2. Outline projects to be carried out by the county government and location of these projects. This will help elicit needed co-operation of all stakeholders in the implementation of the project.
3. Creating awareness to the beneficiaries on various development projects and their rights and responsibilities.
4. Progress reports from various sectors to help inform the community.

6.2 Tools for Disseminating Information

Busia county government will design and utilize a mix of channels and tools as part of the communication and information sharing strategy. These include

- Electronic and print mass media
- Media briefs by the governor
- Email and network communication and information sharing
- Regular public fora, workshops and meetings
- Social media e.g. facebook, twitter etc.

6.3 Factors supporting the Implementation of the Plan

Effective implementation of Busia ISUDP 2011-2030 will largely depend on various factors. These include;

- Land availability – these can be achieved through land acquisition, land pooling, developing a land revolving fund, Public-private partnerships on land, leasing of land and land banking
- Political will from the county and national government
- Availability of funds – this can be achieved through donor funding, PPPs, national government grants and improved revenue generation.
- Availability of capable human resource – this will be achieved through recruitment of skilled labour, regular training and capacity building. Clear institutional and governance structures outlining departmental mandate will also enhance the implementation of the plan.
- Zoning plan – full implementation and adherence to development control standards of the area.

6.4 Plan Implementation Matrix

The Plan Implementation Matrix highlights the individual programmes of action which need to be implemented towards achieving the proposals which have been put forward in the Plan. The area specific programmes or actions have been phased accordingly and have indicated the actors who will spearhead the implementation process. Detailed programmes are outlined in detailed sectoral plans and area action plans.

6.5 Monitoring and Evaluation

The M&E matrix draws indicators in order to measure the objectives and activities of the urban development plan period. These indicators were constructed based on the logical framework and its specific activities. The objectives as well as its indicators are classified by the correspondent development themes proposed at the national level.

The M&E matrix (Table 8.2) indicates the specific sources of the data required to monitor the indicators. The sources include governmental institutions, departments or agencies in the District, communities and information derived from field work. The frequency of monitoring is specified to follow the implementation of every activity.

The team responsible for monitoring and evaluation works in collaboration with other project staff from other departments. Additionally, target groups can be involved in the monitoring and evaluation process as a means to ensure wider participation of stakeholders which can guarantee sustainability of the projects. The comparison of the baseline, targets and the achieved result will ensure easy evaluation of the projects.

6.6 Quick Wins

Table 6-1: Implementation Matrix

Housing and Informal Settlement						INDICATIVE BUDGET (KSHS. MILLION)				
Emerging Issues	Objectives	Strategies	Projects/Actions	Actor	Time Frame	2016/17	2017/18	2018/19	2019/20	2020/21
Poor road network; Poor accessibility; Encroachment into road reserve	To improve accessibility within the informal settlements	Developing proper road networks within informal settlements	Remove encroachments on road reserves	County Government of Busia/KURA	5 years					
			Widen the roads within Marachi Estate to standard size	County Government of Busia/KURA	5 years					
Insecurity	To improve security in Marachi Estate	Improving safety within Marachi Estate	Provide flood lights within Marachi Estate	County Government of Busia	2 years					
			Establish a police booth within Marachi Estate	Kenya Police	2 years					
			Implement community policing measures	Kenya Police/Community	2 years					
			Initiate the development of economic self-help groups	County Government of Busia	2 years					
Poor housing development	To improve housing condition within Marachi Estate	Developing proper housing units within the informal settlements	Initiate KISIP and KMP Programmes	County Government of Busia/Ministry of Housing	5 years					
			Encourage private sector financial institutions to provide housing finance for housing improvement	Private sector/Financial Institutions	5 years					
			Designing a standard low-cost house	Ministry of Housing/County Government	2 years					

				of Busia						
Inadequate water supply	To increase access to water within the informal settlements	Increasing water network within the informal settlements	Extend piped water to Marachi Estate through existing water lines or boreholes	LVNWSB/County Government of Busia	3 years					
			Establishing water kiosks within a radius of 50 metres in Marachi Estate	County Government of Busia/Community/Private Sector	3 years					
Poor drainage system	To reduce flooding incidences in the informal settlements	Develop proper drainage system in Marachi Estate	Construct drainage system within Marachi Estate	KURA/County Government of Busia	5 years					
Poor sewerage system	To connect the informal settlements with the sewer system	Connecting Marachi Estate to the sewer line	Connecting upgraded houses to the sewer line	LVNWSB/County Government of Busia	5 years					
			Construct modern public toilet/bathroom in Marachi Estate	LVNWSB/County Government of Busia	5 years					
Poor solid management system	To improve solid waste management	Improving solid waste disposal within Marachi Estate	Provide solid waste collection point	County Government of Busia	1 years					
			Regular collection of solid waste	County Government of Busia	1 year					
			Register youth/women groups dealing with solid waste collection in	County Government of Busia	2 years					

			Marachi Estate							
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						INDICATIVE BUDGET (KSHS. MILLION)				
Environmental Issues						2016/17	2017/18	2018/19	2019/20	2020/21
Emerging Issues	Objectives	Strategies/ Proposals	Projects/Actions	Actors	Time Frame					
Degradation of Natural Water Courses	To protect and conserve natural water courses	Protecting and preserving natural water courses	Awareness campaigns and community sensitization; Tree planting along the water courses; Undertaking a land use plan Prosecutions of offenders;	County Government Of Busia NEMA WARMA MOA	2 years					
Emerging Issues	Objectives	Strategies/ Proposals	Projects/Actions	Actors	Time Frame					
Inadequate water supply system	To improve efficiency and effectiveness in water supply	Improving access to portable water	Protection of the spring; Construction of additional collection points; Expand water supply networks	EMC LVNWSB Community Voluntary Agencies	5 years					
Emerging Issues	Objectives	Strategies/ Proposals	Projects/Actions	Actors	Time Frame					

Poor Sewage system	To increase the sewer coverage and management	Expanding sewer coverage	Improvements screening/ grit; Repair of damaged embankments; Complete the construction works on existing manhole chambers; Construct perimeter fence; Desludge the sewage ponds	County Government of Busia LVNWSB	5 years					
Emerging Issues	Objectives	Strategies/ Proposals	Projects/Actions	Actors	Time Frame					
Poor Solid waste management	To improve on solid waste management system To improve effectiveness and efficiency in solid waste management	Provide solid waste management	-Fence off the designated site for the landfill -Encourage sustainable solid waste handling techniques -Provide for essential personnel to manage solid waste equipments and vehicles -Provide waste collection bins -Buy more trucks for collecting wastes -Sensitize the residents on proper waste disposal -Prosecution of waste polluters -Encourage public-private partnership in waste management - Enforce relevant	County Government Of Busia Private sector	5 years					

			regulations/ legislations							
						INDICATIVE BUDGET (KSHS. MILLION)				
Emerging Issues	Objectives	Strategies/ Proposals	Projects/Actions	Actors	Time Frame					
Lack of recreational, and open spaces	To provide space for recreational purposes	Provide recreational parks in Busia County Government	-Acquire land for four (4) additional recreation areas -Tree planting along major streets and designated parks -Enforce by-laws on sub-division -Encourage greening of the town	County Government Of Busia Forestry Department Community	5 years					
Emerging Issues	Objectives	Strategies/ Proposal	Projects/Actions	Actors	Time Frame					
Environmental Hazards and Disasters	To reduce environmental hazards and disasters	Reducing environmental hazards and disasters	-designing the storm water drainage system -Open the blocked drains -Enforcement of biodiversity regulations -Develop and implement effective early warning systems -Creation of awareness and educating the community -Encourage community participation in flood control	Department of meteorology Ministry of Special Programmes WARMA County Government Of Busia KURA	5 years					

Transportation						INDICATIVE BUDGET (KSHS. MILLION)				
Emerging Issues	Causes	Proposal/Strategy	Projects/Activities	Actors	Time Frame	2016/17	2017/18	2018/19	2019/20	2020/21
-Over reliance on the B2 highway that links Kenya and Uganda.	- Lack of alternative roads into Uganda. - the location of the weighbridge o the B2 - Location of customs clearing along the borderline of B2 at the customs post. - Poor state of roads in Busia Town -	-Create alternative access - upgrade the B2 road to international standards - make the B2 a dual carriageway - Extension of feeder roads - Opening up of new feeder roads - Construction of all-weather roads - Initiating infrastructure provision strategies -Establishment of roundabouts at the main intersections - Provision of traffic lights - Provision of street lights on all access roads, including B2 section through town, Busia District Hospital road, Tanaka-Legio Junction road, posta market road from equity/Busia	-zoning to influence origin and destination of users, especially on the location of residential clusters and market centres -opening up the missing links and expanding narrow roads. The lowest road widths should be 9 metres, and these are access roads. -upgrading existing roads to bitumen level: -class C connecting Busia to Malaba through Alupe -class D road from Busia to Mabale - class D road from Busia town to Farm-view Hotel - Local road from works, through highrock estate, Ojamii estate and further through Omeri to Allupe. - Opening as a main/secondary distributor the all-weather murrum road	KENHA/KUR A/ KERRA County Government of Busia	10 years					

		<p>Polytechnic road</p> <ul style="list-style-type: none"> - Provision of storm-water drainage channels of the main access roads - Connectivity to the fibre-optic cable - Construction of terminal facilities 	<p>that passes through Works, Highrock estate, Ojamii and Omeri.</p>							
<ul style="list-style-type: none"> -Poor/lack access/missing links in rural areas -Traffic jams/congestion -Inadequate parking -Bodaboda menace - Environmental hazards-air pollution, noise, dust, water(car wash) -Accidents prone zones -Location of industries in road reserves -disuse of the 	<ul style="list-style-type: none"> - Poor subdivision regimes that leave small roads for access (upto 4 metres!) - inadequate enforcement of planning standards - poor road designs that do not accommodate other trunk infrastructure - increased competition among roads users, including the <i>bodaboda</i> menace especially on the B2 highway 	<ul style="list-style-type: none"> -Designate appropriate locations for <i>BodaBoda</i> operators, informal traders, and Lorry Parking -Enhancing public transport -Integrating non-motorized transport into the transport system - expanding all road reserves to accommodate all trunk infrastructure and road users 	<ul style="list-style-type: none"> -Creation of convergence zones -Zoning areas appropriate for users-council/government to acquire the land-buying, eminent domain, business venture -Sensitization for local community and leaders -Redesign existing roads and provide for non-motorized transport -Provide exclusive pedestrian walkways and cycle-ways to accommodate NMT 	<p>KENHA/KUR A/KERRA County Government of Busia</p>	<p>10 years</p>					

<p>rail option</p> <ul style="list-style-type: none"> - haphazard/unplanned developments -problems related to non-motorized transport, including the <i>boda boda</i> menace. 	<ul style="list-style-type: none"> - Access roads joining the highway at right angles, which cause accidents. These include at: Magharibi stage, Legio Junction, Unilever Junction, Equity Stage Junction, Korinda Junction, and roadblock junction, among others. - Over speeding transit trucks. 									
<ul style="list-style-type: none"> - Deprived and congested roads -Blocked storm-water drains -Lack of storm water drains in some drains 	<ul style="list-style-type: none"> -Soil Erosion -Uncontrolled solid waste dumping along road reserves - encroachment on road reserves 	<ul style="list-style-type: none"> -Open blocked drains -Building SWD system on all roads -ensure proper solid waste management - expand road reserves to accommodate adequate storm-water drains worked to adequate gradients to allow proper drainage. 	<ul style="list-style-type: none"> -designation of an area for storm water collection, used for greening. -designate space for storm water treatment plant to make the water reusable -ensure road design incorporates storm water drainage 	<p>KENHA/KUR A/ KERRA County Government of Busia/LVNWS B</p>	<p>5 years</p>					

-Inadequate transportation support services and facilities -blocked access roads	- Haphazard/ random dumping of solid waste in the town Blocked storm - water drains	-Clear all blocked roads in Busia town to enable proper storm-water drainage.	-zoning to identify appropriate framework for acquisition of land -provision of collection bins in different areas- residential, markets, terminal facilities.	KENHA/KUR A/ KERRA County Government of Busia	2 years					
-Poor accessibility	-Haphazard settlements in the town -Informal business and hawking activities -Lack of effective Transportation planning	-Reorganize Busia town through planning to allow for effective servicing with transportation and attendant services. -Create and open up access roads and orientation of plots during subdivisions - expand access in all informal settlements for example Marachi and Mtongwe	-Proposal to identify land for resettlement of displaced land owners -Planning as a framework to facilitate services-water reticulation, electricity and sewer lines among others.	KENHA/KUR A/ KERRA County Government of Busia/Kenya Power/ LVNWSB	5 years					
-Informal commercial activities located on road reserves. -Lack of vehicular parking space - Traffic congestion	- Encroachment of human activities in to road reserves -lack of effectual zoning in the area - uncontrolled ribbon developments	Incorporate planning and zoning to: - create buffer to control ribbon development and optimize space use within CBD - set aside land for hawkers/informal traders -create of parking for buses, matatus, lorries and motorcycles/ <i>bodaboda</i> . -set structures for	-Capacity building -Awareness creation -create space for open air markets at appropriate locations	County Government of Busia	5 years					

		development control- minimum plot sizes, set- backs ,plot density, plot ratios								
- Parking along major road B2 highway -Missing links -Some roads not designed to accommodate other users cyclists, pedestrians -Bad road conditions	-Lack of matatu park/terminal facility -Lack of parking for lorries -Lack of well reticulated hierarchical roads network - Poor road management	-Proposing by-passes, including one to the north of the B2 Highway through government quarters, Ojarii and Omeri. -Propose hierarchy of roads connecting all major land users as required by law. The main land uses in Busia are residential, commercial and public purpose around which other land uses are organized. -Designing roads aimed at enhancing permeability of railway -Provide terminal facilities at appropriate locations -Joining missing links -integrate all road users in road transport - extension of the railway head to Uganda through Busia	-Provide well reticulated road system to act as a framework for negotiations for land acquisition -Sensitization of the public -Framework for acquiring/borrowing funds - If difficult, there should be applied compulsory acquisition for land adjacent to the 4-metre roads for expansion to at least 9 metres in residential areas.	KENHA/KUR A/ KERRA County Government of Busia	5 years					

						INDICATIVE BUDGET (KSHS. MILLION)				
Social Infrastructure						2016/17	2017/18	2018/19	2019/20	2020/21
Emerging Planning Issues	Objectives	Proposals/Strategies	Projects/Actions	Actor	Time Frame					
Congestion at the Busia Level 4 Hospital; poor condition of public mortuary	To improve health facilities in Busia	Improving access to effective and efficient health services	Acquire land for expansion of Busia level 4 Hospital	Ministry of Health/County Government of Busia	5 years					
			Upgrade Busia Level 4 Hospital to a Level 5 status	Ministry of Health	5 years					
			Construct a Medical Training College next to Busia Level 4 Hospital	Ministry of Health	10 years					
			Post adequate medical personnel to the health facilities	Ministry of Health	2 years					
			Expand the public mortuary at Busia Level 4 and Alupe health centre	Ministry of Health	5 years					

Inadequate space at the public cemetery	To improve the condition of cemetery facilities in Busia	Expanding cemetery facilities in Busia	Acquire land for expansion of the cemetery next to the sewer pond	County Government of Busia	5 years					
			Fence the cemetery at the sewer pond and demarcate between the Muslim area	County Government of Busia	5 years					
			Acquire land in Alupe for a designated cemetery	County Government of Busia/Community	5 years					
Poor pre-primary and ECD facilities	To ensure appropriate standards for the provision of pre-primary/ECD facilities in Busia	Improved standards of pre-primary/ECD education	Regular monitoring and supervision to ensure education standards are maintained	Ministry of Education	1 year					
			Provide standards for building pre-primary/ECD facilities	Ministry of Education	1 years					
			Improve facilities for the public pre-primary facilities	Ministry of Education	5 years					
Congestion in primary schools; poor facilities in public primary schools	To improve maintain efficient standards in primary education	Provide efficient quality of primary education	Build additional classrooms in Bulanda and Township Primary schools	Ministry of Education	5 years					
			Acquire land for construction of a new primary school within Zone III	County Government of Busia/Community/Ministry of Education	10 years					

Inadequate secondary schools	To increase the number secondary schools in Busia	Providing adequate facilities for secondary education	Construct a new secondary school within Zone II (along Busia-Malaba road) next to Amerikwai commercial centre	County Government of Busia/Ministry of Education	10 years					
			Construct additional classrooms in the existing secondary schools	County Government of Busia/Ministry of Education	10 years					
Inadequate tertiary education facilities; Inadequate skilled labour	To increase the number of skilled labour in Busia	Promote Busia as an educational Hub	Zone land in Alupe (Zone I) for establishing an Education and Research Park	County Government of Busia/Ministry of Higher Education	5 years					
Few and inadequate recreational facilities; Poor condition of recreational facilities	To improve the condition of recreational facilities	Provide sustainable and aesthetic recreational facilities	Construct offices and spectator stands in Busia Stadium	Ministry of Sports	3 years					
			Demolish developments within the municipal park	County Government of Busia	5 year					
			Acquire land and begin beautification plans for four (4) new green parks	County Government of Busia	10 years					
			Construct a cultural museum and theatre at Busia Arboretum	Ministry of National Heritage	10 years					

			Undertake a one (1) county sports day in a year	County Government of Busia/Ministry of Sports/County Government	2 years					
Cross-border insecurity	To improve security in Busia	Providing adequate human and investment security	Construct a police post in Alupe	Kenya Police	5 years					
			Establish a police booth in Marachi	Kenya Police/County Government of Busia/ Community	5 years					
			Increase the number of police officers to 200	Kenya Police	5 years					
			Improve the quality of police housing	Kenya Police/Ministry of Housing	15 years					
			Implement community policy strategies	Kenya Police/County Government of Busia/ Community	1 years					
Frequent power blackouts	To increase electricity supply to Busia	Increasing the quantity of electric supply to attract investors	Expand road reserves to accommodate electric lines	Kenya Power/KURA/ County Government of Busia	5 years					
			Increase electric network within Busia	Kenya Power	15 years					
			Connect the town to either Rang'ala or Mumias Sub-station	Kenya Power/KETRACO	5 years					

Economic and Investment						INDICATIVE BUDGET (KSHS. MILLION)				
Emerging Issues	Objectives	Strategy/Proposal	Actions/Activities	Actors	Time Frame	2016/17	2017/18	2018/19	2019/20	2020/21
<ul style="list-style-type: none"> Poor infrastructure 	<ul style="list-style-type: none"> To improve basic infrastructure for economic development 	Improve infrastructure particularly roads, electricity, housing, water and sanitation as catalyst for the Northern transport corridor	<ul style="list-style-type: none"> Construction of new and quality roads around the town and county roads connected to Busia Town Maintenance and expansion of access roads Increase electricity supply to the town Increase of water supply to the town Construction of sanitation facilities Improvement of 	KENHA, KURA, KeRRA, Kenya Power, KETRACO, LVNWSB, MCB, NHC, Private Sector	10 years					

			<p>drainage systems in the town</p> <ul style="list-style-type: none"> • Improve access to housing loans to improve housing development in the town. • Improve access to financial loans from the many financial banks in the town. 							
<ul style="list-style-type: none"> • Long bureaucratic red-tape • Poor service delivery due to lack of public-private partnership 	<ul style="list-style-type: none"> • To improve service delivery by reducing the long bureaucratic red-tape 	Reduce Legal, Regular and Bureaucratic Red Tape	<ul style="list-style-type: none"> • Review, develop and implement a regulatory framework that reduces the time taken to acquire development permits. • Coordinate and build public and private partnerships in order to maximize synergies. • Uphold the integrity measures in the constitution 	MCB, EACC, Private Sector	2 years					
• Inadequa	• To	Undertake integrated	• Zoning of land for	MCB, KIE	5 years					

te public-private partnership for service delivery	provide for sustainable land use	urban development land use	the Business Park <ul style="list-style-type: none"> • Develop and supply basic infrastructure to the park • Develop a Master Plan for the Business Park • Seek proposals from interested investors 							
<ul style="list-style-type: none"> • Poor publicity for investment potential 	<ul style="list-style-type: none"> • To promote public-private sector participation in service delivery 	Enhance and promote Public-Private sector participation	<ul style="list-style-type: none"> • Opening dialogue between government agencies and private sector • Develop council website for easy access of information on investment opportunities in the town • 	MCB, Private Sector	2 years					
<ul style="list-style-type: none"> • Poor means of communication • Lack of corporat 	<ul style="list-style-type: none"> • To promote Busia as a trade and investment hub 	Promote and advertise Busia as a Trade and Investment Hub	<ul style="list-style-type: none"> • Coordinate with the media companies to air investment and economic programmes on Busia. 	Media Houses, MCB, Private Sector, Financial Institutions	5 years					

<p>ion with the media companies</p> <ul style="list-style-type: none"> • Lack of transparency and accountability • Inadequate corporation between Busia County Government, Media companies and Investors 			<ul style="list-style-type: none"> • Institute a transparent, trusted and effective governance and regulatory framework to support the town's business environment. • Host financial and business roundtable meetings between the public and private sector. • Propose to host financial and business roundtable meetings in the town for the nation and East African region. 							
<ul style="list-style-type: none"> • High incidences of insecurity 	<ul style="list-style-type: none"> • To improve measures for combating crime and insecurity in Busia 	<p>Improve measures for combating crime and insecurity</p>	<ul style="list-style-type: none"> • Install and extend street lights along the Kisumu-Busia road from the border point to Mundika and along the Busia-Malaba road upto Alupe. • Increase police patrols in the town. • Purchase one (1) 	<p>Kenya Police/Provincial Administration/MCB/Kenya Power</p>	<p>5 years</p>					

			<p>police patrol car for Alupe area.</p> <ul style="list-style-type: none"> • Create a police base/station at Alupe area. • Reinforce community policing in Busia town. 							
<ul style="list-style-type: none"> • Inadequate higher education facilities • Poor transition of students from secondary to college • Expensive higher education services • Relocation to Uganda for cheaper higher education 	<ul style="list-style-type: none"> • To develop Busia an Education and Research Town 	Development of a Busia-Alupe Educational Park at Alupe area	<ul style="list-style-type: none"> • Develop a master plan for the Busia-Alupe Educational Park • Hiving or/and transferring the Agricultural Training College to Alupe • Transferring the Youth Polytechnic to Alupe area. • Allocate more land in Alupe for educational purposes to attract new universities and research institutions. • Zoning of land in Alupe education park for building of student hostels • Zoning of land in Alupe for high and 	Ministry of Higher Education, Science and Technology/MCB	10 years					

			middle-income residential purposes							
<ul style="list-style-type: none"> • High unemployment rate • High number of unskilled labour • Lack of on-job training programmes 	<ul style="list-style-type: none"> • 	Institution of educational and industrial partnerships	<ul style="list-style-type: none"> • Create dialogue between educational institutions and industries in the region. • Organize for graduate industrial attachments in companies in the region such as Mumias Sugar Company, health and other public or private institutions. 	Ministry of Labour/Ministry of Trade and Industry/Ministry of Higher Education/MCB/Regional Trade Association	10 years					
<ul style="list-style-type: none"> • Inadequate employment opportunities 	<ul style="list-style-type: none"> • To develop a strong support system for entrepreneurs and SMEs 	Develop a strong support system for entrepreneurs and small businesses	<ul style="list-style-type: none"> • Improve access to credit for the SMEs. • Establish new and permanent markets in Busia town • Source for an investor to construct a Shopping mall at the Busia Youth Polytechnic • Create another permanent vegetables market at the current Busia airstrip. 	Ministry of Co-operative Development/Ministry of Trade and Industry/Ministry of Social Services/MCB/Ministry of Labour	10 years					

			<ul style="list-style-type: none"> • Encourage establishment and registration of marketing groups such as savings and credit and industrial co-operative societies among different economic sectors. • Gazette and expand areas to locate jua kali enterprises. • Promote ICT related SMEs • Organize at least two capacity building workshops annually to strengthen SMEs, and co-operative societies in the town. 							
<ul style="list-style-type: none"> • Food insecurity 	<ul style="list-style-type: none"> • To promote the development of urban and peri-urban agriculture, and fisheries 	Promote the development and retention of urban and peri-urban agriculture, fisheries and livestock	<ul style="list-style-type: none"> • Promote use of appropriate agricultural and livestock technologies that are suitable for reduced land for agriculture e.g. use of hydroponics, high value and land 	Ministry of Agriculture, Livestock and Fisheries/NEMA/ MCB/Private sector.	15 years					

	in Busia		<p>intensive crops and livestock enterprises.</p> <ul style="list-style-type: none"> • Promote the establishment of green houses. • Integration of urban agriculture as a component of urban land planning by the Local Authorities and central Government. • Promote the development of fish farming along wetland. • Organize at least two fish farming training workshops annually for capacity building. • Support coordination between fish farmers and financial institutions for easy access to credit. • Modernize existing and build additional markets specifically 							
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			<p>meant for food commodities.</p> <ul style="list-style-type: none"> Strengthen existing and promote formation of new commodity based producer and consumer organizations. 							
<ul style="list-style-type: none"> Inadequate touristic activities 	<ul style="list-style-type: none"> To promote tourism development in Busia 	Promote tourism activities	<ul style="list-style-type: none"> Promote conference tourism in the town. Create land for the construction of a community hall in the town. Promote Busia town as a regional conference/workshop hub. Promote culinary tourism (Luhya and Teso traditional foods). Promote eco-tourism along the border by landscaping the no-mans-land for tourists who would like to have a feel of a foreign country. Create land for the 	Ministry of Tourism/Ministry of Culture/Ministry of Fisheries, Ministry of Agriculture	10 years					

			<p>construction of a cultural centre/museum at the arboretum.</p> <ul style="list-style-type: none"> • Preservation of heritage sites. • Promote the development of sports tourism. <ul style="list-style-type: none"> ✓ Promote sports activities that will attract people to the stadiums ✓ Organize two sports championships annually between Busia County regions and/or Busia Kenya and Busia Uganda. • Improve infrastructure in the green parks, playgrounds, stadium and other recreational facilities. 							
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Revenue Enhancement						INDICATIVE BUDGET (KSHS. MILLION)				
Emerging Issues	Objectives	Strategies	Actions/Activities	Actors	Time Frame	2016/17	2017/18	2018/19	2019/20	2020/21
Inadequate market stalls at the open air markets	To broaden the income base and increase the council's revenue.	Improve market stalls	<ul style="list-style-type: none"> Demarcate market stalls to know the number available in each market Improve infrastructure within the markets 	MCB	3 years					
Poor spatial distribution of market facilities	To broaden the income base and increase the council's revenue.	Construction of new markets	<ul style="list-style-type: none"> Expand the commercial nodes and markets in Mayenje, Angorom, Amerikwai and Alupe area Upgrade temporary markets to permanent status. Build a vegetable market at the airstrip market. Incorporated hawkers within the existing 	MCB	5 years					

			markets in the town							
Non-collection of property rates Non-collection of rents	To broaden the income base and increase the council's revenue.	Collection of property rates	<ul style="list-style-type: none"> Undertake valuation of properties within the council boundaries to determine appropriate property value rate Undertake valuation to ascertain rent to be collected from stall, kiosks, council houses, council offices etc. Prosecute/punish/auction properties of rate defaulters Remove property rent defaulters from council properties 	MCB	2 years					
Inadequate revenue sources	To broaden the income base and increase the council's revenue.	Development of a business park	<ul style="list-style-type: none"> Coordinate and facilitate the construction of a business park at the ATC. Coordinate and source for an investor to put up a shopping mall at the current Busia Youth Polytechnic 	MCB/Ministry of Local Government County Government of Busia	10 years					
<ul style="list-style-type: none"> Congestion at the border point Insecurity posed by the oil tankers Reduced revenue at the bus park Corruption 	To broaden the income base and increase the council's revenue.	Develop a trailer and bus park	<ul style="list-style-type: none"> Develop a trailer park away from the CBD Develop a bus park at the Busia Airstrip Relocate the current bus park to the airstrip area Introduce electronic ticketing at the trailer and bus parks 	MCB	10 years					
<ul style="list-style-type: none"> Advertisement 	To broaden	To promote	<ul style="list-style-type: none"> Develop a framework to 	MCB	2 years					

pollution	the income base and increase the council's revenue.	aesthetic advertisements in the town	regulate advertisements in the town <ul style="list-style-type: none"> Lease advertisements rights for the various recreational facilities 							
<ul style="list-style-type: none"> Bloated workforce 	To reduce the proportionally high cost expenditure to affordable levels.	Trimming workforce	<ul style="list-style-type: none"> Undertake a job evaluation study Higher more technical staff Improve capacity of the workers 	MCB	2 years					
<ul style="list-style-type: none"> Inadequate/lack of ICT knowledge 		Introduce ICT to reduce paper work	<ul style="list-style-type: none"> Develop council website Develop an e-investment portal as part of the website 	MCB	2 years					
<ul style="list-style-type: none"> Dumping of waste in the markets 	To create an environment which enhances development, growth and service delivery	Waste management at the markets	<ul style="list-style-type: none"> Distributing garbage bins and designate garbage collection points Regular collection of garbage in the markets Construct public toilets/bathrooms in the markets, commercial centres and bus/trailer parks 	MCB	2 years					

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