



REPUBLIC OF KENYA
OFFICE OF THE DEPUTY PRIME MINISTER
AND MINISTRY OF LOCAL GOVERNMENT
INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN
FOR BOMET TOWN (2010-2030)
DRAFT REPORT



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Cover Photos

<i>Background Images</i>	Part of Bomet Town and River Nyangores
<i>Foreground Images</i>	Proposed Structure Plan Map of Bomet Town

Report Prepared for:

- Office of the Deputy Prime Minister and Ministry of Local Government (ODPM&MoLG)
- Municipal Council of Bomet (MCB)
- People of Bomet town



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LIST OF ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ALGAK	Association of Local Government Authorities of Kenya
BoISUDP	Bomet Integrated Strategic Urban Development Plan
CBD	Central Business District
CBO	Community Based Organization
CDF	Constituency Development Fund
CILOR	Contributions in Lieu of Rates
CSOs	Civil Societies Organizations
DDC	District Development Committee
DPP	Department of Physical Planning
EA	Environmental Audit
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
ERS	Economic Recovery Strategy
FGD	Focused Group Discussions
GDP	Gross Domestic Product
GIS	Geographic Information System
GoK	Government of Kenya

HIV	Human Immunodeficiency Virus
ICT	Information and Communication technology
ISUDP	Integrated Strategic Urban Development Plan
KENAO	Kenya National Audit Office
KENSUP	Kenya Slum Upgrading Programme
KES	Kenya Shillings
KFS	Kenya Forestry Services
KLGRP	Kenya Local Government Reform Programmed
KPLC	Kenya Power and Lighting Company
KRB	Kenya Roads Board
KURBA	Kenya Urban Roads Board Authority
KUTIP	Kenya Urban Transport Infrastructure Project
LA(s)	Local Authority (ies)
LADP	Local Authority Development Programme
LAIFORMS	Local Authority Integrated Financial Operational and Management System
LASDAP	Local Authority Service Delivery Action Plan
LATF	Local Authority Transfer Fund
LGA	Local Government Authorities
LPG	Liquefied Petroleum Gas

MCB	Municipal Council of Bomet
MDG	Millennium Development Goals
MEMR	Ministry of Environment and Mineral Resources
MoF	Ministry of Finance
MoL	Ministry of Lands
MW	Ministry of Water
NEMA	National Environmental Management Authority
NGOs	Non-Governmental Organization(s)
NHC	National Housing Corporation
NIMES	National Integrated Monitoring and Evaluation System
ODPM&MoLG	Office of the Deputy Prime Minister and Ministry of Local Government
PHE	Public Health Environment
PPD	Physical Planning Department
PPOA	Public Procurement Oversight Authority
PPP	Public Private Partnership
PRSP	Poverty Reduction Strategy Paper
PS	Permanent Secretary
REP	Revenue Enhancement Plan
RMLF	Roads Maintenance Levy Fund

SEA	Strategic Environmental Assessment
SME	Small and Medium Enterprises
The Act	Local Government Act, Cap 265
UDD	Urban Development Department
UN	United Nations
UNEP	United Nations Environmental Programme
UN-HABITAT	United Nations Human Settlements Programme
UNIDO	United Nations Industrial Development Organization
UPVC	Unplasticised Polyvinyl Chloride
VR	Valuation Roll

PART I: INTRODUCTION

1.1 BACKGROUND

1.1.1 Preamble

The growing trend where a majority of the World's population lives in urban areas is indeed universal. Urbanization is strongly associated with economic growth and indeed Vision 2030, Kenya's blue print for long-term development, shows that over 60 percent of Kenyans will be living in towns by the year 2030 and will number 38 million people in a population of 60 million. This document presents the Bomet Town Integrated Strategic Urban Development Plan 2010 - 2030 (BoISUDP, hereinafter "the Plan"). The Plan has been prepared with the support of Matrix Development Consultants Ltd. under a contract agreement with the Government of Kenya (GoK) through the Office of the Prime Minister and Ministry of Local Government (ODPM&MoLG). The main purpose is to guide integrated planning, infrastructure and all future development within the area of jurisdiction of the Municipal Council of Bomet (MCB). In undertaking this assignment Matrix worked very closely with the MCB, Bomet stakeholders and the project team designated by ODPM&MoLG within the overall framework of the TORs for the assignment. The assignment was conducted with liaison from the Department of Physical Planning (DPP), Ministry of Lands.

The specific objectives of the Plan as detailed in the TORs are to:

- Enhance and promote integrated socio-economic development in town;
- Provide and develop sustainable human environmental and resource system;
- Allocate sufficient space for all land-uses to ensure efficient operation and comfort of users and accommodate future growth;
- Ensure compactness of urban form and design of transport and communication network to enhance interaction while minimizing loss of open land, agricultural land, forest, wildlife (land and riverside), water catchment areas etc.;
- Avoid juxtaposition of incongruous uses and bringing together especially harmonious uses, or those whose combination will enhance special benefits;
- Preserve and protect existing good features and fragile ecosystem. This may often require removal of unsatisfactory features;
- Create a specific town character by different uses of topography and other natural features and by specific groupings of uses and densities;

- Provide a policy framework for socio-economic investments, economic use of space, infrastructure services and community facilities; and
- Provide a framework of plan implementation, organization and administration structure requirement, and resources needed to implement the plan.

1.1.2 Understanding Bomet Town

Bomet Town is run by a Municipal Council and is the proposed Headquarters for Bomet County. The Municipality straddles Bomet, Chepalung'u and Sotik constituencies. It covers an area of approximately 250 Km² of which only 3 Km² is trust land under control of the council.

Bomet Municipality does not have a Registered Planner and relies heavily on the services of a Works Officer who works closely with the District Physical Planning Officer (DPPO) from the Ministry of Lands (MoL).

As at the time of undertaking the assignment, the Town did not have an up to date Integrated Strategic Urban Development Plan.

Planning challenges facing Bomet include, but are not limited to the following:

- Lack of an up to date plan that is strategic enough to guide overall development;
- Inadequate survey and planning data that covers the entire municipal boundary (available survey and mapping information as at the time of starting the assignment, only covered 10 Km², which is less than 20% of the total area and an assessment of this information indicated some weaknesses. We therefore had to undertake fresh aerial photography and mapping of the whole town);
- Inadequate staff capacity within MCB to plan and undertake development control;
- Uncontrolled and unplanned urban growth;
- Inadequate provision of infrastructure services: Roads, storm water drainage, water supply, sewerage, waste disposal, non-motorised transport, drainage, electricity etc;
- Inadequate community facilities and services e.g. hospitals, recreational facilities, fire stations and schools;
- Poor housing conditions and slum type developments;
- Poor environmental conditions arising from lack of an environmental strategy; and
- Inadequate employment opportunities.

1.2 GOALS, OBJECTIVES AND VISION OF THE PLAN

1.2.1 Objectives

This document presents the Bomet Town Integrated Strategic Urban Development Plan 2010 - 2030 (BoISUDP). The Plan has been prepared with the support of Matrix Development Consultants Ltd. under a contract agreement with the Government of Kenya (GoK) through the Office of the Deputy Prime Minister and Ministry of Local Government (ODPM&MoLG). The main purpose is to guide integrated planning, infrastructure provision and all future development within the area of jurisdiction of the Municipal Council of Bomet (MCB).

In undertaking this assignment Matrix worked very closely with the Municipal Council of Bomet (MCB), Bomet stakeholders and the project team designated by ODPM&MoLG as well as a Liaison Officer from the Department of Physical Planning (DPP) at Ministry of Lands, within the overall framework of the ToRs for the assignment.

The specific objectives of the Plan as detailed in the ToRs are to:

- Enhance and promote integrated socio-economic development in the town;
- Provide and develop sustainable human environmental and resource system;
- Allocate sufficient space for all land-uses to ensure efficient operation and comfort of users and accommodate future growth;
- Ensure compactness of urban form and design of transport and communication network to enhance interaction while minimizing loss of open land, agricultural land, forest, wildlife (land and riverside), water catchment areas etc.;
- Avoid juxtaposition of incongruous uses and bringing together specially harmonious uses, or those whose combination will enhance special benefits;
- Preserve and protect existing good features and fragile ecosystem. This may often require removal of unsatisfactory features;
- Create a specific town character by different uses of topography and other natural features and by specific groupings of uses and densities;
- Provide a policy framework for socio-economic investments, economic use of space, infrastructure services and community facilities; and
- Provide a framework of plan implementation, organization and administration structure requirement, and resources needed to implement the plan.

1.2.2 Refining the Vision

Taking account of the views expressed in the Visioning and Feasibility Studies Validation workshops the following revised Vision has been adopted:

“Bomet as a well governed City that provides a secure, dynamic environment and sustainable resource use for all.”¹

The realization of the overall vision for Bomet is achievable through short, medium and long-term development strategies, projects and programmes, within a coordinated policy and institutional framework. These projects, programmes and strategies are summed up in plan proposals that outline desired development objectives for Bomet and the residents’ role in its actualisation. The settlements strategy is aligned to the BoISUDP as well as the country’s long-term national development blue print, *Kenya Vision 2030*.

1.2.3 Mission for BoISUDP

The Mission of this plan is to:

“Identify the municipality resources; their potential and levels of utilization, challenges and opportunities and provide a framework for sustainable development”.

1.3 SCOPE OF THE PLAN

This plan covers a detailed analysis of sectoral and spatial structure of MCB. It discusses the current situation in Bomet highlighting the sectoral and thematic constraints in the town that inhibit the development of a burgeoning and environmentally sustainable Town. It also covers the key planning and development challenges in the Town as well as proposing sectoral programs and investments to ameliorate the identified constraints.

This document provides the Spatial Development Strategy for Bomet town, and proposes measures to enhance the revenue base for the town. There are various development scenarios for MCB of which the preferred one was adopted by the people of Bomet and which was used for the detail Strategic Urban Development Plan/Structure Plan of the town.

Since it is important that all these proposals must be communicated in a workable and stakeholder friendly manner the document also proposes a Communication Strategy for implementing the BoISUDP. To operationalise the strategy, the document includes the institutional and monitoring and evaluation (M&E) framework for implementing proposed activities and investments as well as the Plan Implementation Matrix

1.4 EXPECTED OUTPUTS

This document provides an integrated Strategic Urban Development Plan which has the support of the municipal administration, the municipal residents, and all relevant agencies in charge of

¹ The Vision and the Mission have been further revised to take into account comments given by the Client.

implementation of programmes and projects within the municipal area of jurisdiction and which is approved by the Municipal Council. Furthermore, the plan meets the following elements:

- i. A situational analysis of the current socio-economic, physical, environmental and cultural characteristics of the Bomet town;
- ii. A widely accepted vision for the town's development;
- iii. A detailed structure plan depicting specific land use and zoning regulations (code);
- iv. Sector strategies including transportation, investment/economic, settlement/housing environmental management, disaster management and cultural heritage preservation plan;
- v. An implementation matrix with associated realistic costs and responsibilities for implementation of agreed sector wise prioritised programs.

1.5 METHODOLOGY PROCESS FOR THE BoISUDP

1.5.1 Background

The idea of preparation of Bomet strategic urban plan originated from the Office of the Deputy Prime Minister and Ministry of Local Government (ODPM&MoLG). This was following requests from the local level and realization by the ministry that most of the towns in Kenya needed integrated planning and that the provision of digital maps was necessary for planning and provision of others services such as infrastructure.

Five towns i.e. Othaya, Garissa, Mtwapa, Bungoma and Eldoret were included in the first phase on trial basis. The second phase covers 7 towns of which Bomet is one. The Ministry's objective is to change the management of Towns. This is particularly so given that only 30% of towns in Kenya are planned. Lessons and experiences from Bomet and the other six towns as well as from the pilot towns will therefore be useful in influencing the planning of other towns in the country.

1.5.2 Scope of the Proposals and Strategies of the Study

The broad objective of the study was to get an understanding of the issues in Bomet that would inform the preparation of the strategic urban development plan that would guide the growth and development of Bomet Municipality. Specific objectives of the study are:

- To identify planning issues in Bomet Municipality,
- To enhance and promote integrated development of socio- economic activities in the Municipality,
- To preserve existing good features and protect fragile environment,

- To formulate and set standards for development control,
- To identify existing resources potentials,
- To identify finding and issues related to development of the town,
- Promote town-wide ownership of the planning process,
- To analyze both primary and secondary data, and
- To provide spatial framework for participatory planning and implementation.

1.5.3 Methodology of the Study

1.5.3.1 Introduction

As part of the studies for the development of the Plan, the Team undertook field visits to Bomet, undertook aerial photography, mapped the Town, conducted a Visioning Workshop, carried out focused group discussions (FGDs) using structured interview schedules, detailed spatial and socio-economic field surveys, key informant discussions, transect survey, and direct observations. In addition, the team collected and analysed detailed secondary data collection both in Nairobi and Bomet Town. These methodologies are briefly discussed below.

1.5.3.2 Profiling

This entailed compiling detailed background information on Bomet town and its environs. Secondary data was collected and used to analyse the challenges and opportunities of the town.

1.5.3.3 Transect Survey

A reconnaissance survey, and subsequent transect surveys of the town and its environs was undertaken between November and 2nd December, 2011. The transect surveys were meant to:

- Confirm the profiling issues,
- Appreciate the town,
- Acquire data to consolidate the base map, and
- Acquire data for project design.

1.5.3.4 Rapid Assessment of Socio-Economic Situation

The rapid assessment of Socio Economic situation of Bomet Town focused on the assessment of the economic activities, housing, community facilities, social infrastructure, people's likes and dislikes of Bomet in both the formal and informal settlements. It was meant to give the Bomet people's vision for their town. The assessment focused on both the ordinary citizen through the

focus group discussions and the key informants who were mainly the business community representatives and professionals.

The objectives of the rapid social economic survey were to:

- Gather people's opinions and views in regard to the future planning of their Municipality.
- Contribute towards a better appreciation of the socio-economic issues and hence to influence the overall strategic planning for Bomet town and its environs.

The approach to the rapid assessment was participatory. It entailed among others the following;

- Key Informant Discussions with Local Authority Staff and Councilors, prominent, business people and professionals,
- Direct observations through several visits to different parts of the town., and
- Focus Group Discussions (FGD) - the consultant developed participatory tools that were applied during the focus group discussions.

1.5.3.5 Data Analysis and Interpretation

Socio-economic data

Data collected through the structured interview schedules was coded and analysed using SPSS. Frequency tables were generated to analyse means and variances of the variables. Further analysis was conducted to obtain various additional insights into the socio-economic attributes of the respondents. The results were compared to both published socio-economic data on Bomet Town and its environs as well as information obtained from key informants and the field visits.

Development of Spatial Data

Since the town did not have a base map, a new one has been generated. This was done through compilation of all the existing maps and the aerial photography (see separate report on mapping exercise).

Analysis of both socio-economic and spatial data was done with a view of generating information that would enable the Study Team to prepare the following sectoral/ thematic strategies:

- Physical and natural resources,
- Economic base,
- Social, Cultural and Demographic profile,
- Infrastructure sector,
- Land use analysis,

- Transport sector analysis,
- Environmental protection, heritage conservation,
- Economic (investment) and implementation, and
- Settlement upgrading.

The end product of data analysis was used in generating the Feasibility Study Report (FSR) that depicts the existing situation, issues and problems that will help in the projecting/forecasting, modeling the future conditions and scenario building for Bomet Town.

1.5.3.6 Plan Preparation

Findings and conclusions arising from concurrence on the Feasibility Studies Report will be modeled and presented in a spatial context detailing individual Area Plans. Desired outcomes, alternatives models, strategies and programmes will also be outlined.

1.5.3.7 Training

An intensive interactive working methodology has been incorporated in this planning process to facilitate transfer of technology to the Municipal Council of Bomet (MCB) employees. A number of employees were identified to be trained on the planning process as well as the use of GIS in the planning process. So far the council staff have been closely involved and therein trained in all processes and activities in the plan preparation.

1.5.3.8 Data Collected

Two types of data have been collected.

Secondary data

This data was gathered from secondary sources such as publications, topo-cadastral maps, district development plans, LASDAP reports, and land-use plans and other media.

Primary data

Primary Data was collected through;

- Field surveys,
- Photography,
- Questionnaire administration,
- Focused group discussions,
- Workshops reports,
- Consultative Workshops,
- Oral interviews,
- Stakeholder rums,

- Direct observations through several visits to different parts of the town, and
- Key Informant Discussions with Local Authority Staff and Councilors, prominent, business people and professionals.

1.5.3.9 Stakeholders Consultative Meetings

The role and participation of the residents of Bomet has been identified as critical in the planning of the town. Therefore a number of Stakeholder consultative meetings were held during the various stages of planning. The aims of these meetings included the following:

- Sensitize the residents on the need for planning,
- Mobilise the community to participate in the preparation of the Plan,
- Build consensus,
- Provide planning data and
- Validate study team's findings.

1.5.3.10 Consultative Workshops

Visioning Workshop

The Visioning Workshop was the first in a series of consultative workshops that formed the process for the preparation of the Plan and was a key milestone in the team's activities. Reports for the Workshops have been produced and shared with key stakeholders.

The Visioning Workshop was held in Bomet's County Hall on 21st November, 2011 and was anchored on the following key objectives:

- To create awareness amongst key stakeholders on Importance of Urban Strategic Planning for Bomet;
- To create awareness on the importance of an Integrated Urban Strategic Plan for Bomet town and the initiation of the planning process;
- To promote County/ town-wide ownership of the planning process;
- To direct the strategic growth and direction of the town to 2030 (or: to obtain pointers to the strategic growth and direction of the town to 2030);
- To identify Bomet's strength and strategic importance to the region and to Kenya in general.

Participants were drawn from the MCB, (Officers and Councilors), public sector (government ministries and parastatal officials from Nairobi and Bomet), private sector, civil society organisations including CBOs and NGOs active in the area and a wide range of community

sector representatives. In addition to the Visioning Workshop, feasibility proposals and draft sectoral strategies workshops were held. These are briefly outlined below.

Feasibility Studies Validation Workshop (FSV)

The Feasibility Study Validation Workshop held at St. Bakhita Catholic Church Hall in Bomet Town on 28th February 2012 was the second in the series of consultative workshops that were organised to inform the strategic planning process. The objectives of the workshop in accordance with the terms of reference for the assignment and as a follow-up to the Visioning Workshop were:

- To update the stakeholders on the current status of the mapping and planning exercise for Bomet town;
- To present and validate the findings of the feasibility study (Focusing on the key issues, emerging strategies, tentative proposals and strategic interventions); and
- To jointly chart the Way Forward.

Draft Proposals and Strategies Workshop

Draft proposals and strategies were presented and discussed in details at a stakeholders Workshop held at St. Bakhita Catholic Church Hall in Bomet Town on 11th April 2012. Different strategies presented and discussed not only acted as the guide in implementation of programmes and activities within the different spatial, economic, social, infrastructural and environmental sectors for Bomet, but also aim to significantly influence the final spatial plan for Bomet.

The objectives of the workshop in accordance with the terms of reference for the assignment and as a follow-up to the Feasibility Study Validation Workshop were:

- To update the stakeholders on the current status of the mapping and planning exercise for Bomet;
- To share the draft strategies and seek stakeholder reactions and obtain concrete feedback (around key issues, emerging strategies and proposals); and
- To jointly map the way forward.

1.6 PLANNING CONTEXT

1.6.1 The Constitution

1.6.1.1 *Expectations/Promise*

Sec 184. (1) of the new Kenyan Constitution recognises the importance of modern urban planning and stipulates the constitutional imperatives for a new urban planning and management Act. It must be pointed out that the critical role of modern management of urban areas is centrally recognized in the Constitution and there is an expectation that new legislation would specifically:

- (a) Establish criteria for classifying areas as urban areas and cities,
- (b) Establish the principles of governance and management of urban areas and cities; and
- (c) Provide for participation by residents in the governance of urban areas and cities.

The twin expectation of proper governance systems and participatory planning of urban areas is at the centre of the current practice of preparation of long term Strategic and Integrated Urban Development Plans.

1.6.2 Policy Frameworks

1.6.2.1 *Vision 2030*

Vision 2030 recognises the urbanization challenge in Kenya: by 2030 Kenya will be predominantly an urban country and the subsequent need for modern urban planning and provision of “decent and high quality livelihoods for her population” (GoK, (2007a:19). Under the social pillar of the Vision, there is a national vision for a just and cohesive society that enjoys equitable social development in a clean and secure environment. In terms of operationalization of this it is stated that the new planning will need to start not just with the major cities and towns also smaller settlements like Bomet that play a crucial pivotal and catalytical role in rural development. To do this the Vision recognises that there will be need for “rapid build-up of her urban planning and implementation capacity and this is part of the commitments under Vision 2030” (GoK, (2007a:19). To operationalize the above Vision 2030 calls for the preparation of strategic development and investment plans for special, border towns and all municipalities countrywide.

In the economic pillar of the Vision, it is expected that the country will maintain a 10% annual economic growth to the year 2030. Crucial activities identified in the Vision to work towards the difficult target annual growth rate include recognition of the role of the informal sector,

particularly in the urban areas, and specific targeting of key flagship projects in a few selected sectors with desired actions/activities/projects to be implemented. These include the following:

(a) Tourism Sector

- Development of 3 resort cities two at the coast and one in Isiolo.
- Premium Park Initiative.
- Under Utilized Parks Initiative.
- Development of Niche Tourism Products.

(b) Agriculture Sector

- Enactment of the Consolidated Agricultural Reform Bill.
- Fertilizer Cost-Reduction Initiative.
- Setting up of five livestock Disease Free Zones in the ASAL regions.
- Land registry.
- Land use master plan.
- ASAL Development Projects.

(c) Manufacturing Sector

- Development of Special Economic Zones in all the eight regions.
- Development of 5 SME parks.

(d) Wholesale And Retail Sector

- Build 1 free trade port in Mombasa in order to bring Dubai to Kenya.
- Create at least 10 hubs and 1000-1500 Producer Business Groups (PBGs) - start with a pilot in Maragua.
- Build at least 10 Tier 1 marks in all the regions - starting with a pilot in Athi River.

(e) ICT and BPO Sector

- Establish one major BPO park

(f) Financial Sector

- Issuance of benchmark sovereign bond.
- Pursue comprehensive remittances strategy
- Develop and execute comprehensive model for pension reform.
- Facilitate transformation towards stronger, larger scale banks.

The important point from the above-mentioned guideline of priority projects is that preparation of long term urban plans like the one for Bomet must take cognisance of these projects and where possible see how to position them for implementation in the town. This is what this plan for Bomet has endeavoured to do.

1.6.2.2 Land Policy

For a long time, Kenya's land administration and management framework has remained weak leading to the proliferation of informal settlements, unplanned urban settlement, inefficient land use practices, land use conflicts, environmental degradation, congestion, unjust land distribution, landlessness and high poverty levels. In order to address the problem in a comprehensive manner, Kenya's Parliament approved on 3rd December 2009 a National Land Policy (NLP). This policy was agreed upon after a long consultative process though it has been pointed out that the policy, unless enshrined into law and/or the Constitution was prone to several risks: Firstly, the NLP did not provide guidelines on how to operationalize some contentious land reforms such as restitution, redistribution and resettlement. Secondly, there was a lack of sequencing of the land reforms while the third related to the lack of strategies for mitigating the governance and political economy risks to the NLP implementation. (Syaggah and Mwenda, 2010:10).

However, as subsequently borne out by the current comprehensive land laws embedded in the Constitution, issues of contentious land reforms such as restitution, redistribution and resettlement have been addressed. Even though there are currently Court issues regarding the operationalization of the National Land Commission, the framework for sequencing of the land reforms has been addressed in addition to the governance structure for management of land reforms. However, some political economy risks still remain with regard to the land policy imperatives of taxation of idle land and differential size ownership of land in Kenya.

1.6.2.3 National Urban Development Policy

According to the draft National Urban Development Policy "The statutes that provide the legal framework for urban planning and development, the Local Government Act Cap 265 and the Physical Planning Act Cap 286, have 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).

Whilst the importance of sustainable urban planning and development has been captured in the Urban Areas and Cities Act No 3 of 2011, the national and county governments face a complex and varied planning agenda”.

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

1.6.3 Legal Framework

1.6.3.1 Physical Planning Act

The Physical Planning Act (PPA), vests in the Director of Physical Planning the responsibility for preparing regional physical development plans. The same law also provides county councils the responsibility for preparing regional physical development plans for areas falling in their jurisdiction. In practice, the Director of Physical Planning is required to formally delegate planning authority to the councils where they can carry out this responsibility while only providing policy and professional guidance to the councils. This Act is under review to conform to the constitution and other emerging enabling legislation.

1.6.3.2 Local Government Act

The law stands as repealed, however Local Authorities (LA's) in Kenya had for a longtime operated under the Local Government Act regime of **Cap 265**. This was an elaborate system of public administration, which empowered the local authorities through legislation. Operating under the direct supervision of the Office of the Deputy Prime Minister and Ministry of Local Government (ODPM & MoLG), the functions and responsibilities of the local authorities were defined only in terms of 'permission' rather than being mandated.

1.6.3.3 Urban Areas and Cities Act

This Act has been formulated in pursuit of Article 184 of the Constitution that calls for a National legislation to provide for classification, governance and management of urban areas and cities. The Act will become operational after the first elections held under the Constitution.

The Act covers among others the following: Classification and establishment of UA&C; Governance and management of UA&C; Delivery of Services; Integrated Development Planning; Financial Provisions; Miscellaneous and Transitional Provisions. There are also important provisions within the schedules including: Classification of cities and Towns by

services; Rights of, and participation by residents in affairs of their city or urban area; and Preparation of an Integrated Plan

There are other laws that govern physical planning. Some of these legislations include but not limited to:

- 1) Physical Planners Registration Act, 1996
- 2) Environmental Management and Co-ordination Act, 1999
- 3) Public Health Act (Cap 242)
- 4) Agriculture Act (Cap 318), Rev.1986
- 5) Land Control Act (Cap 302)
- 6) Land Acquisition Act (Cap 295), 1968
- 7) Registered Lands Act (Cap 300)
- 8) Survey Act (Cap 299)
- 9) The Building By-Laws (Grade I &II), 1968
- 10) Housing Act (Cap 117)
- 11) Water Act, 2002

1.6.4 Terms of Reference (TOR)

This report aims to achieve the following aspects as identified in the Terms of Reference

1. The plans should provide for measures to promote Local Economic Development (LED) and provide a system for coordination of activities to create synergy and spur Economic Development of the town.
2. The plan should carry out an inventory of environmental assets, resources and challenges. It should provide for improved quality of life and sustainable use of resources. The plan should map the location of the resources.
3. The Plan should have a Land Use Chapter dealing with current allocation of space and projections for future requirements to the end of the plan period. The plan should provide for a system of circulation and interactions.
4. That the plan should develop strategies to set urban growth limits and design measures to absorb growth within the already developed part of town through urban renewal.
5. The plan should zone the town while promoting inclusivity and identify present conflicts and potential future conflicts.
6. The plan should have an environment Chapter that isolates the unique features in the town that give it identity.
7. The plan should have an urban design chapter that uses different elements in planning

- e.g. physical features, neighborhoods.
8. The plan should have an investment Chapter stipulating the policy statements and spatial framework and incorporates the private, public partnership (PPP).
 9. The plan should propose an organization structure to implement and oversee the investments.

1.6.5 Stakeholders Concerns and Expectations

1.6.5.1 Housing

Housing being a universal right in Kenya's constitution should be provided for all in the Bomet ISUDP. There was an expectation of housing strategies that facilitate provision of adequate and quality housing in Bomet town. There was an expectation that the plan would indicate feasible locations where MCB would purchase new land banks for housing projects. There were concerns about emergence of informal settlements as well as control of poor quality housing developing in plots in the freehold areas of Bomet town. Furthermore, population growth should be factored in the plans for housing. There were questions on what extent the MCB had understood and embraced the building code

There were concerns that there are too many protocols in approval of land for social projects e.g. a proposed establishment of a rehabilitation centre by an NGO in Bomet could not happen because MCB was not able to allocate the required land. Concerns were raised on the review framework on acquisition of housing finance, e.g. Municipal Bonds. Government should speed the provision of title deeds for plot owners to acquire house financing. Need for a housing scheme to loan and build houses for land owners

Stakeholders and expectations to have strategies that would allow dynamic development of housing and promote social infrastructure and open spaces needed in Bomet town. There also need for institution and school land be surveyed immediately to allow growth and development of the institutions. Furthermore, it was noted that existing stadia and recreational parks should be surveyed to ensure their existence and location. There were expectations for provision of recreational parks and stadia to save the growing youth population from wasting away

A need was expressed for strong policy and prompt enforcement to ensure constructions that come up do so in a proper manner.

1.6.5.2 *Agribusiness and Poverty*

Poverty was raised as an observed challenge in Bomet town by stakeholders. They also expressed the importance of saving agricultural land in Bomet to enhance livelihood through farming and agribusiness.

1.6.5.3 *Environment*

Bomet town Stakeholders were concerned that waste management was a problem in the town. They noted that Kenya's Vision 2030 provides a framework for environment plans and with climate change becoming a phenomenon, there was need for the plan to come up with adaption measures

There were concerns on the perpetual degradation of the environment in Bomet and need for the plan to recommend measures that sustainably conserve the environment. Stakeholders expect the plan to recommend specific areas for tree planting especially along roads and on identified open spaces. There is also an expectation on the plan to give policy guidance to curb rampant cutting down of trees without replacement.

Stakeholders raised concerns on inadequate drainage in the town. They noted that waste water from hotels was being directly discharged to the Nyangores River. They expect the plan will proposal measures to curb the discharge of waste water into rivers and recommend areas to set up adequate ponds to handle waste water. It was also expected that the plan would recommend strategic location of more public toilets.

1.6.5.4 *Disaster Management*

Bomet town is prone to lightning and flooding. These raised concerns among stakeholders on how the plan intends to curb these types of disasters since different disasters require different strategies in terms of management.

It was noted that MCB lacks fire fighting equipment. This raised concerns on how a fire disaster be controlled in Bomet in Bomet town. Stakeholders also recommended land to be allocated to the Kenya Red Cross, an organization effective in disaster response and management.

1.6.5.5 *Transport, Infrastructure and Services*

Stakeholders had an expectation that the transportation strategies in the plan would enhance mobility and competitiveness. They were, however, concerned that space may be lacking for expansion of roads especially in the freehold areas. There was also concern that some access roads are not communicable making access to residential areas problematic. They proposed a road connecting Banaba from Singorwet through Kapsimotwo to Bomet town to enhance

linkages especially for the poor. There was also need to provide adequate parking spaces in Bomet town.

There were concerns from stakeholders on availability of land that had earlier been set aside for public purpose. It was noted that the 3.7 acres set aside for a stadium and the 30 acres set aside for light industries were still available. The plan should inform the utilisation of land set aside for public purpose and utilities. It was noted that there was a proposal for setting up of a sewer line and a sewerage treatment plant as per Lake Victoria Small Towns programme.

1.7 STRUCTURE AND CONTENTS OF THE PLAN

Organisation of this Report

After this introductory part the rest of this Proposals and Strategies Report (PSR) is organised as follows: Part II details the current situation in Bomet highlighting the sectoral and thematic constraints in the Town that inhibit the development of a burgeoning and environmentally sustainable Town. Part III discusses the key planning and development challenges in the Town, while Part IV discusses sectoral activities and investments that the Study Team proposes to ameliorate the identified constraints and where possible indication of the costs of these activities and investments. These costs have been deliberately left as tentative estimates since it is proposed that they will need to be discussed with stakeholders in Bomet before agreed activities and investments can be fully costed. Part V gives a draft Spatial Development Strategy for Bomet Town, while Part VI proposes some measures to enhance the revenue base for the Town. Since it is important that all these proposals must be communicated in a workable and stakeholder friendly manner, Part VII proposes a Communication Strategy for implementing BoISUDP. Part VII provides the institutional and monitoring and evaluation (M&E) framework for implementing proposed activities and investments. Chapter 9 outlines the various Development Scenarios for BOMET while Chapter 10 discusses the Strategic Urban Development Plan/Structure Plan of Bomet. Chapter 11 is devoted to the Plan Implementation Matrix

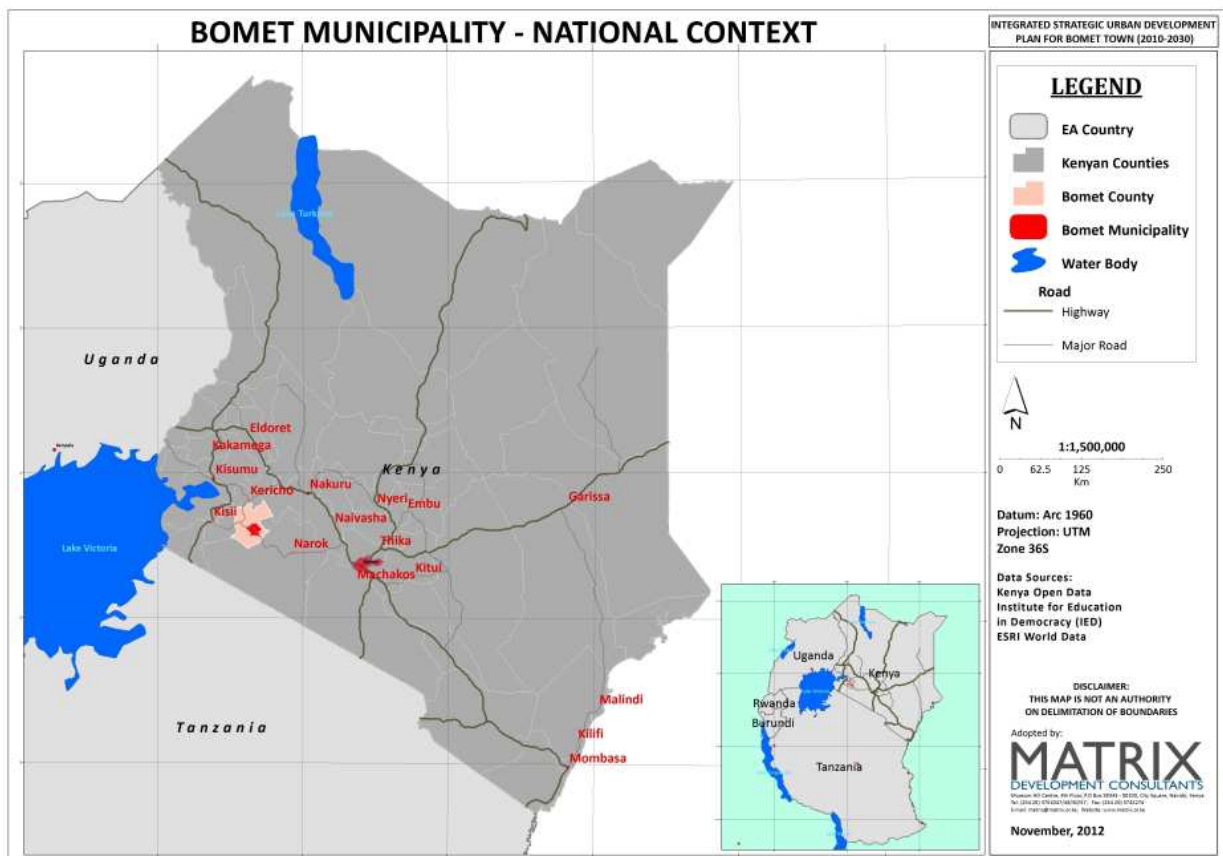
PART II: SITUATION ANALYSIS

2.1 PLANNING AREA

2.1.1 National Context

Bomet with its unique location in the Rift Valley Kenya (see map 2.1 below) is well suited to play an important role in the realisation of Vision 2030 objectives. Firstly, food security and agro-processing is an important national objective that can be contributed by the town and its hinterland. Secondly, Bomet town can play an important role in deepening the tourism potential of the Mara River Basin tourism circuit.

Map 2.1: National Context of Bomet Town

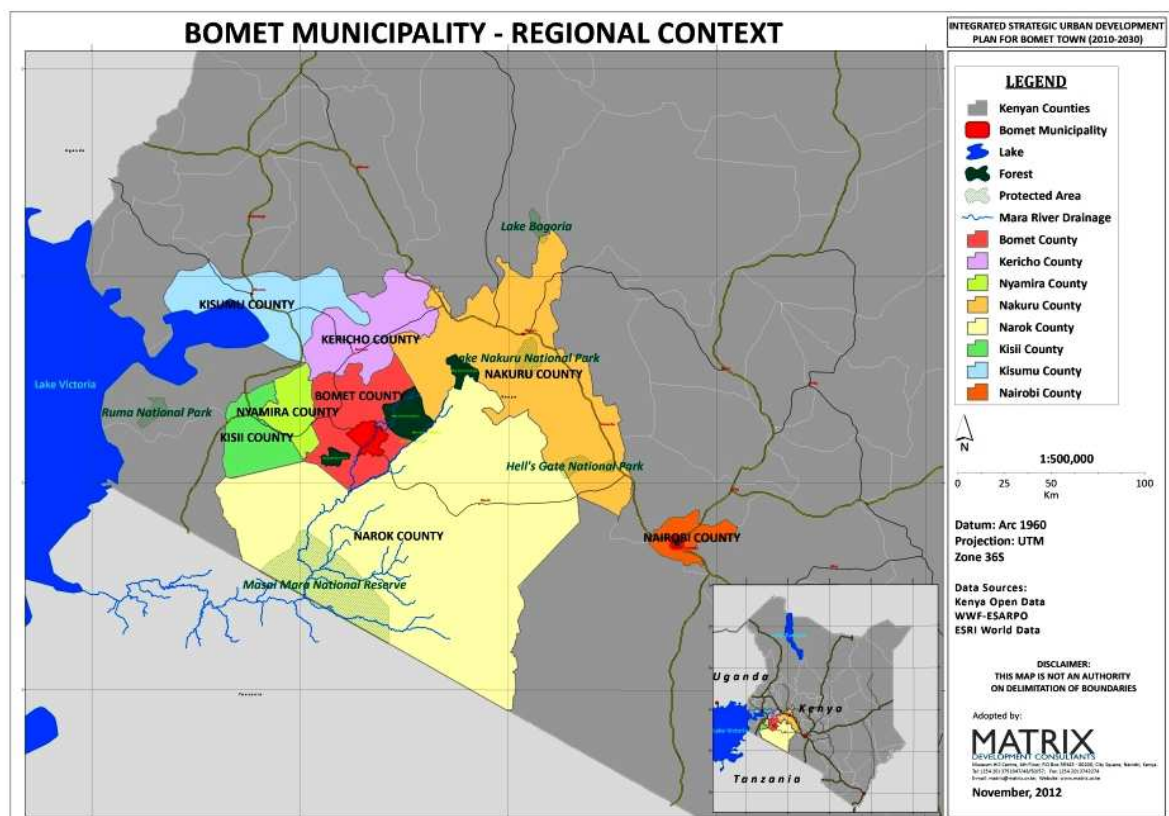


2.1.2 Regional Context

Bomet Municipality falls within the Rift Valley floor at an altitude of 900 metres to 1850 metres above the sea level characterizing the area and the whole district with undulating topography that give rise to the main rivers mainly river Kipsonoi which marks the boundary of Bomet and Buret districts and flows to Lake Victoria; River Nyangores which flows from South – West Mau Forest and traverses the town forming a structural element in the growth and expansion of Bomet town.

Bomet town is set to be the county headquarters for Bomet County. The town is quickly developing into a financial centre in south rift providing financial services to the booming agricultural sector in that region. **Map 2.2** below depicts the location of Bomet town in its regional context.

Map 2.2: Regional Context of Bomet Town



2.1.3 Local Context

Bomet Municipality straddles Bomet, Chepalung'u and Sotik constituencies. It has seven wards covering an area of approximately 250 Km².

The area receives rainfall throughout the year with the two rain seasons: being, the long rains that start from March to May and short rains from August to October. The mean monthly temperature is 18°C with the coldest months being July and August. The soils are generally fertile with altitude and deep dark clay soils that characterize most of the area within the Municipality. Clay soils cover 43.6% of the district which hampers the percolation of water. As a result toilets overflow pouring the sludge on the surface thus causing a threat to human health. This forms a challenge given that Bomet town and other trading centers within the Municipality do not have sewerage disposal systems thus necessitating the need to prioritize proper ways of sewerage disposal.

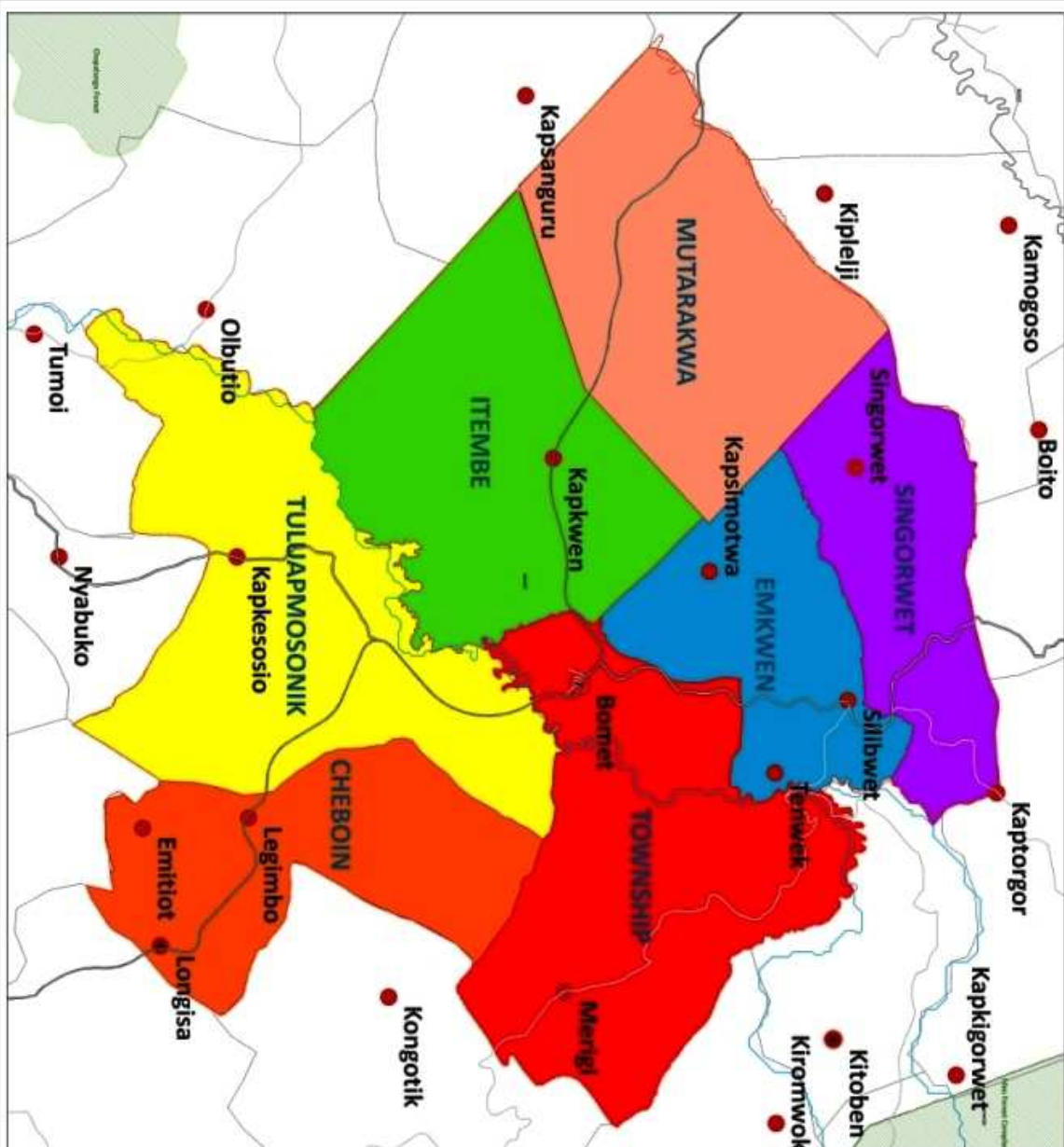
Bomet town and its hinterland possess a high agricultural potential region for food crop production of maize, beans, Irish potatoes, sweet potatoes and cash crops such as Tea, coffee and pyrethrum. Hence there is a need of balancing this high value agricultural land with the urban growth through proper planning in order to bring about harmony.

Map 2.3: Local Context of Bomet Town (overleaf)

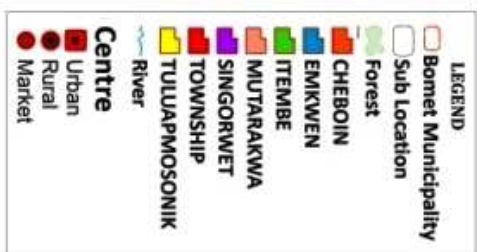
Map 2.4: Bomet Municipality Civic Wards

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

BOMET MUNICIPALITY CIVIC WARDS



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



Datum: Arc 1960
Projection: UTM
Zone 36S

Data Sources:
Institute for Education
in Democracy (IED)
Kenya Roads Board
ESRI World Data

DISCLAIMER:
THIS MAP IS NOT AN AUTHORITY
ON DELIMITATION OF BOUNDARIES

Adopted by:
MATRIX
DEVELOPMENT CONSULTANTS
November, 2012

2.2 DEMOGRAPHIC DYNAMICS

2.2.1 Historical Background

The history of Bomet town dates back to the 1920s where the town first started as a “*boma*” – an enclosure for livestock on transit. The town has been steadily growing especially from the 1980s due to its high agricultural production more so having to do with tea production. Bomet Municipality is inhabited majorly by the Kipsigis people. Kipsigis is a tonal language classified as Nilotic, and is grouped within the Eastern Sudanic Branch of the Nilo-Saharan Language Family. The Kipsigis occupy a portion of the highlands in southwestern Kenya that is roughly contiguous with the present boundaries of Kericho and Bomet Counties. The Kipsigis are the southernmost and most populous of the Kalenjin² peoples of Kenya. They are bordered to the north by the Nandi and the Luo, Kisii, and Maasai, to the west and south. Within the broader political and cultural context of present-day Kenya, the Kalenjin are recognized as a distinct population that shares a common cultural heritage and common political interests.

Bomet town was first gazetted as a rural centre in 1983. It was then elevated to a Town Council in 1993 and further promoted to a Municipality a year later in 1994. Bomet town is ranked 97th in the Kenya town rankings (*Wolfram Alpha, 2004*). Currently, Bomet town is the administrative capital of Bomet County. It has seven wards (Map 1.1) which are split between Bomet, Chepalungu and Sotik constituencies.

2.2.2 Population Structure in Bomet

2.2.2.1 Population Size and Growth

According to the 2009 Kenya Population and Housing Census (KNBS, 2010), the total urban population in Bomet Municipality was 110,160 inhabitants within the 7 wards of MCB (see table 2.1.below). Compared to the 1999 Census population of 84,321 this shows that the population grew by 3.2% annually over the period. The sex ratio while 1.02:1 in favour of females in 1999, changed in favour of males to 1.01:1 in 2009.

Township Ward where the CBD is located has the highest population and comprised of 25% of the population in both 1999 and 2009. However as would be expected of a rural town like

² The term “*Kalenjin*” (lit. “I say to you”) was coined in radio broadcasts and at political rallies during the late colonial period, at a time when political events spurred a growing awareness of the close cultural, historical, and linguistic ties between Kipsigis and neighboring peoples to the north

Bomet, further classification of the population of MCB in 2009 shows that the Core Urban population was 7,035 in 2009 comprising 3,635 males and 3,400 females. The total Peri Urban population was 76,694 and the Rural Population 27,234 (Republic of Kenya, 2010, pg. 194).

Table 2.1: Population of Bomet Municipality 1999 and 2009 by Sex

Wards	1999 Population			2009 Population			Inter-censal
	Male	Female	Total	Male	Female	Total	Growth Rate
Township	10,492	10,176	20,668	13,860	13,702	27,562	3.49
Ingorwet	5,505	5,457	10,962	6,257	6,194	12,451	1.36
Mutarakwa	4,375	4,518	8,893	6,153	6,309	12,462	4.01
Itembe	3,835	4,176	8,011	5,669	5,872	11,541	4.41
Emkwen	6,298	6,342	12,640	7,922	7,931	15,853	2.79
Tuluapmosonik	6,306	6,780	13,086	8,270	8,571	16,841	2.87
Cheboin	4,886	5,175	10,061	6,632	6,818	13,450	3.54
Total	41,697	42,624	84,321	54,763	55,397	110,160	3.16

Source: Republic of Kenya, 2010

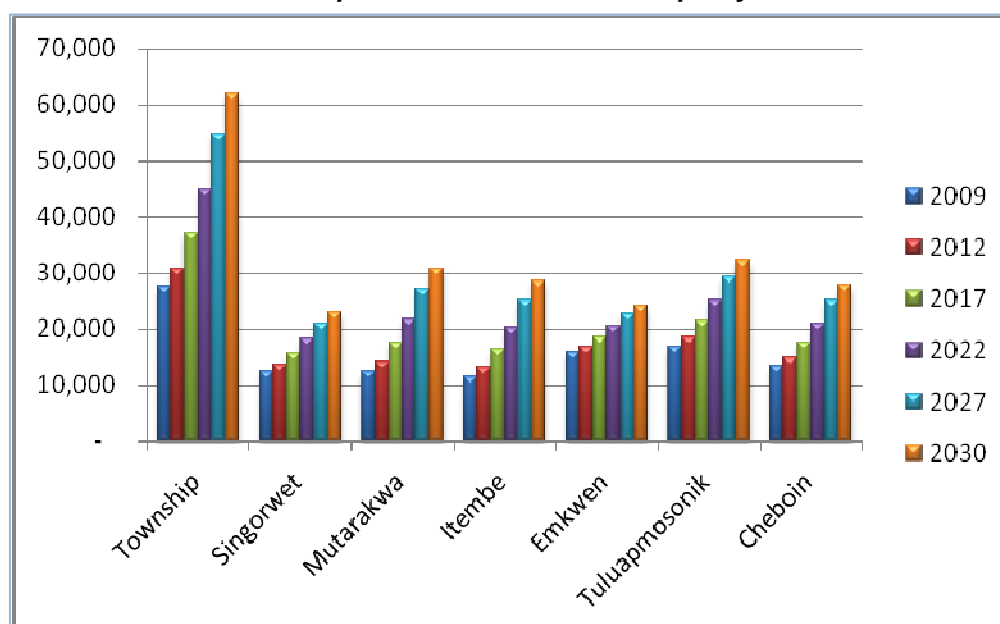
The inter censual annual growth rate for MCB was an average of 3.2 though some wards like Singorwet, Emkwen and Tulapmosonik grew at rates lower than this average. The highest growth of 4.41% was exhibited in Itembe, a small but fast growing rural township within MCB. From a population of 110,160 it is projected that the population of MCB will more than double to 228,419 in 2030 as detailed in Table 2.2 below. Township ward where the CBD is located will grow by 2.2 times to stand at 62,000 residents in 2030. Detailed projections by age groups and wards 2030 are given in Annex 1.

Table 2.2: Projected Population of Bomet Municipality 2009 – 2030

Ward	2009	2012	2017	2022	2027	2030
Township	27,562	30,733	37,035	44,906	54,780	61,892
Singorwet	12,451	13,596	15,745	18,235	21,120	23,067
Mutarakwa	12,462	14,182	17,591	21,821	27,068	30,804
Itembe	11,541	13,135	16,297	20,221	25,090	28,558
Emkwen	15,853	16,834	18,606	20,564	22,728	24,134
Tuluapmosonik	16,841	18,464	21,529	25,112	29,300	32,146
Cheboin	13,450	14,912	17,718	21,065	25,059	27,818
MCB	110,160	121,856	144,521	171,923	205,145	228,419

Source: Projections based on 2009 Census data (Republic of Kenya, 2010)

Chart 2.1: Ward level Population of Bomet Municipality 2009 – 2030



Source: Projections based on 2009 Census data (Republic of Kenya, 2010)

2.2.2.2 Age Structure

As can be seen in Table 2.3 and Chart 2.2 the population of MCB is very young with those under 20 years of age comprising 56 % of the population in 2009. In 2009, the young person's dependency ratio expressing the age group 0-14 years as a share of the labour force (ages 15-60) is calculated at a high 90% while the old age dependency ratio (age group over 60 years) is a much lower 9%. This has important ramifications for future planning for the Town in terms of basic social services particularly educational and medical facilities as well as infrastructural services.

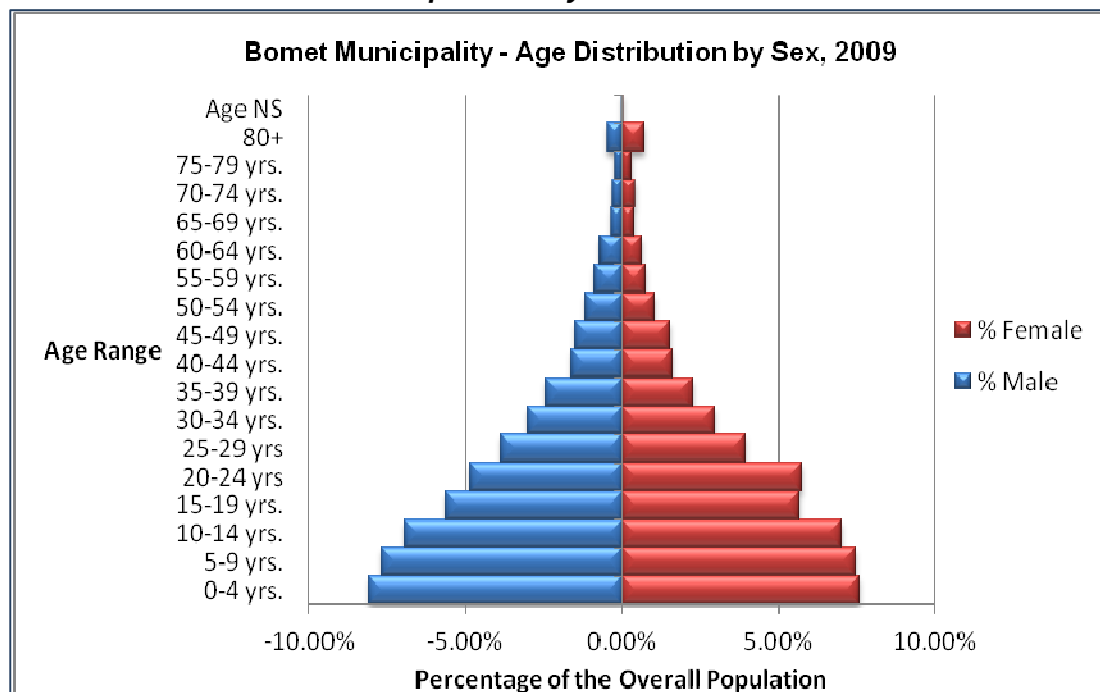
Table 2.3: Bomet Town: 2009 Population by Age

Age	Male	Female	Total
0-4 yrs.	8891	8407	17,298
5-9 yrs.	8471	8266	16,737
10-14 yrs.	7640	7738	15,378
15-19 yrs.	6188	6232	12,421
20-24 yrs	5350	6316	11,666
25-29 yrs	4225	4372	8,597

Age	Male	Female	Total
30-34 yrs.	3316	3266	6,582
35-39 yrs.	2664	2507	5,171
40-44 yrs.	1765	1814	3,578
45-49 yrs.	1638	1728	3,366
50-54 yrs.	1247	1155	2,402
55-59 yrs.	961	852	1,813
60-64 yrs.	773	709	1,482
65-69 yrs.	417	434	851
70-74 yrs.	361	462	823
75-79 yrs.	257	348	605
80+	501	777	1,278
Age NS	64	48	112
Total	54728	55432	110,160

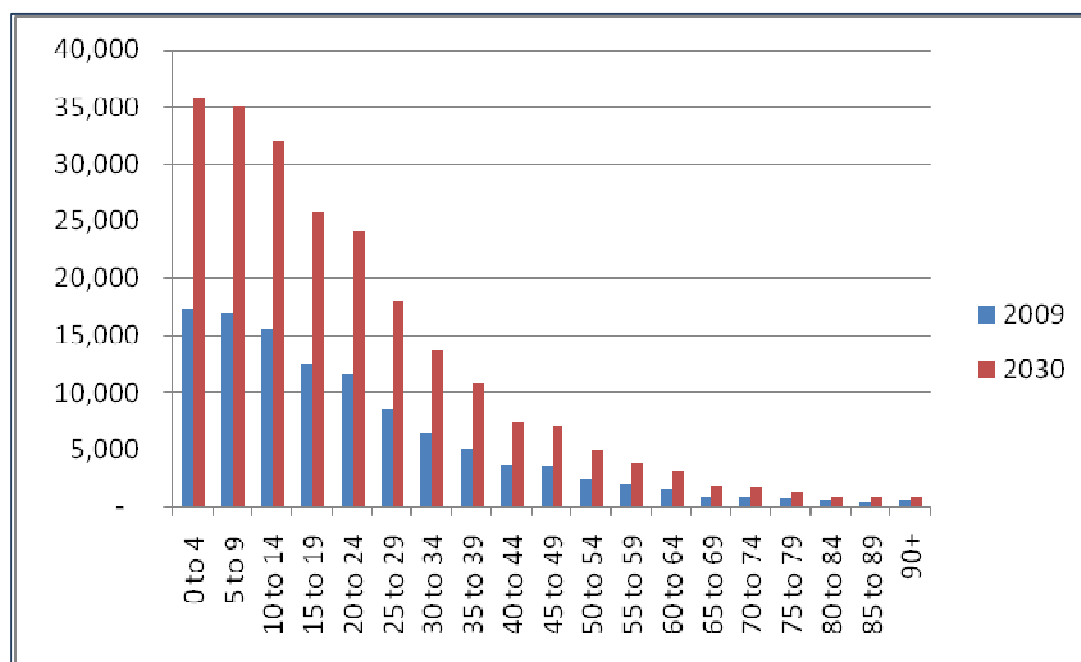
Source: 2009 Census data (GoK, 2010)

Chart 2.2: Bomet Town 2009 Population Pyramid



Source: 2009 Census data (GoK, 2010)

Chart 2.3: Population of Bomet by Age Structure 2009 – 2030

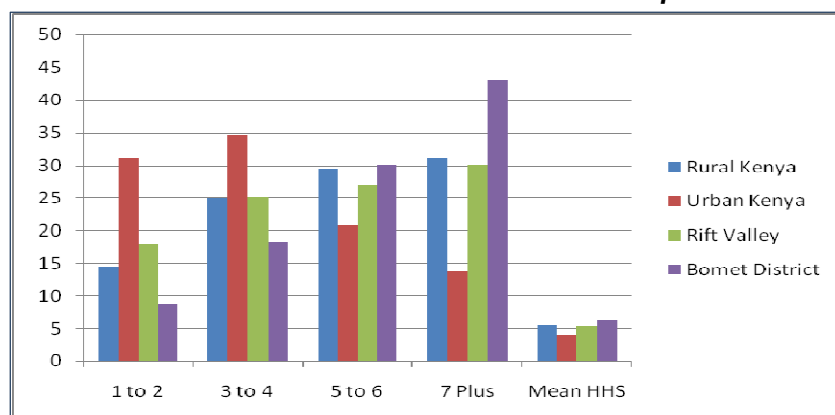


Source: Projections based on 2009 Census data (Republic of Kenya, 2010)

2.2.2.3 Household Size

As Chart 2.4 below shows, in rural Kenya the mean household size nationally is 5.1 persons while the average for urban areas of Kenya is only 4 persons. The share of urban households that have more than 7 persons is 14%. In comparison for Bomet District as a whole, the mean household size is 6.1 persons and the share of households that have more than 7 persons is 43%, almost half of all households.

Chart 2.4: Household Size – Bomet District Compared to rest of Kenya



Source: Kenya National Bureau of Statistics (2007), table 3.5, pg.27

Compared to the whole district, it appears that household sizes in MCB are slightly smaller. As *Table 2.4* below shows, the average household size across all wards was 5.5 while specific wards had sizes ranging from 5.1 in Township, Tuluapmosonik and Cheboin to 6.1 in rural Emkwen.

Table 2.4: MCB – Household Size by Civic Wards in 2009

Wards	2009 Census Population			
	Total	Male	Female	H/hold Size
Township	27,562	13,860	13,702	5.1
Singorwet	12,451	6,257	6,194	5.6
Mutarakwa	12,462	6,153	6,309	5.7
Itembe	11,541	5,669	5,872	5.5
Emkwen	15,853	7,922	7,931	6.1
Tuluapmosonik	16,841	8,270	8,571	5.1
Cheboin	13,450	6,632	6,818	5.1
Total	110,160	54,763	55,397	5.5

Source: Republic of Kenya, 2010

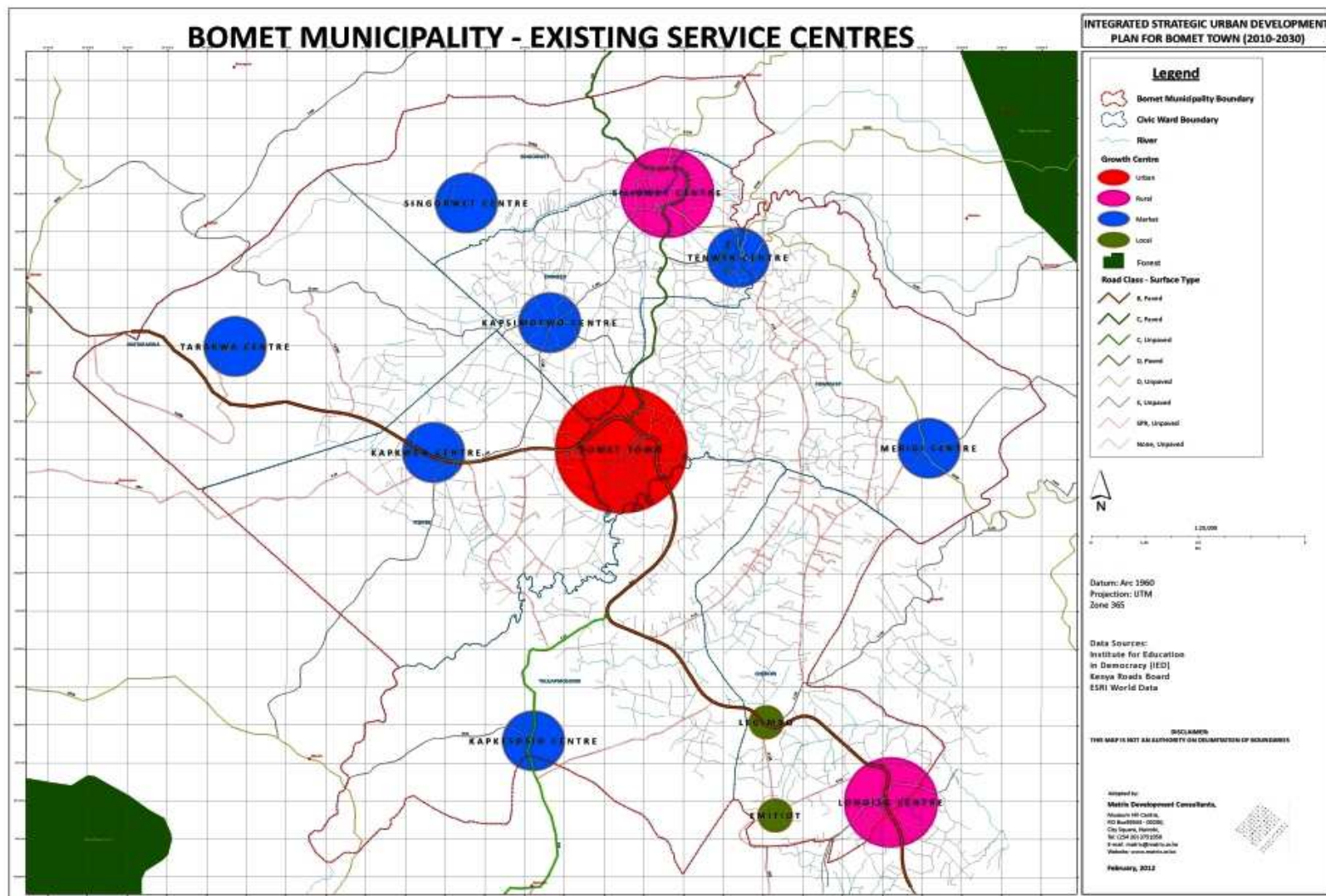
2.3 SITE ANALYSIS

2.3.1 The Local Centres

Among the local centres within the Municipality, Longisa and Silibwet are at the level of Rural centres according to the National human settlement strategy while, Merigi and Itembe Kapkesosio, Singorwet are at the level of Market centres and Imitiot, Kapsimotwa, Tenwek and Legimbo are at the level of the Local Centres. *Map 2.5* shows the various categories of these centres.

All these centres have developed spontaneously and provide services of various types to the local community. The strategy will be to spur growth to these centres particularly Longisa, Silibwet and Itembe so that growth does not concentrate on the C.B.D. alone but should allow it to happen simultaneously with these other centres so that higher level of urban services are allowed to spread outside the C.B.D.

Map 2.5: Ranked Service Centers within Bomet

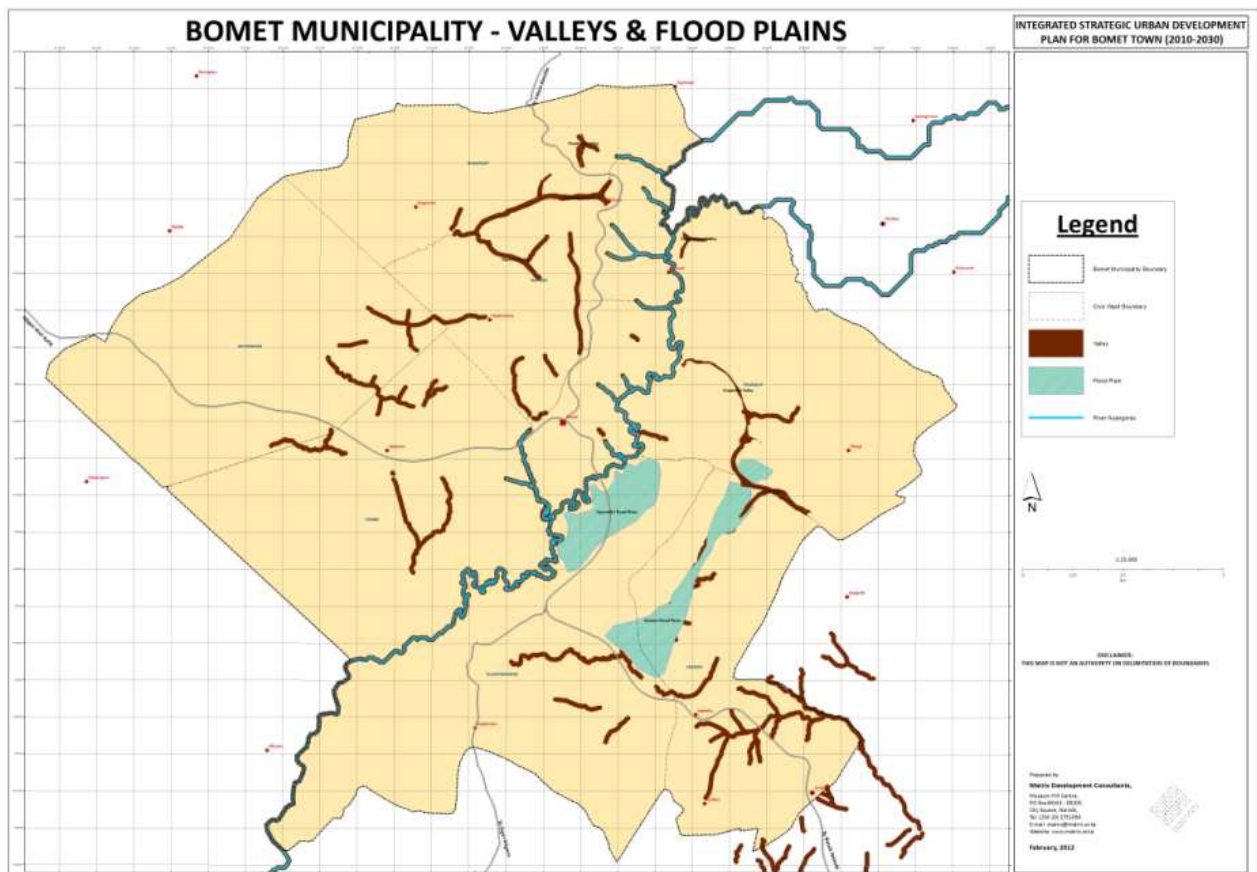


Source: Matrix Development Consultants, May, 2012

2.3.2 The Flood Plain and the Valleys

In terms of area these cover over 2,140 Acres of land and form some of the fragile area in the Municipality. They need special treatment in terms of their conservation and development and are not conducive for urban development.

Map 2.6: Valleys and Flood plains within Bomet Town



2.3.4 The Rich Agricultural Hinterland

This covers slightly more than 50% of the Municipality. Among the important crops grown here are Tea, Pyrethrum, Onions, Potatoes, horticultural produce as well as rearing of beef and dairy cattle. The challenge here is to provide a balance between urban growth and food or crop production. The strategy should be to strengthen this sector so as to provide the basis to spur Agro based Industries particularly at Silibwet and its environs as well as Merigi and Itembe. Hence, this land could be left as deferred for future urban use beyond 2030.

2.4 LAND SUITABILITY

2.4.1 Terrain

The Topography of Bomet Municipality is characterised by undulating hills and valleys. It forms a transitional belt between Kericho hills and the Narok Plains. The altitude of Bomet ranges from 1900 metres above sea level to 2060 metres above sea level with the average being 2000 metres above sea level. The Masare range, Kyangong and Tiroti hills to the South East; the Sugumerka hills to the South West and the Mutarakwa hills to the North East reflects the upper zones of the Municipality which give way to the flatter terrain on the Central, Western and South Western area of the Municipality. The land slopes mainly from North to South and to a lesser extent in the East-West direction with a ridge across the area.

2.4.2 Drainage

The valleys in the Municipality form the natural drainage profiles and several seasonal and perennial streams define the study area. The Nyangores River is the Permanent River which flows from South Western Mau Forest and Proceeds Southwards through Tenwek, Bomet Town and Joins Amolo River to form Mara River.

2.4.3 Soil Structure

The predominant geology of the study area comprises of tertiary age. These are mainly of alkaline type, including basalt phonolites, nephelinites, trachytes and alkali of rhyolite and their pyroclastic equivalent.

The soils in the upper zones in the North and North Eastern parts range from high to moderately fertile. Those in the South range from low to very low in fertility. Those in the Central part of the Municipality range from moderately fertile to variable in their fertility. Soil erosion is one of the problems experienced in the Municipality especially as a result of increasing cultivation on steep slopes. This has increasingly led to reduced fertility and a higher incidence of bare hills.

2.5 LAND IN BOMET TOWN

It has been estimated that almost 95% of the Land in the Municipality is private that is land under freehold tenure or under leasehold tenure leased by the Municipal Council. Land Uses in Bomet

All the previous development plans and the zoning plan prepared in Bomet have concentrated in what is presently being referred to as “Bomet town” or the C.B.D. of the Bomet Municipality covering an area of 1.5 km square approximately. However, the Bomet Municipality covers an area of 250 sq kilometres. Our land use study of the Municipality has shown in the *Table 2.5* below the percentage of the various land uses in comparison with that of the National averages.

Table 2.5: Bomet and National Average Landuses

CODE	LAND USE	BOMET %	NATIONAL AVERAGE %
0	Residential	0.83%	41.5%
1	Industrial	0.02%	7.8%
2	Educational	1.26%	15.6%
3	Recreational	0.28%	13.2%
4	Public Purpose	1.27%	15.0%
5	Commercial	0.39%	3.9%
6	Public Utility	0.20%	3.0%

Source: Matrix Development Consultants, 2011

The National averages were worked out in 1971 and considered only the land-uses from codes 0 to 6. Comparing the two, it emerges that the Bomet averages are all far below the National ones. The *Table 2.6* below gives the percentage land-uses for Bomet Municipality in areas (acres or hectares) and included all the land-uses from code 0 to 8. This enabled a better understanding of the anomaly than when compared with the national average.

Table 2.6: Bomet Land uses in Areas

CODE	LANDUSES	AREA (2 decimal places)	
		Acre	Hectare
0	Residential	514.55	208.23
1	Industrial	12.39	5.01
2	Educational	7 82.73	316.76
3	Recreational	172.12	69.66
4	Public Purpose	791.25	320.21

5	Commercial	244.38	98.90
6	Public Utility	125.89	50.95
7	Transportation	6,941.57	2,809.15
8	Agricultural (Deferred)	52,535.49	21,260.37

Source: Matrix Development Consultants, 2011

The Table 2.5 above shows that over 80% of the land in the Municipality is still under agricultural but considering that Municipality is composed of 250sq. kilometres the land which is under urban use is still substantial. However, the land shown under agriculture or **'deferred'** includes the land under steep valleys, hill tops, flood plains and riparian reserves, but in actuality what constitutes fertile agricultural land which should be allowed to retain its status is only about 50% that is 13,644.45 hectares.

As stated earlier (Table 2.5) above shows that the Bomet land uses from code 0 to 6 are all far below the expected National averages. The reasons could be as follows:

1. For **'Residential use'** it can be said that Bomet has only few Institutional housing projects. The only formal housing is in the form of Government houses meant to accommodate the senior Government officers within the C.B.D. Many of the other residents of Bomet are being accommodated in private houses above the commercial zone within the C.B.D., either the freehold area near the C.B.D. or at the Informal area of Kambi Shetani. Considering that a very big area of the Municipality is still under agriculture it can be concluded that a large number of local residents of Bomet are actually staying in their rural homes. The only other form of Institutional housing is that of **'in house'** accommodation which has been provided for the Doctors and the Para medic staff at the recently completed district hospital at Longisa.
2. Though Bomet has a clearly designed **'Industrial'** zone, very few of the industries have been put up. The only visible industrial activity which has taken place is the existing flour Mill Plant, which is presently not operating and the slaughter house which appears to be wrongly sited and an eyesore. There is however, a substantial area zoned for Jua Kali activity. We were reliably informed that the major hindrance at present facing this industrial zone has been inadequate electricity supply to enable any industrial activity to operate efficiently. Most of the Industrial activities are in the form of metal fabricators, Carpentry, Quarrying, Garage and repairs, Tailoring, Bakeries and Confectionaries, Posho mills, brick making and various types of food processing.

3. The existing land-use under '**Educational**' though appears small in terms of percentages but in area it is actually substantial. Bomet has approximately 783 acres under Educational use. According to our population projections the existing number of schools appears adequate to the year 2030. There will be no need of putting up any new schools instead if there will be a demand for such facilities in future this should be in the form of adding more streams to the existing schools. The current population structure shows that the school going population (0-19) forms over 55% of the population which shows that Bomet has a population of a high dependency ratio. The *Table 2.7* below shows the number of Educational Institutions in Bomet and the area they cover.

Table 2.7: Number and Area of Educational Institutions within Bomet

EDUCATIONAL INSTITUTION	NUMBER	AREA	
		ACRE	HECTATRE
E.C.D	12	35.82	14.5
Primary School	109	546.74	221.26
Secondary School	22	151.12	61.15
Polytechnic	3	12.25	4.96
College	10	36.25	14.67
Library	1	0.55	0.22
TOTAL	156	782.73	316.76

Source: Matrix Development Consultants, 2011

4. The only formal outdoor '**Recreational**' zone in Bomet Municipality is the public garden at the C.B.D. which also doubles up as the area for public meetings during National Day Celebrations. The only other public outdoor area is the Stadium or football ground at Silibwet. We have been informed that the Municipal Council has set aside an area for a new stadium within the C.B.D. The remaining area under this use is basically the riparian reserves along river '**Nyangores**' and other smaller streams. There is a need of providing more open spaces and recreational areas in the C.B.D. This is because Bomet has a large daytime population in the C.B.D. which requires this facility as a priority.
5. The Government offices at the C.B.D., the district hospital at Longisa and Tenwek hospital forms the, large areas under '**Public Purpose**'. The remainder of the land is under the various Religious Institutions and health centres spread out in various areas of the Municipality. Overall the area under public purpose is very much below the national

average. There is a need of distributing some of these public purpose facilities to the various centres in the Municipality in order to bring the services closer to the people.

Secondly, there is a need to urgently set aside a piece of land in the C.B.D. to set up a fire station to serve the whole Municipality.

6. The 'Central Business District' in Bomet is the biggest area of '**commercial**' activity in the Municipality. The other areas are the commercial centres and open air markets at Silibwet, Longisa, Itembe, Merigi, Kapkesosio, Singorwet, Kapsimtwo, Tenwek and Logimbo. There is a need of opening up new Municipal markets at Itembe, Legimbo and Longisa. The construction of the new Municipal market at the C.B.D. is long overdue, this should be completed soon. The only strategy under this sector is to concentrate any future commercial activities in to the centres at Longisa, Silibwet, Itembe and Merigi.
7. '**Public Utility**' provision in Bomet is concentrated around the Central Business District. That is why the figures are far below the National average. Apart from the Muslim and Christian cemeteries, Bomet does not have a formal sewerage system and the water reticulation system covers only a small area of the C.B.D. There is an urgent need of bringing Bomet under a public sewer and putting up a modern water distribution to cover a larger area of the Municipality. Map 1 overleaf shows the existing Land uses in Bomet.

2.5.1 Tenure

It has been estimated that almost 95% of the Land in the Municipality is private that is land under freehold tenure or under leasehold tenure leased by the Municipal Council. On the other hand the Municipal Council still holds a substantial amount of land as trust land. A small amount of land, 78 ha in the C.B.D. is held by Government and has been used to put up Government buildings. Bomet town is still growing and expanding but this growth and expansion needs to be controlled through proper planning.

2.5.2 Conversion of Land for Urban Use

Bomet town is still growing and expanding but this growth and expansion needs to be controlled through proper planning. For this to happen land will need to be made available for various uses in the future. This will have to take place in various ways as outlined below:-

2.5.2.1 Land Acquisitions

Land could be acquired by using the “Land Acquisition Act” for the purposes of putting up urgently required public facilities. Of priority are the Land acquisitions for putting up a fire station, Residential estates of various densities and other emerging needs.

2.5.2.2 Land Pooling

Land pooling is a form of temporary public ownership that seeks to achieve unified control over large areas and means of financing public service installations during the crucial land development stage of urban growth. This process entails a Public Authority e.g. the Municipal of Bomet, to assemble numerous parcels of Land without paying compensations to the owners. Instead the Council services and subdivides the Land for urban use and returns most of the resulting building sites or plots to the original owners on prorated basis i.e. on proportion to their Land contributions and sells the remaining sites to recover public costs.

Government or public sponsored land pooling is an efficient way to convert rural land to urban use and allows the Government to capture some of the land value increases resulting from the supply of inputs. This system is widely used in South Korea, India, Japan and China. Locally in Kenya the process has been used in Changamwe, Mombasa. The Changamwe Re- Pooling Scheme through the Municipal Council of Mombasa is a live example of the success of this process.

2.5.2.3 Public – Private Partnership

Private Investors in Bomet could be encouraged to partner with the Municipal Council in raising funds for the acquisition of land for specific projects and share the accrued profits. For instance, land could be acquired for medium or high density residential use, after which a block of flats on tenant purchase could be put up and availed to the residents.

2.5.2.4 Private – Private Partnerships

Owners of private land zoned for Industrial purposes for instance could be allowed to enter into direct arrangements with private entrepreneurs for purposes of putting up Industries with the Municipal Council having an overseeing role as well as involved in the provision of infrastructure and basic services. Their local contribution will be in the form of land and could work out profit sharing or sublease for the land.

2.5.2.5 Revolving Fund

Government/Municipal funds could be set aside for purchase of strategic land. For instance the Government/Municipality could buy out some of the plot owners in the freehold area near the

C.B.D. and develop rental housing scheme. Accruing proceeds could be shared on a 50 – 50 ratio whereby the Government/Municipality remains with the asset and 50% of the rent whereas the balance of the 50% of the rent could remain in the revolving fund to be used to replicate the exercise at another site.

2.5.2.6 *Open Market Transactions*

Entrepreneurs could be encouraged to be involved in a willing buyer, willing seller transactions when looking for land to put up various types of Investments provided the particular piece of land has been zoned for that purpose. However, this will need a lot of publicity once the Plan is completed to make entrepreneurs aware of this possibility. The social media and the Local Planning Steering Committee could be used to popularize these options amongst the local owners in the Municipality and could even attract external or international investors.

2.5.2.7 *Subleasing of Land*

The owners of the land in the freehold area for instance could sublease their land for the various urban uses and earn reasonably good amount of money while still remaining as the lessor of the land. This however implies that Government regulations such as change of user will need to be complied with.

2.5.2.8 *Land Banking by the Government*

The Municipal Council of Bomet could have more controls on the development control conditions on subdivision and change of users.

Presently a large number of freehold owners near the C.B.D. are operating commercial enterprises on hitherto agricultural land. These should revert to 99 year leases and bring these lands under direct Government control and be able to increase the Government Land Bank. These conditions apply to the whole country as per the Government Land Act.

Secondly, the Government can acquire large tracts of land to be set aside for controlled development of urban growth.

2.5.3 *Cost of availing land for public use*

It is assumed that land will be bought or compulsorily acquired, for putting up sewerage treatment works and Sanitary landfills, Public cemetery, water treatment works, Markets, police Stations, expansion of the airport, fire stations and recreational grounds. The cost of land has been calculated at the current market value and Table 2.8 below gives a detail of public facility, land size and cost involved in the purchase and/or acquisition of land at the respective centres

BOMET TOWN			
LAND USE	SIZE (HA)	ESTIMATED COST /ACRE (KES)	TOTAL COST (KES)
SEWAGE TREATMENT WORKS & SANITARY LANDFILL	31.3	500,000	38,675,000
PUBLIC CEMETERY	5.76	500,000	7,120,000
TOTAL COST			45,795,000
SILIBWET			
LAND USE	SIZE (HA)	ESTIMATED COST /ACRE (KES)	TOTAL COST (KES)
WATER TREATMENT WORKS	4.31	500,000	5,325,000
MARKET (WHOLESALE & RETAIL)	1.88	500,000	2,320,000
POLICE STATION	2.07	500,000	2,555,000
FIRE STATION	0.64	500,000	790,000
TOTAL COST			10,990,000
LONGISA			
LAND USE	SIZE (HA)	ESTIMATED COST /ACRE (KES)	TOTAL COST (KES)
MARKET	3.19	500,000	3,940,000
RECREATION	7.08	500,000	8,745,000
FIRE STATION	1	500,000	1,235,500
POLICE STATION	1.5	500,000	1,853,500
TOTAL COST			15,774,000
KAPKWEN			
LAND USE	SIZE (HA)	ESTIMATED COST /ACRE (KES)	TOTAL COST (KES)
OPEN AIR MARKET	3.55	500,000	4,500,000
AIRPORT	52.37	500,000	64,699,725
PARKING FACILTY	0.82	500,000	1,015,000
TOTAL COST			70,214,725
MCB TOTAL COST OF AVAILING LAND FOR PUBLIC USE			142,773,725

2.6 LAND MANAGEMENT

2.6.1 Cadastral and Property Boundaries

The cadastral and property boundaries in Bomet have been distributed among eleven sections. The leasehold properties consist of parcels within the Bomet township and constitute 273 parcels of land totaling to an area of 223.26 hectares whereas the remainder are freehold properties under the ten settlement schemes all of which are outlined in *Table 2.8* Below:

Table 2.8: Bomet Town Cadastral Property Statistics

	Number of Parcels	Minimum (Ha)	Maximum (Ha)	Average (Ha)	TOTAL AREA (Ha)
1. Bomet township (Leasehold)	273	0.0211	3.6	0.96	223.26
2. Kongotik	900	0.0001	25.22	3.38	3041.07
3. Kyogong	1,038	0.0006	29.32	3.15	3266.63
4. Merigi	412	0.0001	20.09	2.87	1182.86
5. Ndaraweta	516	0.0006	23.53	2.95	1521.56
6. Silibwet	1,835	0.0005	24.08	1.7	3126.65
7. Kapsimbiri	1,068	0.0001	23.92	2.35	2511.61
8. Itembe	800	0.0019	46.66	4.75	3800.59
9. Chesoen	481	0.0003	14.73	2.13	1024.73
10. Tumoi	486	0.0001	23.09	3.52	1708.42
11. Sotik East Settlements	549	0.0001	0.218224	7.4	4060.51
MCB OVERALL STATISTICS	8,357	0.0001	46.66	3.02	25254.93

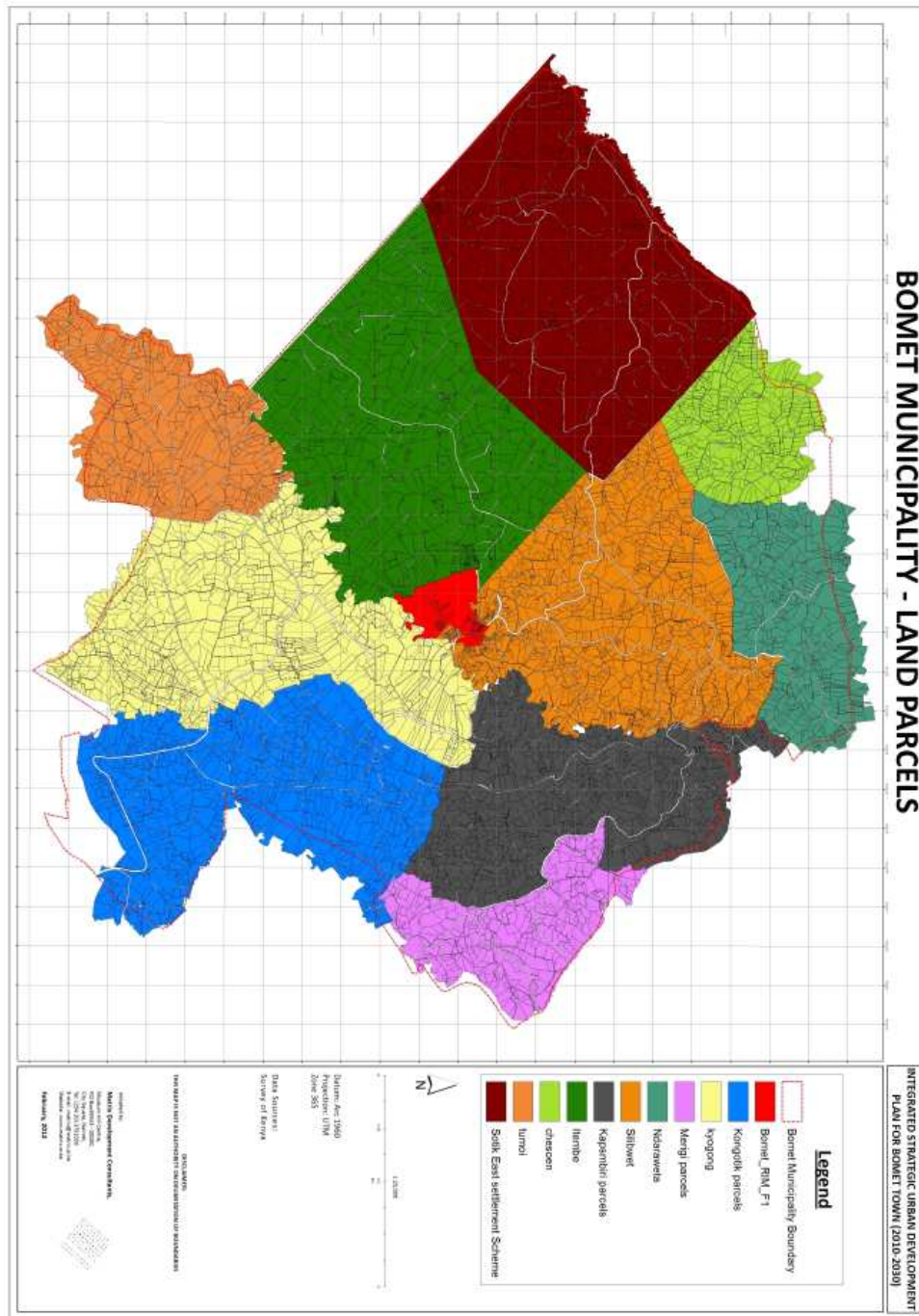
Source: Survey of Kenya, September 2011

Most of the disaggregated properties under MCB lease in Bomet have not been surveyed and therefore do not have titles. It is important that these parcels get surveyed and titles issued in order to improve the security of the tenure for the leasee's.

Secondly, issues of development control should be addressed and given importance and the subdivision of land should be done according to the law taking into consideration the respective area zoning plans. This will enable up-to-date recording of these activities and the true picture of the land data will be maintained

Thirdly an establishment of a physical planning department with GIS capability should be set up within the Municipal Council of Bomet. This will provide up-to-date planning services to the people of Bomet and improve on the revenue generation for the council.

Map 2.7: Cadastral Map of Bomet Town



2.6.2 Institutional Framework for Land Management.

There is need for capacity building within the MCB. Employment of skilled and experienced personnel such as a physical planner, cartographer and a land surveyor will be of utmost importance. There is need to also set up an inspectorate department which will work closely with the planning department in enforcing development control issues within the municipality. There should be regular training of council officer to manage GIS software in handling land data management and updating.

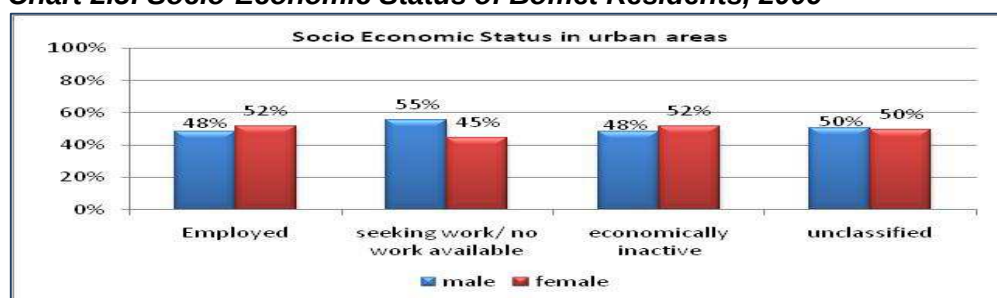
2.7 ECONOMY

2.7.1 Incomes and Sources of Livelihood in MCB

2.7.1.1 Socio-Economic Status

According to the 2009 Kenya Population and Housing Census (KNBS, 2010)³, the socio-economic status in urban areas of Bomet by gender showed that 48% males and 52% females were employed, those who were seeking work or no work available were 55% male and 45% females, however there was a 50% of both males and females who were unclassified as illustrated in *Chart 2.5*.

Chart 2.5: Socio-Economic Status of Bomet Residents, 2009



Source: Matrix Development Consultants, December, 2011

³ Kenya National Bureau of Statistics, 2010, Source: 2009 Kenya Population and Housing Census, Vol II, KNBS, 2010

Agricultural and related activities were the main sources of livelihood for the majority. However, a growing number of the residents are also engaged in formal employment as well as running their businesses. *Table 2.9* below represents the sources of livelihood for a majority of the population.

Table 2.9: Sources of livelihood in MCB

Type of participants	Source of Livelihood
Mixed (Male/Female) Group	Agricultural activities:- <i>dairy farming, tea farming, potatoes farming</i> Business/trade: <i>small scale business, shopkeepers, boda boda, motorbike, taxi operators , hotelier</i> Formal employment: <i>civil servants</i> Others: <i>self-employed, sand harvesters and casual workers at the market.</i>
Women Group	Agricultural activities: <i>farming food crops,</i> Formal employment: <i>teachers, civil servants</i> Business and trade: <i>posho milling, farming, boda boda, motorbike, taxi operators and small scale business such as hawkers, snack hoteliers and shopkeepers</i> Others: <i>self-employed</i>

Source: Matrix Development Consultants, December, 2011

Farming and small-scale trading are the major sources of livelihood for the people living in Bomet town and the periphery. Agriculture is the main source of livelihood for the majority of residents of Bomet. As pointed out above, in MCB; at least 40% of the workers who earn a living within MCB actually reside outside the boundaries of MCB. There is a high element of non-agricultural sources of income in Kenya. As chart 2.6 shows, and according to national statistics, whereas in rural Kenya 7.3% of non-agricultural income is generated from off farm sources, the share for urban Kenya is only 0.8% compared to 3.7% for Bomet District. Trading (wholesale and retail) is by far the biggest source of non-agricultural income in Kenya accounting for 66% of the total non-agricultural income in both urban and rural Kenya and a high 79% in Bomet District (Kenya National Bureau of Statistics, 2007:154).

2.7.1.2 Livelihood Analysis

Residents of Bomet earn their livelihood from various occupations with a majority of them relying on tea farming, dairy, maize etc or agriculture-related activities like selling cereals and vegetables (see Table 2.10.) The youth take up more skill based occupations like being beauty salons employees for girls and barbers for boys, etc. However, there was mention of prostitution as an occupation for some female youths. The types of occupation undertaken by the various segments of the population are tabulated below:

Table 2.10: Economic Activities by Gender in MCB, 2011

General economic activities	Women	Male youth	Female youth
- <i>Boda boda</i> , -Coffee farming -Dairy Farming -Farming; tea, maize, potatoes -Grocery -Hawker -Horticulture -Matatu -Poultry -growing pyrethrum -Sand hawking -shops	-Farming subsistence crops -Buying and selling of cereals -Casual employment -Tea picking -Dairy -Fruits growing -Sales of <i>mitumba</i> clothes -Potatoes farming -Poultry keeping -Sand hawking -Small business i.e. groceries and milk sale -Tailoring	-Barber shop - <i>Boda boda</i> -Taxi operator -Bricks hawking -Buying and selling of Potatoes -Carpentry -Livestock -Tout services -Manual labour -Phone repairs -Poultry production -Sand harvesting -Shoe shiners -Shop keeping	-Buying & selling vegetables -Computer services -Dressmaking -Hotel attendants -Knitting -Manual labour -Sales of milk -Printing works stationery -Prostitution -Hair saloons -Shop keepers -Dressmaking -Transporting water /firewood

Source: Matrix Development Consultants, December, 2011

Generally, enterprises in the town are mainly small scale in nature i.e. operating shops, butcheries, hotels, posho-mills and metal fabrication Workshops. Women entrepreneurs are engaged in buying and selling of cereals, vegetables and maize roasting as tabulated in *Table 2.11* below. The types of enterprises in Bomet are relatively small and general. Women enterprises are also smaller and not as well capitalized as reported in the discussions. An average of five persons (*min=1, maxi=10*) are employed in one enterprise in Bomet town.

Table 2.11: Types of Enterprises by Gender in MCB, 2011

Common Enterprises	- Women specific enterprises
<i>Boda boda</i>	Buying and selling of cereals
Butcheries	Buying and selling of vegetables/ potatoes
Clothes selling	Clothes selling
Farming	Maize selling
Hawkers	Roasting maize

Common Enterprises	- Women specific enterprises
Hotels	Salons
Bars	Shop keeping
Posho mills	Tailoring
Sand harvesting	Washing clothes
Shop keeping	
Tailoring	
Welding	

Source: Matrix Development Consultants, December, 2011

Both the mixed groups and the women respondents identified the agricultural sector and the favourable climatic conditions as the predominant features of Bomet which make most of the residents like Bomet. On the other hand, they complained about poor physical infrastructure, poor service delivery by the administration (particularly the local government) as their dislikes.

2.8 INCOME AND EXPENDITURE

2.8.1 Sources of Income

Compared to other parts of Kenya, people in Bomet are relatively not poor. As Table 2.12 shows, poverty rates in Bomet though high are not as glaring as in the rest of Kenya. Of the 3 constituencies in Bomet County, The one that fares worst is Bomet.

Table 2.12:2004 Poverty Indicators of Bomet Constituencies based on 1999 Census

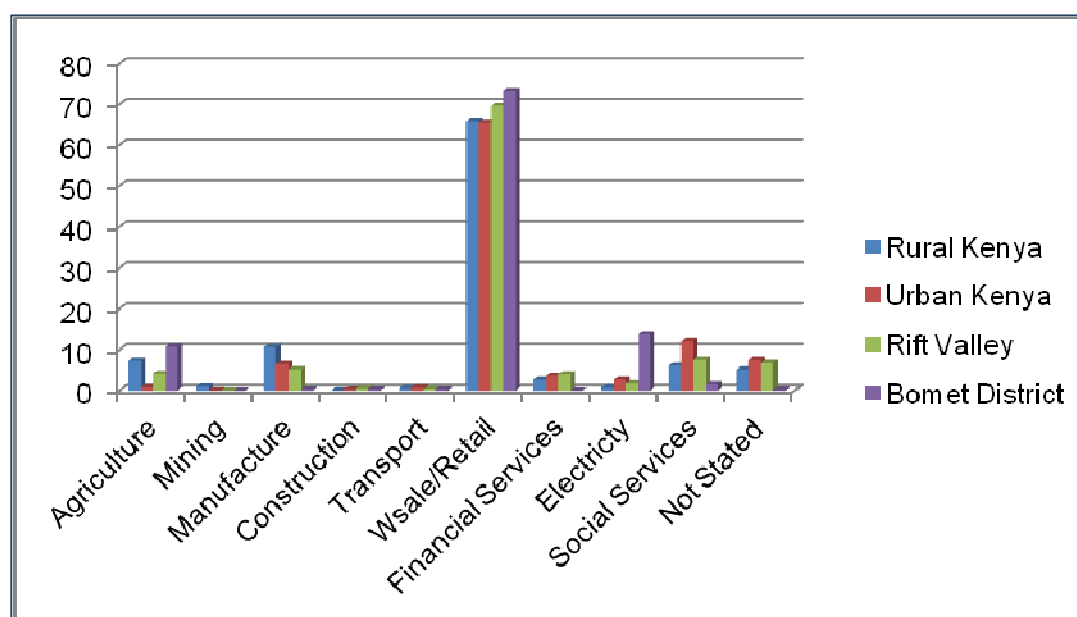
Constituency	Population in 1999	No. of poor	% below poverty line	Constituency National Poverty Ranking	% Contribution to provincial poverty
147 Bomet	174,471	90,059	52	93	2.8
148 Chepalungu	116,757	65,495	56	111	2.1
149 Sotik	133,529	6,005,779	49	86	2.1
Rift Valley Province	6,648,288	3,182,219	48	-	100

Source: Republic of Kenya/Kenya National Bureau of Statistics (2005), table 1, pg. 12

Agriculture and livestock rearing are the main livelihoods for the rural population. The two main types of farming systems include subsistence farming which covers over 100,000 ha. and commercial farming that covers about 3,000 ha. There is a growing industry around tea, milk and coffee processing as well as the informal jua kali sector. As would be expected, there is brisk retail and wholesale business outside agriculture as shown in Chart 2.6 below. Indeed this

is a major source of non-agricultural income in the wider Bomet District. The type of trade in the district includes wholesale/retail traders, food catering industry, service industries and processors. The district has limited quarrying and sand harvesting activities whereby most of the materials obtained are mainly used locally for construction. Rehabilitation of quarrying sites needs to be given priority.

Chart 2.6: Source of Non-agricultural income activities – Bomet compared to rest of Kenya



Source: Kenya National Bureau of Statistics (2007), table 8.1pg.154

As Table 2.13 below shows, the median monthly income from agricultural-related activities was KES.15, 786 (minimum–1,500 and maximum–50,000). Business and trading activities had an average of KES.13,000 (min–3,000 and max–20,000).

Food (groceries) items, wages for farm workers, transport, rent and education expenses consume the significant portion of the monthly income. Computation of various statistical parameters (measures of central tendency) could not be carried due to extreme data ranges.

Table 2.13: Source and Average Incomes in MCB, 2011

Source of income	Average KES.	Range	
		Highest KES.	Lowest KES.
Dairy farming	12,600	25,000	2,000
Farming	2,625	6,000	1,500
Tomatoes	25,834	50,000	1,667
Maize	3,800	7,500	2,000
Tea	15,571	30,000	6,667
Business	4,500	6,000	3,000
Boda boda taxis	15,000	15,000	15,000
Shops/ hotels	13,000	15,000	10,000
Bars	18,000	20,000	16,000
Coffee farming	16,000	16,000	16,000
Potato farming	17,500	50,000	6,000
Posho mills	3,000	3,000	3,000
Cabbage	20,000	20,000	20,000
Sand hawking	4,000	4,000	4,000

Source: Matrix Development Consultants, December, 2011

2.8.2 Expenditure Levels

2.8.2.1 Household Expenditures

In line with the general increase in cost of living, particularly food, expenditure on food in Bomet takes the highest proportion of household expenditures followed by rent (see table 2.14 below). Given the acute shortage of rental premises in Bomet this does not come as a surprise. It should be noted that expenditure on sanitation seems high because a pay-as-you-use toilet is KES.10 in the township and a person can use the facility up to three times a day. Residents in the township also spend money on exhauster services hence the anomaly.

Table 2.14: Monthly household expenditure in MCB, 2011

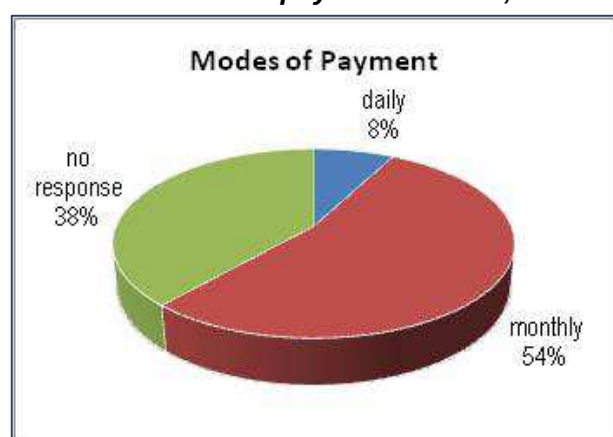
Expenditure items	Average KES.	Range	
		Highest KES.	Lowest KES.
Food	7,000	30,000	1,000
Health	1,164	6,000	200
Rent/ mortgage	3,356	15,000	1,200
Education	2,629	8,000	150
Water	910	1,500	300
Sanitation	1,733	4,000	600
Electricity	4,000	4,000	4,000
Labour for farm workers	6,000	6,000	6,000
Transport	5,000	5,000	5,000

Source: Matrix Development Consultants, December, 2011

2.8.2.2 Modes of Payment

Forty-four percent of the household income is spent on payment for water, sanitation and electricity. On average, Bomet households reported that they pay KES. 591 (min-100, max-1,200) for water, KES. 357 (min-200, max-600) for sanitation and KES. 1,055 (min-300, max-4,000) for electricity. Fifty-four percent (54%) of the respondents reported they settle their expenditures monthly (see Chart 2.7 below).

Chart 2.7: Modes of payment in MCB, 2011



Source: Matrix Development Consultants, December, 2011

2.9 CURRENT MUNICIPAL FINANCIAL STRUCTURE

2.9.1 Financial Records and Reporting

Bomet Municipal Council has a comprehensive set of financial rules and regulations whose primary intention is to ensure accountability and proper use of the public funds entrusted with it. It maintains:

- A record of all its financial transactions including receipts and payments
- Vote control books to direct use of available resource to budgeted purposes only
- Cash flow statement and schedules of creditors and debtors annually as supporting schedules to budgets, revenue enhancement plans and to annual financial statements.

These records provide information and data that feeds into preparation and presentation of annual budgets and statutory financial reports. The same information and data is also used for evaluating the council's ability to finance its activities, ability to meet its liabilities and other financial commitments and its performance in terms of service costs, efficiency and accomplishment and accountability to the public.

The council has consistently complied with the condition that it must prepare and publish its annual financial reports of the preceding year to qualify for allocation of LATF Grant in the ensuing year. For this reason the council has had all its annual abstracts of accounts prepared and audited within statutory deadlines. However the quality of the reports has been wanting as they have always attracted a qualified audit opinion for lack of credible valuations for its assets and liabilities. The council needs to:

- a) verify the nature, size, location and use and valuations of all its assets
- b) develop a fixed assets register, and
- c) confirm or reconcile the amounts of all its long and short term liabilities

The council has not yet fully computerized its operations. It is currently installing the Local Authority Integrated Financial Operational and Management System (LAIFOMS), accounting software being developed by the KLGRP to address the unique accounting and other information needs of local authorities in Kenya. The council should ensure implementation of all accounting modules of the programme.

The position of Internal Auditor is appropriately placed in the Town Clerk's Department. This means the Internal Auditor is not directly answerable to the Treasurer whose activities he is supposed to check and report on. The council should be re-organised to create an Audit Committee of the council which will supervise the internal audit oversight function.

2.9.2 Principal Sources of Revenue

The Municipal Council of Bomet provides a variety of services to its residents. For the council to be able to do this satisfactorily, it requires:

- Money to finance the purchase or development of capital assets it uses while responding to service needs of its residents.
- Money to pay for repairs required to maintain the productive capacities of its capital assets to ensure sustainability of quality services provision, and;
- Money to pay for day-to-day operations, e.g. salaries and allowances, borrowing charges, transport and travelling, etc.
- The council's main sources of revenue include government grants, land rents, Single Business Permit (SBP), market fees, user charges (fees and charges) and a variety of cess charges and royalties levied on movement of agricultural and mineral produce from or through the municipality area. MCB levies charges on public toilets in Silibwet and Longisa, and also revenues from a Hall, Slaughter Slabs and Kipsegon hot water springs.

Table 2.15 below outlines annual amounts of the councils' major sources of revenue over the financial years 2004/05 to 2009/10.

Table 2.15: Bomet Municipal Council - Actual Income and expenditure trends 2004/05-2008/09

	2004/05	2005/06	2006/07	2007/08	2008/09	
Revenue	KES Million	KES Million	KES Million	KES Million	KES Million	% of Total
Government Grants						
LATF grant	6.07	7.27	10.25	11.15	12.34	34%
RMLF grant	1.76	1.13	1.73	2.04	3.21	9%
Sub-total	7.83	8.40	11.98	13.19	15.56	43%
Local Revenues						
Contribution in lieu of rates	-	0.19	0.74	1.04	2.30	6%
Motor vehicle parking fees	-	-	-	3.52	5.03	14%
Plot rates and rents	2.35	1.58	2.68	2.84	4.70	13%
Single Business Permit (SBP)	4.78	3.79	3.61	3.38	4.11	11%
Cess / royalties on quarrying	-	-	-	0.94	1.56	4%

	2004/05	2005/06	2006/07	2007/08	2008/09	
Markets / slaughterhouse fees	1.30	1.42	0.94	1.81	1.03	3%
House rents	0.15	0.15	0.15	0.15	0.15	-
Others	1.22	5.28	6.49	-	2.15	7%
Sub-total	9.81	12.41	14.61	13.58	21.02	57%
Total Revenues	17.64	20.81	26.60	26.76	36.57	100%

Source: MCB, December, 2011

On the average total annual revenue has been increasing. The council generates about half of its annual revenue and the other half is derived from government in form of grants. In 2008/09 the Council received from the Government, a general purpose Local Authorities Transfer Fund (LATF) grant for spending on any approved matter in the local authority and a specific purpose Roads Maintenance Levy Fund (RMLF) grant for maintenance of roads within the Town.

The LATF grant accounted for 34% of total revenue while the RMLF grant accounted for 9%. Total Government grants revenue was 43% and revenue from council's own sources was 57% of total revenues. Principal own sources of revenue are Plot rates, parking fees, Single Business Permit (SBP) and Market fees

2.9.3 Principal Classes of Expenditure

Expenditure of the council is classified as follows:-

- Personnel Costs comprise salaries, wages, allowances and other employment or service benefits paid to Councillors and staff.
- Operational costs comprise expenditure on activities that contribute directly to the council's performance of its statutory mandate, namely satisfying the public services needs of its residents.
- Maintenance (or repair) costs comprise expenditure incurred to sustain the condition and productive capacity of capital assets which the council owns and uses for the purposes, and in the course of providing services required by its residents.
- Capital expenditure includes the cost of developing or buying new capital assets to replace those that are worn out or to expand the services productive capacity.
- Debt Resolution is the value of payments made by the council towards reduction of its indebtedness to suppliers on account of outstanding bills for goods and services received.

Over the period 2004/05 to 2009/10 (Table 2.16 below) the council's total expenditure was generally less than revenue generated to finance it. The council is more inclined to incurring revenue deficits than surpluses.

Table 2.16: Bomet Municipal Council - Actual Income and expenditure trends 2004/05-2008/09

	2004/05	2005/06	2006/07	2007/08	2008/09	2008/09
Expenditure	KES. Million	KES. Million	KES. Million	KES. Million	KES. Million	% of Revenue
Civic	1.85	2.58	2.46	2.83	4.73	13%
Personnel costs	7.72	3.25	4.79	11.23	7.75	21%
Operations costs	6.02	5.04	6.07	2.91	7.57	21%
Maintenance costs	2.25	1.09	0.65	2.71	0.65	2%
Develop / acquire new assets	0.60	3.38	3.26	4.68	7.14	20%
Debt resolution	-	10.94	9.17	5.74	6.15	17%
Total expenditure	18.44	26.28	26.41	30.10	33.99	93%
Revenue Surplus (deficit)	<u>(0.80)</u>	<u>(5.47)</u>	<u>0.19</u>	<u>(3.33)</u>	<u>2.58</u>	11%
Total Revenues	9.81	12.41	14.61	13.58	21.02	100%

Source: MCB, December, 2011

In 2008/09 the council spent about 34% of its annual revenue on personnel emoluments comprising councillor's allowances 13% and staff salaries and wages 21%. It applied 21% of revenue for services provision, 2% for maintenance, 20% for development or acquisition of new capital assets and 17% for reduction of outstanding liabilities.

A condition attached to disbursement of LATF grant requires the council to use part of the current year's grant for purchase of new capital assets and towards reduction of debts owing in order to qualify for continued disbursement of the grants in subsequent years. Substantial expenditure on capital assets acquisition and on debt resolution since 2005/06 to-date confirms the council's effort to comply with this condition.

There is need to gradually phase out debt reduction and to gradually reduce the proportion of resources spent on personal emoluments so that more revenue funds can be spared for services delivery operations.

2.9.4 LASDAP Projects and Investments

The Local Authority Services Delivery Action Planning (LASDAP) process is a local level three year rolling consultative planning process whereby the council mobilizes its residents to participate in annual meetings to identify and prioritize the activities and projects that need to be undertaken to resolve their local services needs and also contribute to the realization of some overriding national policy considerations such as poverty reduction and the needs of special interest groups.

The proceeds of RMLF grant are strictly spent on maintenance of township roads. In fact the amounts of the council's annual expenditure on repair and opening up of access roads almost match the corresponding values of RMLF grants received. Qualifying roads are identified and prioritised through the LASDAP process.

The LATF grant received plus revenue from own local sources net of expenditure on debt resolution, civic allowances, staff costs and on maintenance determines the council's 'Resource Envelope' or revenue available to finance programmed Local Authority Services Delivery Action Plan (LASDAP) activities. The practice of the council is to apportion the available Resource Envelope equally to the wards to finance LASDAP projects prioritised at that level. This breaks up the Resource Envelope into little amounts that cannot finance meaningful and visible projects. *Table 2.17* summarizes LASDAP projects financed by the Resource Envelopes over the period 2001/02 to 2008/09.

Table 2.17: Implemented LASDSP Capital Projects

	2004/05	2005/06	2006/07	2007/08	2008/09
	KES Million	KES Million	KES Million	KES Million	KES Million
Bus park	0.23	-	-	-	-
Sewage pit	0.18	-	-	-	-
Dispensary -Itembe	0.02	-	-	-	-
Dispensary -Merigi	-	0.13	-	-	-
Cheboin Sec. School	-	0.13	-	-	-
Mulywek Sec. Sch.	-	0.13	-	-	-
Valuation roll	-	-	1.40	-	-
Road grading	0.17	2.78	1.33	1.38	5.40
Computers	-	-	0.18	-	-
Aisaik Sec. Sch. water	-	-	0.13	-	-
Kabisoge Polytechnic	-	-	0.13	-	-

Civic car	-	-	-	2.50	-
Kiptergekian Pri. School	-	-	-	0.20	-
Chepkolon Pri. Sch.	-	-	-	0.20	-
Kapsimotwa Pri. Sch.	-	-	-	0.20	-
Kipsegon Water Spring	-	-	-	0.20	-
Chebiri Pri. School	-	-	-	-	0.45
Lulusik Pri. School	-	-	-	-	0.39
Strategic Plan	-	-	-	-	0.30
Others	-	0.21	0.09	0.40	0.60
Total	0.60	3.38	3.26	4.68	7.14

Source: MCB, December, 2011

The council's capital asset base is insufficient to enable it maintain a meaningful level of revenue generating public services. It has not been able to meaningfully invest in equipment and other capital assets for use in provision of services needed by the public. The only long-term assets which the council owns are the Town Hall, an official vehicle, the office computers, the bus park which includes a public toilet in Bomet town, a slaughterhouse in Bomet town and slaughter slabs at Itembe, Longisa and Mergi, five public rental housing units, a fresh produce market (under construction) in Bomet town.

2.9.5 Intergovernmental Fiscal Transfers

An Intergovernmental Fiscal Transfer System is an arrangement providing for sharing of the national tax revenue between the central and devolved governments. In Kenya, under the Local Authorities Transfer Fund (LATF) Act, local authorities receive 5% of the gross income tax revenue collected by the central government. Fiscal transfers of general tax revenue from the central government to the council are currently in form of:

- a) A general management support Local Authority Transfer Fund (LATF) grant whose objective is enable the council equip itself appropriately, reduce its liabilities, maintain its stock of assets and pay for its operations.
- b) An earmarked Roads Maintenance Levy Fund (RMLF) grant for access roads maintenance.

In 2008/09 LATF and RMLF grants amounted to 34% and 9% respectively of total revenue, thereby making intergovernmental transfers the principle and most reliable source of revenue for the council.

There are other intergovernmental fiscal transfers through specially created public funding channels to finance specific services or developments in Bomet town but outside the municipality's budget. Examples include the Constituency Development Fund (CDF), the Economic Stimulus Programme (ESP), the Women Enterprise Development Fund, the Youth Enterprise Development Fund, the Constituency Bursary Fund, etc. that supports activities and projects with potential to stimulate or revitalize and sustain national social and economic growth. In 2010/11 fiscal year funds were availed through the Economic Stimulus Programme for installation of ICT Equipment at Longisa Boys and St. Catherine Girls schools and also for development of the Kaptengwet Fresh Produce Market at Itembe. The Municipality can tap into some of these funds to finance its development initiatives.

2.9.6 Motor vehicles parking fees

Motor vehicle parking fees form the council's second most important source of revenue, raising KES.5.30Million (14% of total revenue) in 2008/09. Transport operators pay an annual Single Business Permit (SBP) fee for doing business in the town and in addition they are charged every time they drive or park in the town. Parking charges are as follows:-

- Buses and mini-buses – per entry into municipality area - KES.100 but buses and min-buses rarely enter the bus park.
- Lorries – KES.2,500 per annum
- Nissan matatus - KES.50 per entry into Bomet municipality area.
- Taxies – per entry KES. 30 in Bomet and KES. 20 in Silibwet. Not charged in other trading centres in the town.
- Motor cycles (Bodaboda) - KES.30 per day in Bomet town and KES.20 in other trading centres

The council has no bus park staff. The market attendants posted at Bomet town market also collects parking fees from public passenger vehicles (PSVs) at the bus park. Market attendants posted at Itembe and Longisa cess collection points also collect parking fees from Lorries, buses and mini-buses entering the town. Cess charged by the council for transportation of controlled commodities, e.g. hides and skins, building stones and sand, livestock and marketable agricultural fresh produce into or out of the town is also collected at these points. Market attendants working at other market centres collect parking fees from operators of PSVs picking or dropping passengers along the roads in those markets.

Problems encountered in collection of parking fees and transportation related cases include:-

- Bomet town Bus Park is small and rarely used by bus operators. There are no bus parks in the other trading centre although buses and other public passenger service vehicle pick and drop passengers at road sides.
- Many long-distance haulage trucks traverse and park overnight in the town but contribute nothing towards maintenance of the roads they use. Equally lacking are parking facilities for taxis and boda-boda in town.
- Lack of enforcement personnel
- Lack of supervision
- There are no designated parking places for buses, matatus, bodabodas and the long distant travelling trucks which park in the town overnight.
- Parking fees are recorded and reported as other fees and this blurs their significance as a source of revenue.

2.9.7 Property Taxes

Property taxes are levied on the owners or users of land situated within the town area in the form of:-

- land rates at the rate of 2.5% on the site value of all properties listed in its 2003 Valuation Roll
- Plot rents at KES. 1000 per plot per month on market plots allocated by the council for use or development for residential, commercial or industrial purposes.
- Other land related fees for services such as beacon identification, plots survey and issue of clearance certificates at KES. 2000 per transaction, approval of building plans – KES. 1500 for bungalow and KES. 2500 for storied building. It also charges KES. 2500 per case for hearing and determination of land disputes.

Land based taxes and charges are the second most important source of revenue after government grants. In 2008/09 about 19% of the Council's total revenue was derived from land based charges which included plot rates and rents (13%) and contributions in lieu of rates (CILOR) (6%). *Table 2.18* below shows the location, number and values of plots on which rates and rents are paid.

Table 2.18: Bomet Town - Annual Plot rates and rent revenue potential

Trading / Market centre	Exempt Lands site Value	Private Lands site Value	Local Authority Lands site Value	Govt. Lands site Values	Total Rolls site Values	No. of plots on V. Rolls	No. of market plots	Total No. of plots in Town
	KES. Million	KES. Million	KES. Million	KES. Million	KES. Million			
Bomet Town	14.910	24.845	123.132	-	162.887	790	86	876
Silibwet Centre	0.695	0.503	6.448	0.018	7.664	2475	-	2475
Kapkesosio Centre	-	1.548	-	-	1.548	74	21	95
Longisa Centre	0.540	-	11.476	-	12.016	310	78	388
Itembe Centre	-	-	7.898	-	7.898	326	-	326
Tenwek Centre	-	-	0.414	-	0.414	84	5	89
Motigo Centre	-	-	0.287	-	0.287	87	5	92
Kapsimotwa	-	-	3.192	-	3.192	173	26	199
Merigi Centre	0.002	-	4.122	-	4.124	267	48	315
Singorwet Centre	-	-	1.892	-	1.892	91	10	101
Koitab	-	-	-	-	-	-	17	17
Njerian	-	-	-	-	-	-	8	8
Cheboin	-	-	-	-	-	-	24	24
Total	16.147	26.896	158.861	0.018	201.922	4677	328	5005

Source: MCB, December, 2011

In the 2003 Valuation Roll land within the Town is classified as Exempt Lands – on which rates are not levied, Private Lands – mostly free hold land situated in the town and subject to rates, Government Lands – Land occupied, used or reserved for use by government departments and agencies and, Local Authority Lands – trust lands managed by the council on behalf of the local community.

After allowing for exempt lands, the council levies rates on plots with total site values of KES. 186Million which, at the current 2.5% rate struck, has the potential to raise rates income of KES.

4.6 Million Annually. The council also charges annual plot rents at KES. 1000 per market plot and can raise upwards of KES. 300,000 annually from this source.

Over the period 2004/05 to 2008/09 the council's total revenue from land based sources increased from KES. 2.35 to KES. 7.0 Million Annually. After allowing for the element of arrears of revenue deferred for collection in the period, the council's effort to collect the KES. 4.6 Million rates revenue potential appears efficient although most plot owner openly express their dislike to paying plot rates and rents.

Under the law, the council has an option to charge rates based on either the unimproved site (land only) value of properties or the developed (land plus developments) value. It has however continued to apply the unimproved site value rate whose yields are much lower than the developed value rate. Example, when using the unimproved site value rate, two plots of the same size and located in the same planning zone have the same site value tax base and pay the same amount of rates irrespective of whether one is not yet developed and the other is developed and more economically rewarding, but the developed property attracts more tax as its site plus developments tax base is higher than the site only tax base of the undeveloped plot. The Council's accounts section maintains rates and market plot rents registers and, together with enforcement officers, follow-up on rates and rents collection. These registers and even the valuation rolls are not up to date, especially regarding capture of changes arising from ownership, subdivision, registered use, and contact or physical address of owners of properties. The council's property tax registers and valuation rolls are also not linked and simultaneously up-dated to assist it in assessment and invoicing of property taxes due. The council requires an integrated property taxation system that is linked to land information database and simultaneously up-dates its records as changes on the location, owner, size, usage and occupancy are made to the land database. The database may be in form of digitized geo-referenced maps showing all the properties identification details and their sizes, number and levels of buildings, number of occupants in the buildings and other features such as roads, rivers, schools, recreational grounds, etc, and stored in a Geographical Information System (GIS) for quick retrieval and provision of essential geo-data base for fixing tax rate and generating tax invoices

2.9.8 Business Permit (SBP)

In accordance with Section 148(a) of the Local Government Act⁴ Bomet Municipal Council levies fees on licences and permits it issues in respect of businesses, trades and occupations whose conduct, location and operation it is allowed by the law to control. Businesses licensing is the fourth most important source of revenue for the council after central government grants, motor vehicle parking fees and plot rates and rent. In 2008/09 about 11% of the Council's total revenue was derived from SBPs.

The council has a schedule of licences which was last revised and approved by the Minister in 2010. A listing of licenses and permits issued is maintained for each year. The list shows businesses that have paid for their licenses and is therefore not a good base for enforcing collection of license fees from those that operate illegally and for establishment of what is due to council. Evasion of licence payments is also rampant.

2.9.9 Market Fees and other User Charges

Section 148(b) of the Local Government Act⁵, empowers the council to levy in respect of each service it provides, a user charge to raise revenue to cover the cost of providing the service (presumably with a reasonable surplus remaining to finance such maintenance and capital replacement costs as are necessary to sustain provision of the service).

The users of Bomet Municipal council services and facilities are expected to bear the full cost of the services or facilities they use through payment of a user charges categorized as:-

- Market fees – KES. 50 per bay for display and sale of goods at Bomet and Silibwet markets which operate daily, and KES.50 per market day at Itembe, Longisa and Farmers(Koitasilibwet) which operate on Tuesday, Friday and Wednesday respectively.
- The Government of Kenya through the Economic Stimulus Programme is constructing another large KES.10Million worth Fresh Produce Market which will be donated to the council upon completion.
- Hawkers pay KES. 1,000 for an annual licence.
- Slaughterhouse fees – the council owns and operates a slaughter-house in Bomet town and two slaughter slabs one at Longisa and the other at Merigi trading centres. Butchers pay the council a fee per head of animal handled at any of these facilities. Silibwet

⁴ Law will stand repealed after the 2012 election cycle and replaced by the UACA act 2011

⁵ Law will stand repealed after the 2012 election cycle and replaced by the UACA act 2011

trading centre is served by a privately owned slaughter house operating on a SBP issued by the council.

- Public Rental Housing – The council has five units of two bed-roomed public rental houses. All are leased out at KES.2500 per month for each. House rents are always received in due time and are paid up-to-date.
- Public Toilet – the council has a public toilet building (at the bus park) which it has sub-contracted to Vijana Self-Help Group at a monthly rent of KES.5000.
- Cess charged by the council for transportation of controlled commodities, e.g. hides and skins, building stones and sand, livestock and marketable agricultural fresh produce into or out of the town is also collected at Longisa and Itembe cess collection points immediately upon entry into the town area.

To keep up with inflation the council is expected to revise its schedule of user charges regularly by incorporating marginal and manageable adjustments as opposed to occasional material increases which often ignite public resistance. Collection of markets and other user charge revenue is constrained by:-

- (a) Evasion of payment
- (b) The council lack of enforcement officers with skills and knowledge to interpret and enforce council by-laws.
- (c) The market attendants are overworked and too few to control markets activity transacted everywhere over the expansive municipality.
- (d) The council does not keep a detailed and separate record for each user charge income and related expenditure and is therefore unable to assess the performance and viability of each of its user charge services.
- (e) Market fees levied are generally low and cannot guarantee related cost recovery.

2.9.10 Public private partnership and donor funding

Provision of pre-primary school education and health services by religious organisations, NGOs and stakeholder associations in collaboration with relevant government departments are good examples of public-private partnership in the provision of public services in the town. There is however no evidence of collaboration between the council and private sector operatives for municipal services provision.

Where the council is not in a position to effectively provide a service, it has the option to contract private sector operators to provide the service with such conditions as will ensure sustained availability of the service at an affordable cost to all who need it. User charge services such as

conservancy, markets, bus-park and slaughter house can be run effectively and for the benefit of the general public under such arrangements.

The council may also engage itself in partnerships with the private sector to promote the development of trading activities like hotels, lodges, hostels, restaurants, public transport, etc. which operate purely on commercial terms and with a view to generate profits to ensure and justify their sustainability

The council may solicit for additional development funding from donor organisations and special devolved public funds which have established interest in the town. Devolved public funds such as CDF, Education Bursary Fund, Economic Stimulus Programme Fund and NGOs and other development partners can avail grants and donations to finance the development programmes of the council.

The council may also negotiate and secure a loan for development of a required facility and then apportion the total cost of the loan to the owners of properties served by the facility, and require them to pay their proportionate amounts in form of a special rate in addition to rates normally paid. The council can then use the proceeds from the special rate to service the loan and to manage the use and maintenance of the facility.

2.9.11 Budgeting and Budgetary Control

The council has adopted the Local Authorities Budget Guidelines and complies with the recommended LASDAP formats and procedures. It has also complied with a condition that it prepares and submits a revenue enhancement plan (REP) outlining the measures it plans to implement to increase its gross revenue in the ensuing financial year to qualify for continued LATF grant disbursements.

The budgeting process involves determination and matching of expected revenues with estimated expenditure to give an indication of whether planned operations will yield a revenue surplus or a net expenditure (revenue deficit).

A comparison of the council's budgets with corresponding operating results in the fiscal periods 2007/08 and 2008/09 reveals that revenue estimates are reasonably realistic but expenditure estimates grossly understate actual expenditure levels. This is because the council spends on unbudgeted activities or beyond approved limits thereby causing relatively large negative variances as shown in *Table 2.19* below:

Table 2..19: Bomet MC: 2008 /09 Budget - Actual Variance Analysis

Revenue	2008/09 KES Million Budget	2008/09 KES Million Actual	Average Annual Actual / Budget Variance	Variance as % of Budget %
LATF grant	12.34	12.34	-	(0%)
RMLF grant	3.61	3.21	(0.40)	(11%)
Sub-total	15.95	15.56	(0.40)	-
Local Revenues				
CILOR	1.57	2.30	0.73	47%
Pilot rates and rents	1.42	4.70	3.28	230%
SBPs	3.50	4.11	0.61	17%
Motor vehicle parking	5.86	5.03	(0.83)	(14%)
Markets / s-house	1.42	1.03	(0.39)	(28%)
Cess / royalties	-	1.56	1.56	100%
House rents	0.15	0.15	-	-
Others	1.84	2.15	0.31	17%
Sub-total	15.76	21.02	5.26	-
Total Revenues	31.71	36.57	4.86	-
Expenditure				
Civic	4.08	4.73	(0.65)	(16%)
Personnel costs	13.11	7.75	5.36	41%
Operations costs	4.12	7.57	(3.45)	(84%)
Maintenance costs	3.89	0.65	3.24	8%
Capital expenditure	6.85	7.14	(0.29)	(4%)
Debt resolution	6.56	6.15	0.41	6%
Total Expenditure	38.61	33.99	4.62	-
Surplus / (deficit)	(6.90)	2.58	9.48	-

Source: MCB, December, 2011

2.9.12 Mandate of Bomet Municipal Council

Bomet Town is managed by the Municipal Council of Bomet, a local authority established under the Local Government Act, Chapter 265 of the laws of Kenya⁶. As a local authority, Bomet Municipal Council offers an important democratic forum for communities residing in its area to

⁶ Law will stand repealed after the 2013 General election cycle and replaced by the UACA Act 2011 together with County Government Act, 2012.

deliberate and agree on matters affecting them locally. The communities also decide on the nature and quality of communal services or facilities they can access locally through their local authority.

The municipality provides a variety of public services to its residents. These include:-

- Control and regulation of businesses (licensing.)
- Provision of public markets
- Control and provision of motor vehicle parking,
- Slaughter houses/Slabs
- Social services (registration of women & youth groups, burial of the destitute, organization of national celebrations, sports, public play-grounds, social halls, recreational facilities, etc.
- Survey and land use planning and development control with technical assistance from the Departments of Survey and Physical Planning
- Conservancy, cess pit exhaustor service and other public health awareness creation services with technical assistance from the Ministry of Public Health and Sanitation
- Township access roads opening and maintenance with technical assistance from Ministries of Roads and Works

2.9.13 Bomet Municipal Council: Civic Representation

Bomet municipality area is divided into seven electoral wards, Singorwet, Cheboin, Emkwen, Itembe, Mutarakwa, Township and Tuluapmosonik. Each Ward is represented on the Council by a democratically elected Councillor. The seven elected councillors together with two others nominated by the MoLG to represent resident special interest groups and one Public officer appointed by the MoLG to represent Government (public) interests constitute the ten members of the Council of Bomet Municipality, see *Table 2.20* below:-

Table 2.20: Current Representation of Public Interests on the Council of Bomet Municipality.

Councillor's Name	Elected, Nominated or Appointed	To represent Ward residents & Interest Groups
H. W. Mayor Cllr. Joyce Chepkoech Korir	Elected	Singorwet
H. W. Dep. Mayor Cllr. Stanley Koskey	Elected	Itembe
Cllr. Leonard Barumei	Elected	Tuluap Mosonik
Cllr. Bernard Koech	Elected	Mutarakwa
Cllr. David Sang	Elected	Township

Councillor's Name	Elected, Nominated or Appointed	To represent Ward residents & Interest Groups
Cllr. William Langat	Elected	Emkwen
Cllr. Emmanuel Rono	Elected	Cheboin
Cllr. Joyce Chelangat Korir	Nominated	Women interests
Cllr. Daniel Korir	Nominated	Political Party Interests
Peter Langat	Appointed Public Officer	Government Interests

Source: MCB, December, 2011

2.9.14 Bomet Municipal Council: Staff Compliment

The council has an approved establishment of 52 employees of which only three positions (6%) are vacant. Two (4%) of the approved positions are the senior-most managerial positions Town Clerk and Town Treasurer placed in salary scales range 1-8. Of the two the position of Town Clerk is filled while that of Treasurer is vacant. The Council's capacities to analyse, formulate, and review policies and strategies relevant to its operations are thus limited.

Furthermore the Council has no provisions for recruitment of engineering, legal, public health and physical and environmental planning experts and therefore misses out on benefits accruing from use of professional competencies to identify and prioritize the services needs of the residents and also to develop and implement policies, strategies and plans to conclusively address those needs. The council relies on the qualified staff of the line ministries posted to work from Bomet town for the expertise it does not have. *Table 2.21* below outlines the strength of the council's staff in terms of numbers, salary grades and spread by departments in which they are deployed.

Table 2.21: Bomet Municipal Council Staff Compliment

Cadre of staff	Salary Scale	Position title	No. Approved	No. In-post	No. vacant	Clerk's Dept.	Treasurer's Dept.	Work's Dept.	Social Services
Salary scales 1-8 Professional Management Staff	3	Town Clerk	1	1	-	1	-	-	-
	4	Town Treasurer	1	-	1	-	1	-	-
	7	Senior Accountant	2	2	-	-	2	-	-
	8	Snr Admin Officer	1	-	1	1	-	-	-
	8	Accountant 1	1	1	-	-	1	-	-
Salary scales 9-13 Supervisory / Technical Support Cadre	9	Admin. Officer 1	1	1	-	1	-	-	-
	9	Auditor 2	1	1	-	1	-	-	-
	10	Computer program.	1	1	-	-	1	-	-
	10	Purchasing officer	1	1	-	-	1	-	-
	10	Market Inspector 3	1	1	-	-	1	-	-

Cadre of staff		Salary Scale	Position title	No. Approved	No. In-post	No. vacant	Clerk's Dept.	Treasurer's Dept.	Work's Dept.	Social Services
		10	Works Officer 3	1	1	-	-	-	1	-
		10	Snr. CDA	1	1	-	-	-	-	1
		12	Snr. Audit Clerk, Foreman, CDA 1	3	3	-	1	-	1	1
		13	Copy Typist, Computer operator Snr. Driver	3	3	-	2	1	-	-
Salary scales 14-18 Unskilled Support Staff		14-18	Clerical Officers, Secretary, Cleaner, Messengers, Drivers, Market attendants, Social Workers, Revenue Clerks, Town Askaris, Bus park attendants	33	32	1	4	18	7	4
TOTALS		-		52	49	3	11	26	9	6

Source: MCB, December, 2011

The 17 (36%) approved staff positions at supervisory and technical support levels (salary scales 9-13) are also too few to effectively attend to the services needs of residents of a town the size of Bomet. The council has nobody with substantial experience to oversee its Works and Social Development offices and operations.

The remaining 33 (64%) approved staff positions at salary scale 14-19 are for the unskilled support staff including Clerical Officers, Cleaners, Messengers, Drivers, Market attendants, Social Workers, Revenue Clerks, Town Askaris and Bus park attendants.

2.10 HOUSING AND SOCIAL INFRASTRUCTURE

2.10.1 Housing and Human Settlements

2.10.1.1 Introduction and Overview

Human Settlements comprise the physical components of shelter, infrastructure and services to which the physical elements provide support- *community services such as education, health, culture, welfare and recreation, among others*. A vibrant housing industry is critical for a residential “family” town like Bomet and indeed overall the country's social economic development. It is acknowledged universally that, housing is one of the three essentials of life

besides food and clothing. Adequate housing is therefore a foundation for family security and long term happiness as it fortifies a household's quality of life.

The formulation of a Comprehensive Settlement Upgrading Strategy for Bomet town is happening against a backdrop of key constitutional⁷ led governance changes in the country as well as taking into account the long term national development blue print, Kenya Vision 2030 both which lay a lot of emphasis on providing adequate and quality settlements. This human settlements sub-sector is strategic in facilitating production and management of quality, affordable and decent housing in urban areas and improvement of quality of shelter in rural areas⁸. The housing and human settlements strategy for Bomet is intended to provide a framework for synergy through which both state and non state actors participate in a structured and predictable manner in guiding the town's vision and subsequent sustainable development.

Box 2.1: Kenya Vision 2030 and Housing Interventions

The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. Housing interventions to be implemented in the five-year Medium

Term Plans (MTP) covering the period 2008 – 2012 with a bearing on the Bomet strategic plan include;

- Investment based on private-public partnership to overcome the constraints to housing provisions as well as to develop infrastructure and provide long term finance and technology.
- Environmentally sound human settlement design and development.
- Comprehensive land use planning and management for development of standard settlement with adequate infrastructure, services and open space.
- Upgrading, installation and maintenance of housing infrastructure necessary for shelter provision.
- Promotion and adopting the wide use of appropriate building materials and technologies.
- Land is an invaluable economic asset which can be utilised as collateral to access housing finance, use, development and control.
- Appropriate housing finance for both short-term construction and long-term mortgage is needed for realisation of the targeted housing output.
- Finalisation of the Housing Bill, Private Public Partnership guidelines, draft land policy, Tenant Landlord Bill and secondary mortgage facilitative law.

Source: GOK, Kenya Vision 2030

⁷ The bill of rights as articulated in the Kenyan constitution, 2010 is very comprehensive and one of its key demands is on the right to housing. The right to adequate housing in international instruments is mirrored in Kenya's constitution which provides for the right of “every person to accessible and adequate housing, and reasonable standards of sanitation”.

⁸The 8 key aspects of the concept of adequate housing as per International Instruments on Housing Rights (and is equally applicable to Bomet) are Legal security of tenure; Availability of services, materials, facilities and infrastructure; Affordability; Habitability; Accessibility; Location and Cultural adequacy

The plan also takes into account the spirit of other strategic documents such as the National Housing Policy 2004 and the National Urban Development Policy whose preparation is at an advanced stage. In one of the chapters of the urban policy, major issues afflicting housing and human settlements in urban areas have been pointed out along with suggested measures to deal with these issues.

In the last few years, improved macro-economic environment and ease of access to credit has resulted in positive developments in the housing sector in Kenya particularly within the large urban centres including Nairobi. However within the small centre, the impacts have been less visible.

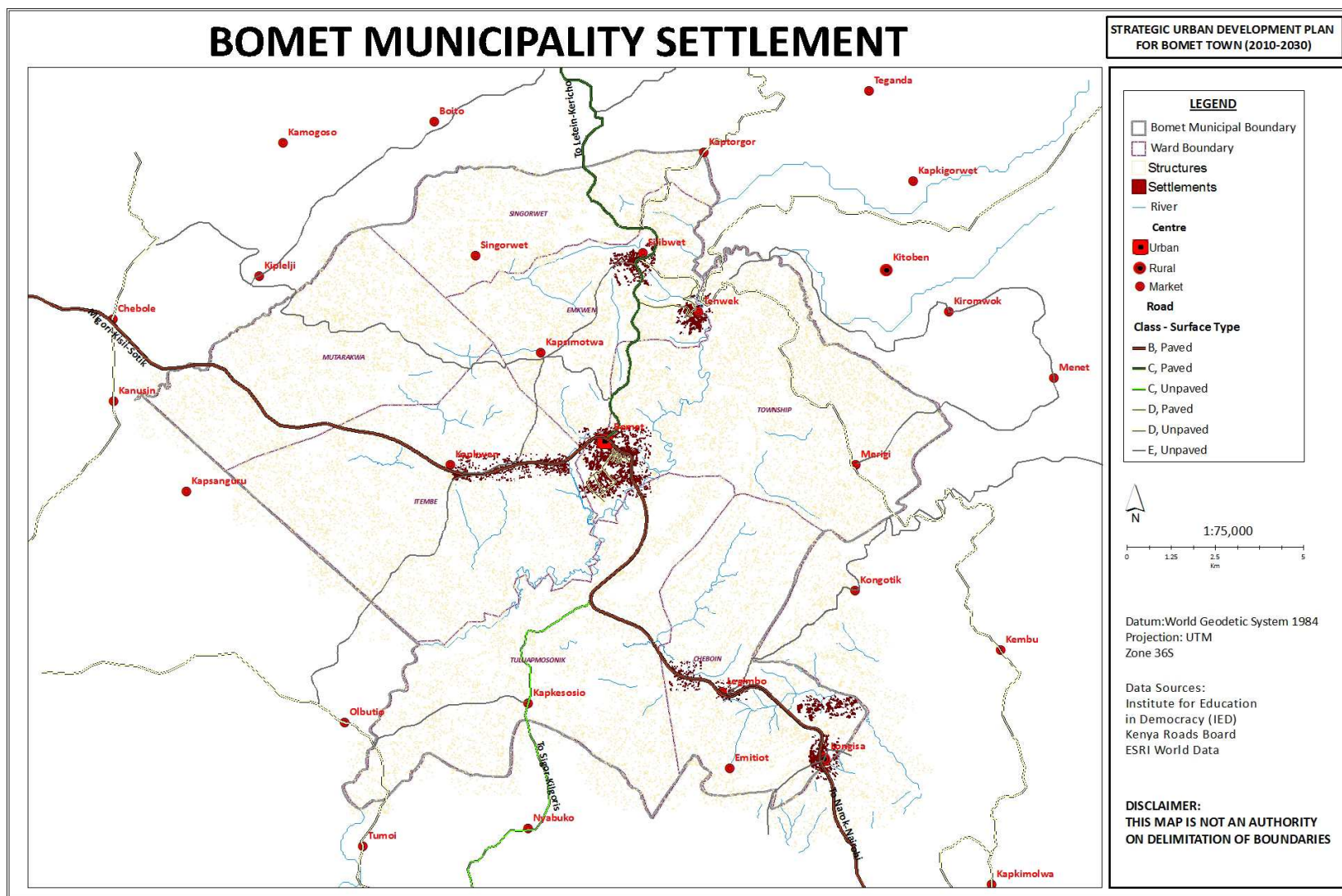
This component of the report therefore looks at housing in its broadest sense using human settlement lenses. It also explores the necessary social infrastructure and amenities that are generally associated with housing.

2.10.1.2 Objectives of the Bomet Comprehensive Human Settlements Strategy

The overall objective of the Comprehensive Human Settlements Strategy for Bomet is to promote orderly and sustainable human settlements in the Town and its environs

The map below shows the concentration of human settlements within Bomet's urban centres.

Map 2.4: Major Human Settlements within Bomet Town



Source: Matrix Development Consultants, May, 2012

2.10.2 Synopsis of Housing and Human Settlement Issues in Bomet Town

Bomet like most other Kenyan urban scenario is plagued by the duality of rural and urban housing and human settlements and is faced with a host of challenges and issues. Currently there is very limited information or data on housing developments in Bomet. There is a serious under-investment in low-and middle-cost housing (particularly rental) by both the public and formal private sectors. Demand for rental houses outstrips supply and there is a huge backlog for rental housing for those moving to the town.

There is limited institutional housing. There are only about ten (10) Administration Police houses. Ministry of Agriculture has about five (5) houses, the District Commissioner has one (1) while the municipal council of Bomet has only five houses. Kenya Commercial Bank and National Bank of Kenya have proposed to develop a few houses within Bomet municipality.

Clearly there are no well developed and explicit housing neighbourhoods and residential use is mainly found in the form of cubicles behind the existing retail shops (Ministry of Lands, Bomet Town Zoning Plan, 2009). There is also serious under investment in decent hotels and accommodation facilities within Bomet municipality and its environs. There was however one reasonable hotel under construction within the CBD at the time of the study.

Efforts should be made to explore ways to encourage increased government participation and spending in local housing through existing and or emerging institutional frameworks such as Civil Servants Housing Scheme and National Housing Corporation (NHC).

2.10.3 Building Materials and Construction sub-sector

Housing construction creates investment and employment that leads to business expansion which in turn drives the financial and other sectors. When housing industry grows, other sectors also grow. It is a powerful industry that stimulates and drives a country's or town's overall economic development and growth. New housing developments often drive infrastructure development that adds value to a town. Street networks, electricity and power are some of the required infrastructure for any successful development and need both private and public sector participation.

The availability of low cost building materials and construction techniques in Bomet was observed as being limited. Building materials are generally very expensive since many of them have to be imported from external sources. Transport related overheads make the cost of materials exorbitantly high. Timber though expensive was observed as being a very common construction material. Extracted mountain sand is becoming a common type of locally available building material, though its quality is not guaranteed by Ministry of Work's engineers.

The quality of the sand has equally been questioned by various players on the ground and there is general perception that the sand from Kisumu is of a higher and acceptable quality than the local one.

The quarrying of local mountain sand is being done in an environmentally unacceptable manner. There is therefore need to establish and assess the suitability and quality of the sand from various local sources. There is also need to introduce more sustainable quarrying techniques to ensure environmental safety and increased output of the product.

Table 2.22: Sources and Cost of Selected Building Materials

Material	Source	Remarks
Building Blocks	Olulung'a (Narok County)	60 Km from Bomet town
Bricks	Bomet municipality, Chebole, Longisa	Locally cured & used for 1-storey building construction
Sand	Kisumu	80 Km from Bomet town
	Quarry Within Bomet(mountain sand)	Illegal, not best for storey buildings
Timber	Bomet municipality	Locally available
Steel	Nairobi	It cost 2,500 in the year 2009
Galvanized iron sheet	Local Hardware shops	

Source: Bomet Feasibility Mission Report 2011

Compared to the national average as well as Nairobi, the largest urban centre in Kenya, the use of both stone and brick/broke in Bomet is a relatively new construction technique in the area owing to the fact that residents have hitherto largely used other soil based technologies.

Brick making appears to be an emerging building materials subsector in some areas. This is mainly concentrated around Kapsimotwa area located near the airstrip. The bricks are produced in a traditional energy inefficient manner and with little reclamation of used sites. The current cost of bricks is about 6 Ksh per piece and which suffers from lack of uniformity and standardization as well as varying qualities. This subsector however has great potential for supporting the housing market in the area. Many housing developments in the town are currently using these bricks as partitioning walling material etc.

Short term interventions that build on injecting new improved and energy efficient brick making techniques to ensure uniformity should be encouraged. Proper guidelines on production and use of bricks and other alternative materials should be introduced, promoted and aggressively

disseminated throughout the planning area with a view of enhancing their utilisation. This should be done by both public and none-state actors in this particular sector.

The Bomet Municipal Council should in the short run ensure that:

- In partnership with other players develop and implement the required minimum standards expected of human settlement dwelling units.
- Adopt and popularise guidelines on utilization of low cost building materials.
- The building plans are approved in conformity with the overall strategic structure plan, 2010-2030 and zoning plan

2.10.4 Types of housing

As noted in the introductory part of this section the duality of both rural and urban housing stands out in Bomet town. Many of the housing structures in the entire Bomet, particularly within the hinterland, are traditional semi-permanent and which account for about 92% of the housing especially outside the trading centres. The survey revealed that within the urban centre in the middle and high income areas, permanent housing typology dominates at 72%. It was also established that in the slum and peri-urban areas 31% of structures were thatched while 15% were mud structured houses.

2.10.4.1 Housing Typology by Roofing and Walling Materials

The housing typologies by materials used are briefly discussed below;-

a) Roofing materials

The type of roofing materials used is mainly grass particularly within the peri-urban areas while corrugated iron roofs mainly feature in the formal urban areas as shown in *Table 2.23* below

Table 2.23: Urban Households by Main Type of Roofing Material for the Main Dwelling Unit

Levels	Iron Sheets	Tiles	Concrete	Asbestos	Grass	Makuti	Tin	Mud/ Dung	Other
Bomet District	14,313	131	134	228	4,301	66	14	44	7
Rift Valley	563,051	26,863	12,318	21,541	18,971	6,748	3,182	1,511	3,741
Kenya	2,669,341	154,203	302,645	99,029	83,837	52,900	11,390	3,159	8,807

Source: Kenya National Population and Housing Censuses 2009

b) Housing by Type of wall materials

About 86% of the households in the area have their dwellings with walls made from mud and grass wood and iron sheets and thus can be considered as temporary. Only few households (14%) use stone and brick/block.

Table 2.24: Households by Main Type of Wall Materials for the Main Dwelling Unit

Levels	Stone	Brick/Block	Mud/Wood	Mud/Cement	Wood	Iron Sheets	Grass/Reeds	Total
Bomet District	1,508	1,146	12,534	1,227	2,533	179	19	19,146
Rift Valley	196,040	111,459	149,749	66,580	67,301	53,015	3,186	657,926
Kenya	1,148,556	744,614	536,845	268,000	196,698	442,029	28,056	3,364,798

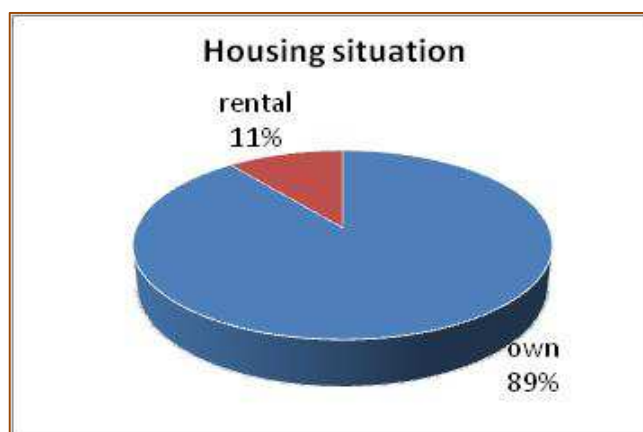
Source: (KNPHS, 2009)

More effort should focus on utilization of acceptable and more permanent building materials such as bricks which are readily available in the area.

2.10.4.2 Housing Typology by Housing tenure

Regarding house ownership, 89% of the respondents during the survey reported that they owned the houses they currently live in. The *Chart 2.8* below profiles the housing ownership situation. The housing situation is dictated by the fact that the town is largely rural in orientation and owning a house is a common practice as people live in the rural areas and only go to work or trade in town. In a more urban setting, renting houses is prevalent. Those who rent houses are non locals such as civil servants posted to the town and those on business trips.

Chart 2.8: Rental/ owner housing in Bomet town



Source: Bomet Feasibility Mission Report 2011

2.10.5 Unplanned and slum settlements in Bomet

Although the housing typologies within the CBD and surrounding areas do not meet the strict definitions of slums⁹, they do exhibit slum type features. It is estimated about 31% of residents reside in informal settlements in Bomet town. Certain parts of the town particularly those within the free hold area are characterized by informality and could easily degenerate into slum areas in the near future. The stretch abutting Narok-Sotik highway covering about 2 Kilometres from the Nyangores River to the Keben/Chelsa Junction was observed to be experiencing mushrooming of poorly planned and under serviced housing developments on irregular subdivisions. This area, which is mainly on freehold land tenure, literally has no adequate road provisions and is overly and irregularly subdivided without following planning and building by laws and standards. It is inaccessible as roads are very narrow and impassable during the rainy season. Other challenges include lack of sanitation facilities, open spaces, garbage collection and improved shelters. The challenges and suggested solutions in each ward are summarized in Table 2.25 below.

Table 2.25: Problems and Solutions Associated with Settlement per Ward

Ward	Problems	Solutions
Township	-Poor housing -Lack of sanitation -Poor sewerage -Lack of toilets -No electricity -No roads	-Improve roads -Install water -Security
Mutarakwa	-Use of land as collateral -Wrong inheritance procedures -Drugs -Poor drainage -Poor sanitation facilities	-Create awareness on family law succession -Local authority to upgrade housing

⁹ A slum household is defined as a group of individuals living under the same roof lacking one or more of the following conditions: access to improved water; access to improved sanitation facilities; sufficient living area(not more three people sharing the same room); structural quality and durability of dwellings; and security of tenure.(UN-HABITAT, 2011-Quick Guide 2: Low-Income Housing)

Kapsimotwa	-Inadequate sanitation -Inadequate housing -Thuggery -Brewing and selling of illicit brews -Few schools and limited schooling by children due to poverty	-Slum upgrading -Improve security -Construct public toilets/ bathrooms
Itembe	-Some land parcels do not have title deeds	-Civil education on ownership rights -Government to survey and give to the rightful people

Source: Bomet Feasibility Mission Report 2011

2.10.6 Housing Projection

Using the average household size of Bomet of 6.1, the housing need is projected to grow from 18,059 in 2009 to 37,446 households in 2030 showing an increasing trend which will double through the planning period¹⁰.

Table 2.26: Projected Household Growth for Bomet

BOMET HOUSEHOLD INCREASE 2012-2030						
WARD	2009	2012	2017	2022	2027	2030
Township	27,562	30,733	37,035	44,906	54,780	61,892
Singorwet	12,451	13,596	15,745	18,235	21,120	23,067
Mutarakwa	12,462	14,182	17,591	21,821	27,068	30,804
Itembe	11,541	13,135	16,297	20,221	25,090	28,558
Emkwen	15,853	16,834	18,606	20,564	22,728	24,134
Tuluapmosonik	16,841	18,464	21,529	25,112	29,300	32,146
Cheboin	13,450	14,912	17,718	21,065	25,059	27,818
TOTAL BOMET MC	110,160	121,856	144,521	171,923	205,145	228,419
Estimated No of Households in Bomet (Average= 6.1)	18,059.02	19,976.39	23,692.03	28,184.14	33,630.31	37,445.74
Inter-censual increase in Households BOMET MC	-	1,917.37	3,715.64	4,492.11	5,446.17	3,815.50

Source: Matrix Development Consultants, 2012

¹⁰ Bomet like other areas in the country is suffering from absence of reliable and robust housing stock and a predictable framework for engagement by key stakeholders in the industry

From *Table 2.26* above, it is estimated that the total urban housing supply in the municipality is 19,238 (both permanent and temporary). Based on the current supply and the projected demand over the planning period, the municipality will need to develop or ensure supply of about 18, 208 but the figures can be higher if permanent housing typologies are desired.

It is recommended that four broad housing categories for different neighborhoods are recommended for Bomet town. These include: Low Density -High income; Medium Density - Middle Income, and High Density-Low Income and settlement upgrading.

2.10.7 Social Infrastructure Facilities and Development

Poor infrastructure is major constraint to socio-economic development of a country. Infrastructure continues to be a key obstacle to growth and development in many towns in Kenya. Availability and access to social infrastructure and community facilities play an important role in the social development of its citizens. Studies have revealed that the availability of facilities such as play grounds for young people can significantly lower their chances of engaging in crime besides offering an opportunity for talent development. Education on the other hand is a vital bridge for communicating development policies. Social infrastructure in this context encompasses education, health, recreational facilities etc. As noted elsewhere, rapid urbanization in Kenya has outstripped ability of urban authorities to avail and maintain the much needed social infrastructure and for its urban residents. This section seeks to provide a general picture on the situation of social infrastructure facilities in Bomet such as education, health, recreational facilities.

In Bomet town, there is a serious under investment in social infrastructure itself a critical component of human settlements as evidenced in the following subsections.

Equally important is the non adherence to social amenities planning and distribution standards as stipulated in the Physical Planning Handbook of 2002.

The existing situation as already exhibited revealed a number of shortcomings namely;

- That although there are enough schools in Bomet, these are variedly distributed.
- Space requirements for learning institutions especially at primary level are undesirable
- The maternity hospitals are unevenly dispersed
- Police presence is inadequate

The net effect are the contrasting distances covered by residents to access services. Young children and women bear the brunt despite there being existing planning guidelines that specify population distribution and acceptable distances to services within neighbourhoods. Apparently this is the case in much of Bomet where the distribution of services has legislated unserved

spaces. Consequently, the situation found in Bomet promotes in severe cases over utilization and in the less severe it represents under utilization of available facilities.

The above situation should be juxtaposed with existing planning standards with provisions for social amenities as indicated in *Table 2.27* below, demand the following provisions be made

Table 2.27: Planning Requirements

Population	Number of Households	Facility to be Provided	Quantity (No.)
2,500	500	Nursery school	1.0
5,000	1,000	Religious facility	1.0
10,000	2,000	Primary school	1.0
10,000	2,000	Community center	1.0
10,000	2,000	Open market	1.0
10,000	2,000	Police post	1.0
20,000	4,000	Secondary school	1.0
20,000	4,000	Health center	1.0

Source: Physical Planning Handbook 2002 (MLH)

Despite the dispensaries in Bomet being numerous, it is the skewed distribution of referral centers that prominently emerges. Bomet is served by only three main health facilities namely Longisa level IV, Tenewek and Sot nursing hospitals in Cheboin, Emkwen and Township wards respectively. This implies long distances for those beyond the immediate catchment area, again contrary to existing physical planning standards on accessibility.

2.10.8 Educational Infrastructure

The provision of education and training to all Kenyans is fundamental to the success of the Government's overall development strategy. In the recent year, the government has put a lot of emphasis on the provision of basic education and training for all children. Besides, development of quality human resource is central to the attainment of national goals for industrial development. Education also aims at enhancing the ability of Kenyans to preserve and utilize the environment for productive gain and sustainable livelihoods. Education is also necessary for the development and protection of democratic institutions and human rights.

Generally the education sector in Bomet fairs relatively well. The performance of females closely ties to that of males particularly at primary and secondary level but shows some dramatic declining trend at the university level which mirrors the national trends. Participation at

tertiary colleges and youth polytechnics is quite minimal yet the numbers recorded to be leaving secondary schools are quite large.

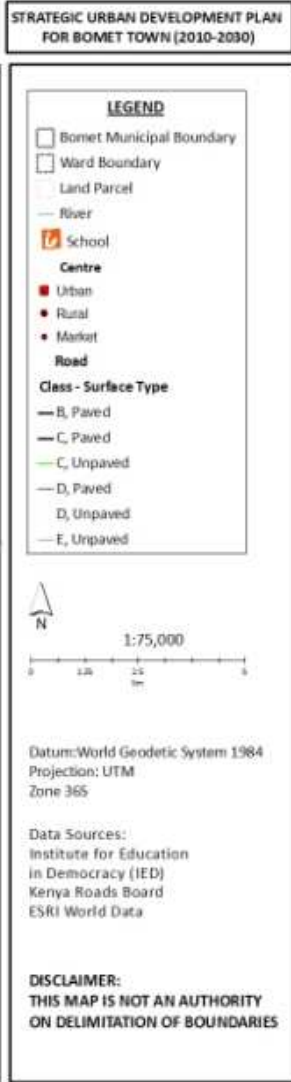
Table 2.28: Urban Population Aged 3 years and above by Sex, Highest Level of Education Reached in Bomet District

Sex	Never	Pre-Primary	Primary	Secondary	Tertiary	University	Youth Polytechnic	Basic Literacy	Madrasa
MALE	3,600	2,954	26,857	7,987	1,473	539	219	76	-
FEMALE	5,107	2,712	28,749	6,396	1,348	271	149	89	6

Source: 2009 Population Census

The general distribution of school infrastructure is captured in the *Map 2.7* below:

Source: District Education Officer, Bomet District



In general, most schools have inadequate physical facilities. They are mostly built of brick, lack shutters with walls that are not plastered, while floors were not cemented and with no painting at all. Most of the schools lack clean drinking water. Only five schools have electricity. The following challenges and issues concerning learning facilities were noted by resident during field visits:

Table 2.29: Characteristics of Learning Institutions

Broad themes	Problems
Physical infrastructure	• Inadequate classrooms • Poor facilities i.e. dormitories • Lack of accommodation • Congestion in classrooms • Inadequate sanitation facilities
Teaching staff	• Lack of teachers / few teachers (secondary, primary) • Low salaries for teachers
Water and sanitation	• Sinking of pit latrines during rain seasons • Inadequate water supplies • Inadequate sanitation facilities
Energy	• Inadequate electricity supplies
Governance / administrative	• C.D.F allocation has political interference • Weak PTAs • Corruption • Few books

Source: Bomet Rapid Appraisal Report 2011

2.10.9 Primary Schools

There are 109 primary schools in the municipality. The transition rate from primary to secondary is between 70% - 80%. Encouragingly enrolment within primary schools within Bomet town stands at between 9,000 – 10,000 pupils, with an average class of 50 pupils having 35 girls. There is large number of privately run primary schools within Bomet municipality as depicted in Table 2.29 below.

Table 2.30: Types and Land Sizes of Private Primary Schools within Bomet Municipality

SCHOOL	TYPE	LAND SIZE(ACRES)
Tarakwa	Mixed Day & Boarding	10
St. Mary's	Girls' Boarding	7
Chelsa Primary	Mixed Day & Boarding	5
Silibwet Township	Mixed Day & Boarding	5

St. Mary's day Mixed	Mixed Day	4
Ilio	Mixed Day	2
Tamason	Mixed Day	1
Bomet Christian	Mixed day	1

Source: District Education Office, Bomet District, December, 2011

2.10.10 Secondary Schools

Most of the secondary schools in the town emerged from primary schools and thus retained their characteristics. Girls Secondary Schools within Bomet have recorded best performance compared to boys. There are about 22 secondary schools.

In terms land sizes, many of the institutions are adequately catered for. This is vital to both expansion and development of infrastructure facilities.

Table 2.31: Types and Land Sizes of Secondary Schools within Bomet Municipality

School	Type	Land Size (Acres)
Longisa High School	Boys' Boarding	17
Tenwek Boys High School	Boys' Boarding	14
St. Michaels	Mixed Day	10
Itembe	Mixed day	8
St. Mary's (Only Private)	Girls' Boarding	7
Merigi high	Mixed Boarding	6
Motiyo	Mixed Day	5
Goitabsilibwet	Mixed Day	5
Cheboin	Mixed Day	5
Chebonei Girls	Girls'	4
Kyogong	Mixed Day & Boarding	4
Kapsimbiri	Mixed Day & Boarding	3
Enjerian	Mixed Day	2

Source: District Education Office, Bomet District, December, 2011

2.10.11 Tertiary institutions and Colleges

There are three polytechnics and 10 other middle level colleges. Such institutions are critical for imparting technical skills that are in dire supply within the council. These institutions can be critical incubators to fill the skill gap that exists within the municipal council through collaborations, in house training etc.

2.10.12 University

There is one constituent college of Moi University. Universities have historically been known for influencing the growth of urban centers such as Oxford and Cambridge in the UK as well as Maseno in Kenya. Elsewhere in the country the increase in the number of educational institutions and expansion of academic programmes has been a major impetus for growth in the respective towns. In addition to boosting consumption, the need for student accommodation is driving the development of hostels in areas close to the universities. Besides, the direct contribution is reflected in the increased level of education.

2.10.13 Community Facilities

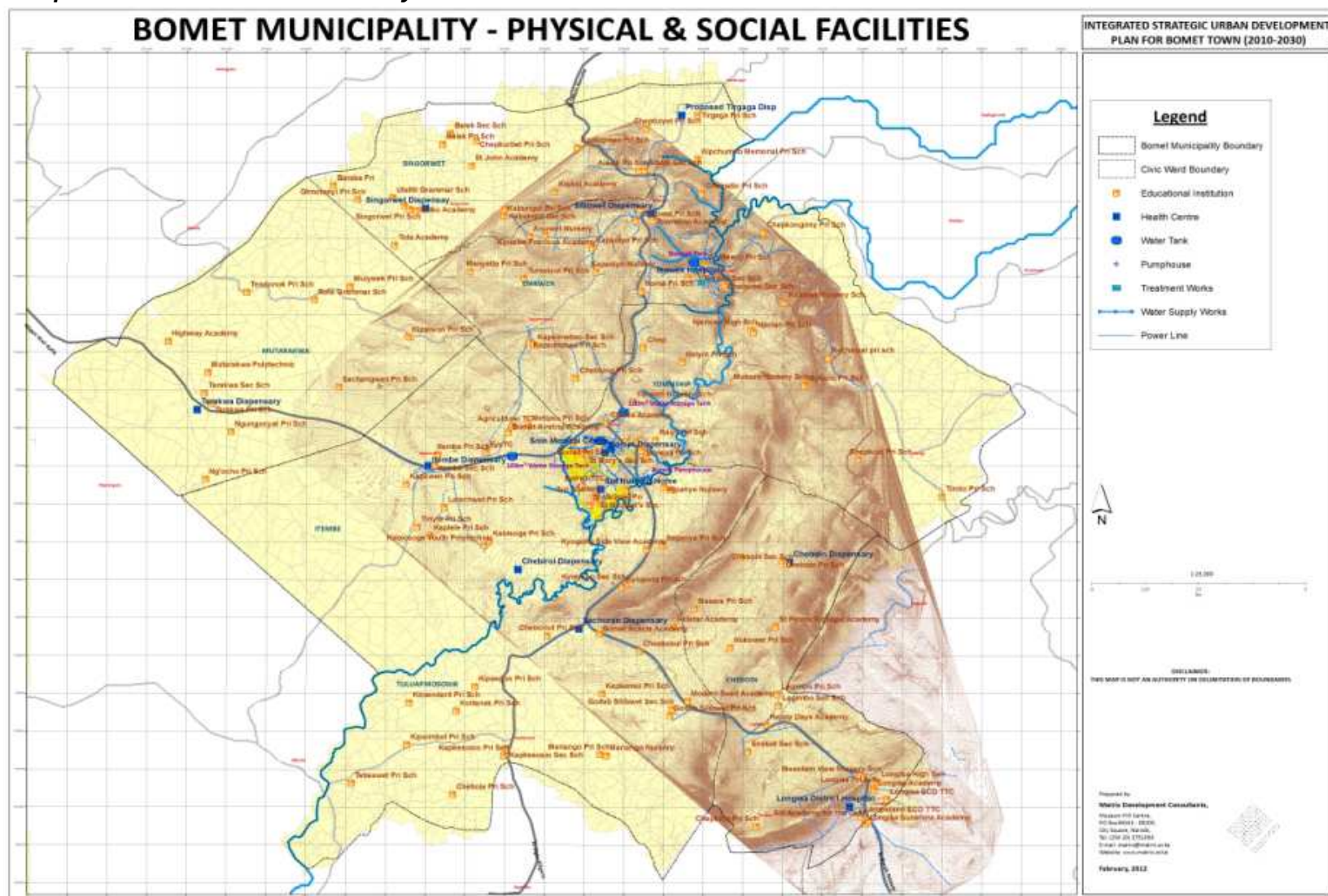
A critical component for human settlement planning and provision is the desired availability of open and green spaces for recreation and related purposes. The current setup of Bomet town as reported earlier is that of limited availability of public spaces. Currently there is one recreational park located near the DC's office which is used for sports by schools and for public baraza. It is largely underutilized as it is not developed to a level of being attractive to the public. Besides, it is poorly maintained. The park is not fenced and animals graze inside freely, and is also used as a dumping site for waste material from construction sites. Short term measures should focus on fencing and beautification/landscaping of the park to make it more attractive to the public.

Bomet Municipal Council should cause for a proper land use and planning that takes care to allocate more open and green spaces for recreation and allied activities. Residents are willing to avail more land for open spaces at a fee. Consideration should be given at the design and constructions stages for the incorporation of community facilities into all new developments to meet the needs of both the residents of the proposed development and the wider community.

It should also avail personnel such as trainers at some of these amenities while at the same time protect and promote green spaces as essential components of healthy urban areas which are important for absorption of carbon and other harmful atmospheric gases.

The general distribution of community facilities is captured in the *Map 2.9* below:

Map 0.6: Distribution of Community Facilities in Bomet town



Source: Matrix Development Consultants, 2012

2.10.14 Health

The main sources of health care service are the dispensaries which include Chebiroi, Itembe, Tarakwa, Singorwet, Tenwek, Silbwet, Cheboin and Bomet dispensary. The main hospitals include Longisa District Hospital and Tenwek, a private referral hospital. Sot Nursing Home also provides services in Itembe ward. There is a proposed Tirgaga dispensary whose completion should be fast tracked. From the initial assessment of this study it appears that health facilities are also well spread in the municipality, however women complain that maternities are unevenly distributed, therefore there is need to focus on maternal health facilities that are close enough to the neighbourhoods. Inadequate water supply to the health facilities also remains a major challenge.

The main problems facing the health sub sector are summarised below:

Table 2.32: Health Care Problems and Solutions

Problems	Solutions
- Congestion in the hospital - Delays in providing services - Dispensaries that are more than 3km from the neighbourhood - Inadequate drugs - Few staff and medical specialists - Inadequate water supply at the hospital - Lack of diagnostic equipments - Lack of maternity wards - Limited ambulance services - Some medical staff report on duty while drunk	- Manage the supply of drugs properly - Change of staff and medical personnel - Construct health centre at Kapungut market - Deploy more committed staff to the existing facilities - Establish a comprehensive health facility including maternity wards - Establish a district hospital at Itembe - Increase coverage of health facilities in rural areas - Lobby the government Post doctors - Provide ambulance services - Provide Water the hospital

Source: Bomet Rapid Appraisal Report 2011

There is a mortuary in Longisa hospital while a public cemetery is situated near the riparian area, but the public have different opinions around its current location.

2.10.15 Religious Purpose

There are several religious institutions, particularly in the town, these include AIC, Catholic, Church, AIC, FGCH. There is also a mosque.

2.11 TRANSPORT AND INFRASTRUCTURAL SERVICES

2.11.1 Water Supply

There are three conventional centralized water supply schemes in Bomet Township; Bomet Town Centre water supply, Tenwek hospital and Market Centre water supply, Longisa water supply and Mogombet community water supply. The three water supplies draw their water from Nyangores River except for Longisa water supply. The town centre water is abstracted and then pumped to the treatment works from where it is again pumped to a reservoir in town then distributed to consumers through gravity.

The existing Bomet Water Supply was constructed in the 1950s and commissioned in 1956. It serves Bomet town central business district and the peripheral peri-urban areas. Initially, the water supply was being managed and operated by the Ministry of Water and Irrigation. Upon the gazettment of Water Act 2002, the supply was leased to Chemosit Water and Sanitation Company by Lake Victoria South Water Services Board (LVSWSB).

2.11.1.1 Bomet CBD Water Supply

Raw Water Intake

A weir abstracts surface river water from Nyangores River. The source works is located 50m from Bomet – Narok Road Bridge from where it is lifted using a single unit centrifugal pump to the treatment works. This is the water intake

Photo 2.1: Intake works House



Source: Matrix Field Surey, October 2011

Treatment Works

Water pumped from raw water sump is conveyed through a 75mm GI rising mains to the main treatment works which is sedimentation with coagulation system with design capacity of 15m³/hr. From the treatment units the treated water is fed into 35m³ RC ground water tank located at the site.

Photo 2.2: Existing Water Intake Works



Source: Field Surey, October 2011

Storage Tanks

The treated water is pumped using a simple unit centrifugal pump from an existing pump house through arising main to distance of 3 km to three main storage tanks as follows:

- i. One 100m³ tank located at a lower level and does not serve many consumers.
- ii. 100m³ new Reinforced Concrete (R.C) tank located at a higher ground near the District Commissioner's office and has also fewer distribution lines.
- iii. 25m³ clear-water tank located at the treatment works.

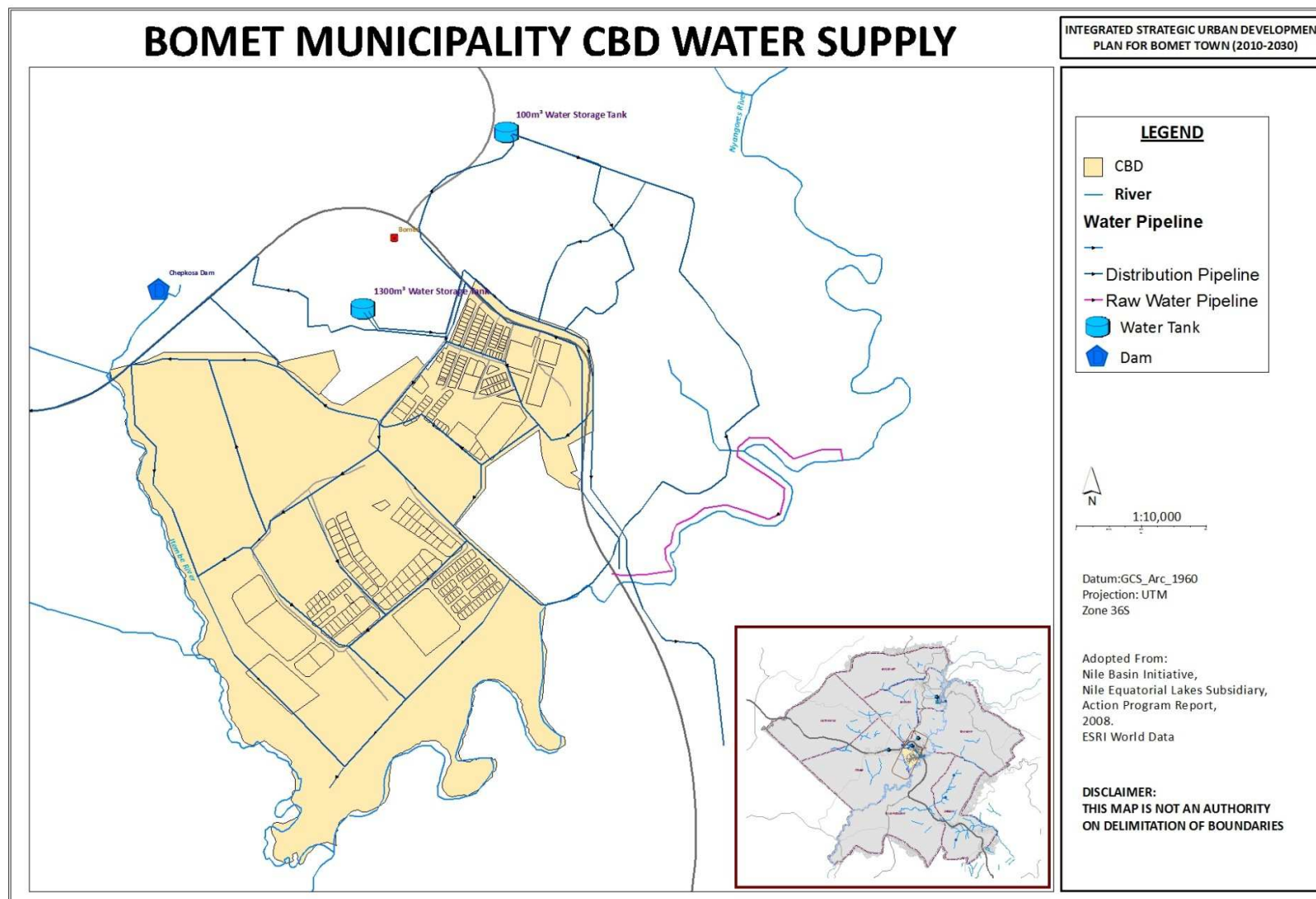
Distribution System

The water distribution is done for 30 minutes daily from 6.00am to 6.30pm. The distribution system has 780 registered consumers, 564 of whom are metered and 226 are on a flat rate basis. The existing distribution system is dilapidated and is not adequately mapped. Part of the distribution system consists of asbestos pipes which have been banned for use in conveying water in Kenya.

From the Reinforced Concrete (RC) tank the water gravitates back to the town through different sizes and materials of pipes. The system has very limited marker posts and no fire hydrants provided.

Other water supply appurtenances are also old and dilapidated and most of the sluice values are no longer functioning properly.

Map 2.7: Existing CBD Water Supply Distribution Network.



Source: Nile Basin Initiative, Nile Equatorial Lakes Subsidiary, Action Program Report, 2008.

Operation and Maintenance

In the recent past the water company has had problems in keeping the water works in operation. The systems and equipments are all rundown. The vehicles are all grounded. The scheme is very low in maintenance tools, which are completely inadequate. Spares required for maintenance are procured when breakdowns occur and no stock is maintained. In net effect the scheme is operating under a deficit.

Existing Staff

There are eight staff members (Table 2.32) under the direct supervision of the scheme manager involved in operation and maintenance of the scheme. Employed staffs of different cadres are able to carry out all the operation and maintenance works within the supply area.

Table 2.33: Staff of Bomet Town centre Water Supply

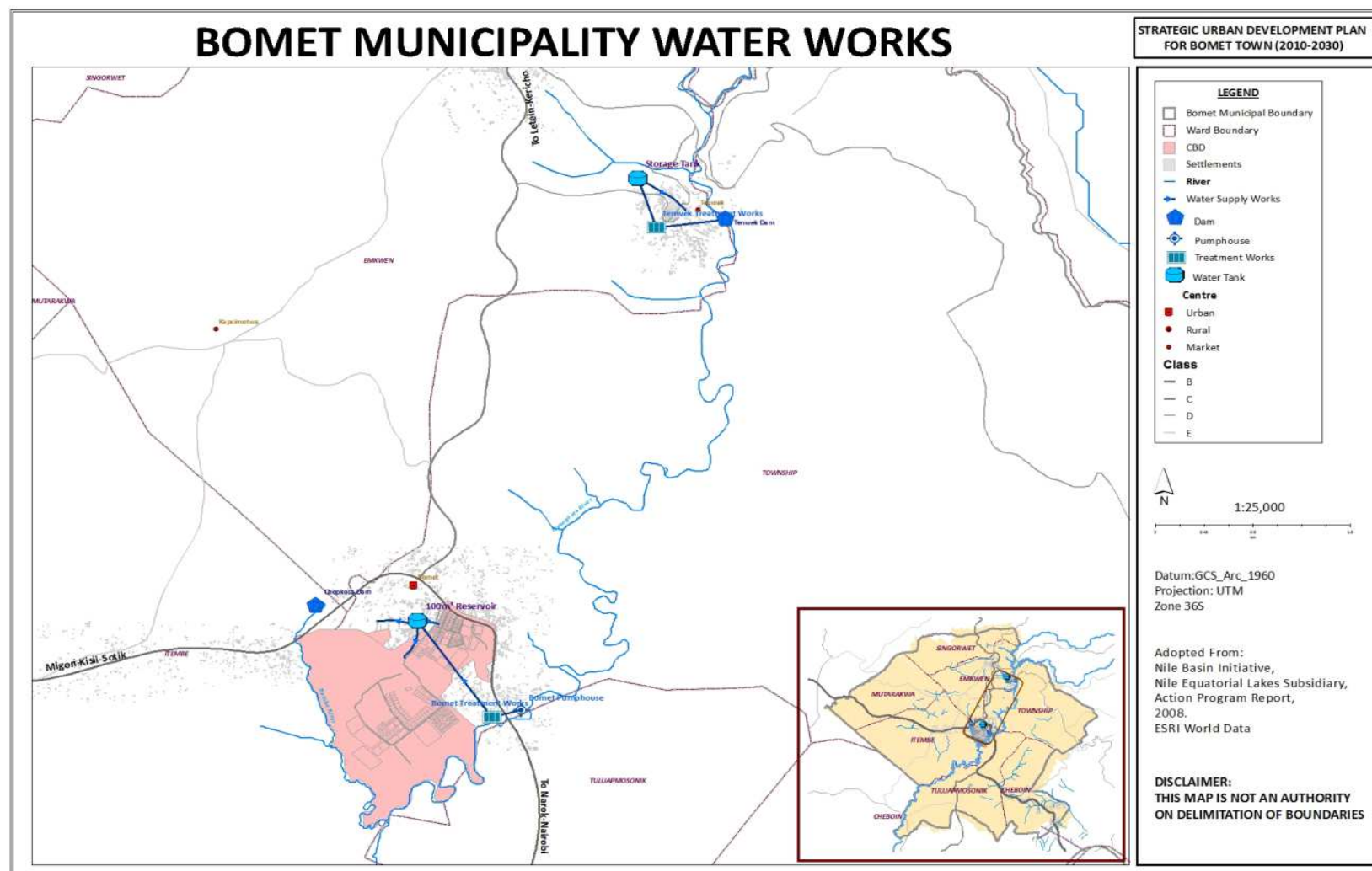
Cadre	Officer in Charge	Inspectors	Plumbers	Pump Attendants	Revenue Clerk	Subordinate Staff
Number	1	2	2	1	1	1

Source: MCB, December, 2011

Revenue and Expenditure

The total monthly revenue collected is approximately KES. 250,000 against total expenditure of KES 750,000. The expenses incurred in running the supply system comprise treatment inputs, power supply, staff salaries, logistical and office running costs. LVSWSB is not able to meet the deficit which is currently being met by Ministry of Water and Irrigation.

Map 0.8: Bomet Town Water Works and Tenwek Water Works.



Source: Nile basin Initiative report, 2008

2.11.1.2 Tenwek Hospital and Market Centre Water Supply

Tenwek Hospital and Market Centre water supply is mainly maintained and managed by Tenwek hospital management. The water supply also serves the resultant market and immediate community. The scheme is well ran and operates throughout the year.

2.11.1.3 Mogombet community water supply

Mogombet community water supply serves the local community in Silibwet, Kimweno A and B and parts of Kapsoyo areas. The water supply is maintained and managed by the community.

Photo 2.3: Mogombet Water Intake and Treatment Works



Source: Field Surey, October 2011

2.11.1.4 Longisa water supply

Longisa water supply mainly supplies water to Longisa sub-district hospital and surrounding market. The water supply is maintained and managed by the Chemosit Water and Sanitation Company.

Photo 2.4: Longisa water treatment works



Source: Field Surey, October 2011

2.11.2 Solid Waste Management

MCB has been allocated land below Bomet high school on the southern part of the CBD, which is currently agricultural land. Currently dumping is being done in front of the Bomet high school gate in the existing quarries, not at the designated dumpsite. The site is located within the CBD, approximately 1 km from town centre. The current dumpsite needs to be relocated urgently to the proposed site close to the proposed sewerage treatment works site.

Photo 2.5: Existing Dumpsite in CBD Adjacent to a School and River Nyangores



Source: Field Surey, October 2011

The proposed site is approximately 1.5 km from the CBD measuring about 1.0 acre which will be adequate for the next 10 years or more if designed appropriately, however the site, due to the location near institutions of high learning and residential areas is not appropriate.

Refuse is collected in wheelbarrows and other means and put in receptacles located within the town centre.

The current dumpsite has not been approved by NEMA. The council has undertaken an Environmental Impact Assessment (EIA) and applied to NEMA for approval of the Environmental Impact Assessment (EIA) report as well as the approval of the proposed site, in addition to this a license for transportation and disposal of waste to the new proposed dumpsite awaits NEMA approval. It is estimated that about 45 per cent of the waste generated in the CBD is collected.

2.11.3 Sanitation

There is no sewerage collection network and treatment facility in Bomet. The modes of sanitation are mainly on site disposal in Bomet town. These include; septic tanks and pit-latrines. This is for both within and outside the CBD. Sewerage services bylaw are to be provided by Chemosit Water and Sanitation Company under contract by Lake Victoria South Water Services Board (LVSWSB).

Noteworthy, studies and designs have been undertaken by Lake Victoria Initiative to address the sanitation issues. This mainly covers the CBD.

2.11.4 Drainage

The topography of the study area is characterized by undulating hills and valleys. It forms a transitional belt between Kericho hills and Narok plains. The valleys form natural drainage profiles for the area; from Silibwet to Kapkwen to Kapkasosio, Tenwek through CBD to Kapkasosio and from Merigi through Kapsimbiri to Kyokong. There are a number of permanent rivers, several seasonal and perennial streams defining the study area. The main rivers through

town are; River Nyangores and Kinoin. The land slopes mainly from North to South and to a lesser extent in the East-West direction with a ridge across the area.

Drainage is a major issue here due undulating hills and valleys. Drainage in the CBD, Tenwek, parts of Silibwet, Merigi, Kapkwen, Kapsimbiri and Kyokong areas flows to River Nyangores. There are natural drainage networks which need to be developed and protected, and the ones following the development of mainly roads and natural surface runoff courses.

There is need therefore to provide storm water drainage as natural drainage network and along all the roads. Maintenance of drains should be carried out regularly and given the importance it deserves.

2.11.5 Road Transportation

The main existing transportation modes in Bomet town is mainly road, and to a less extent air transport. Notable is the fact that Bomet town started as a divisional headquarter. Presently road transport is the predominant mode of transport. The roads within Bomet town fall into two broad categories:

- Classified roads under the Ministry of Roads, and
- Urban roads under the Municipality of Bomet.

2.11.5.1 Classified Roads

The classified roads that are important to transportation within Bomet, which are under the Ministry of Roads are indicated in *Table 2.16* below. These roads provide access between Bomet and its hinterland as well as a link to other important neighbouring towns like Sotik, Litein, Kericho, Kisii, Narok, Nakuru, Kisumu, and Nairobi and therefore the rest of the world. These roads, experiencing high traffic, should be well developed and maintained for the purpose of linking Bomet to its hinterland and the rest of the world.

Table 2.34: Classified Roads – Bomet Town

Serial No	Class No.	Route Description	Remarks
1	B3	Narok – Bomet – Sotik - Kisii	This is a national highway that links Bomet to central Kenya and parts of Nyanza. Bomet is linked to major cities of Kisumu, Nakuru, Nairobi, as well as Uganda, Tanzania and Southern Sudan respectively.
2	C24	Bomet – Litein – Kapkatet – Kericho - Kisumu	Links Bomet to major regional towns of Kericho, Kisumu, Nakuru, Eldoret, as well as Southern Sudan and Uganda through Eldoret and Kisumu respectively.
3	C14	Bomet – Sigor – Kilgoris - Migori	Shortest route to Isebania (Kenya – Tanzania border town) from Bomet. Along this route there are Sigor, Kilgoris and Migori.
4	D236	Bomet – Merigi –	This is an alternative road from Bomet to Narok through Merigi,

Serial No	Class No.	Route Description	Remarks
		Kembu - Narok	Kembu to Narok.
5	D319	Bomet – Transmara forest – Lunguloen - Nakuru	This road is on the north most part of the municipality and provides an important link through transmara forest to Nakuru.
6	D232	Bomet – Kaptorgor – Ndarrawetta - Kericho	This road will serve as an alternative link to Kericho through Kaptorgor and Ndarrawetta. The road is shorter by close to 20 km.
7	D235	Bomet- Tumoi – Sigor - Kilgoris	This road links Bomet town to Sigor and Kilgoris at the southern tip of the town.
8	E184	Kapkwon (Itembe) – Kapsimotwa - Silibwet	The road links Itembe to Silibwet through Kapsimotwa within the municipality. This can act in the immediate short term as the western Bypass.
9	E1105	Bomet – Kapsimotwa - Kiplelji	The road links Bomet, Kapsimotwa, and Kiplelji within the municipality.
10	E182	Bomet – Kapkwon - Olbutio	The road links Bomet, Olbutio, Tumoi, Sigor, and Kilgoris.
11	E181	Kapkesosio - Olbutio	The road links Bomet and Olbutio, thereafter to Tumoi, Sigor, and Kilgoris.
12	R16 - Cluster	Kapsimbiri area - Bomet	These roads link Bomet to Kapsimbiri, Kogotik and Mogoma areas. The roads feed to B3. The roads are important to the immediate growth of the town.
13	R18 - Cluster	Longisa area - Bomet	These roads link Bomet to Longisa and Emitiot areas. The roads feed to B3. The roads are important to the immediate growth of the town.
14	L2309 - Cluster	Kiplelji area - Bomet	These roads link Bomet to Kiplelji area. The roads feed to B3. The roads are important to the immediate growth of the town.
15	T2308 - Cluster	Singorwet area - Bomet	These roads link Bomet to Singorwet area. The roads feed to E1105 and C24. The roads are important to the immediate growth of the town.

Source: Matrix Development Consultants, October, 2011.

Photo 2.6: Classified Roads Class B3 and B24 Passes Through Town



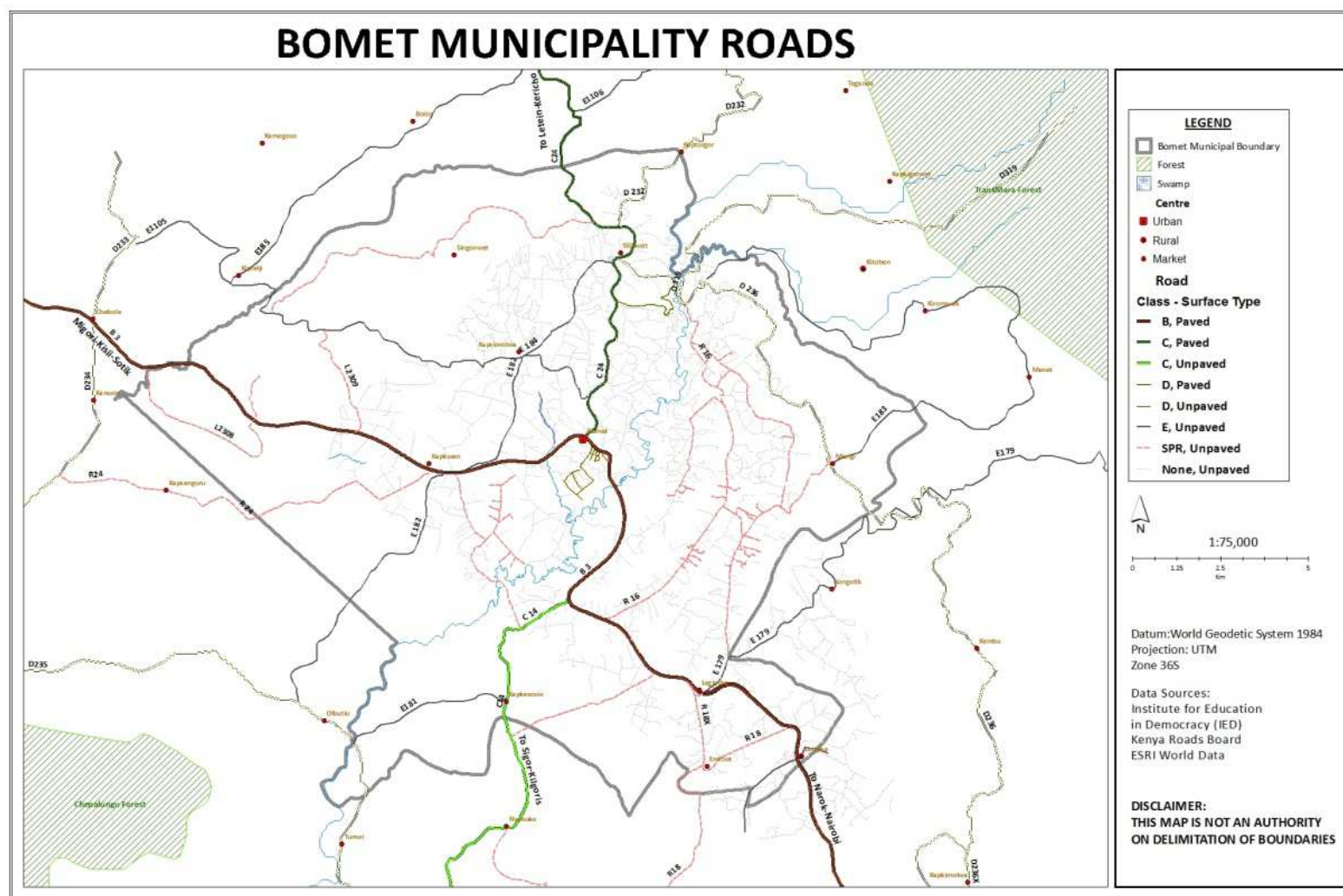
Source: Field Surey,
October 2011

Photo 2.7: Classified Roads Class D236 and d319 Passes through Town



Source: Field Surey, October 2011

Map 2.9: Roads within Bomet Municipality



Source: Kenya Roads Authority, 2008

All these classified roads need annual routine maintenance, due to the nature of the soils and erosion through normal rains on these roads. Their routine maintenance is the responsibility of Kenya National Highways Authority (KeNHA), Kenya Urban Roads Authority (KURA) Kenya Rural Roads Authority (KeRRA) and the Municipal Council of Bomet.

2.11.5.2 Bomet Urban Roads

The road network inventory within the Municipal Council of Bomet was prepared by Kenya Roads Board (KRB). The inventory of all other roads within the municipality does exist, though we are yet to get hold of it. The total length of roads within the Municipality is thus not clearly known. However is estimated at 277 km. The main CBD roads were rehabilitated under C24 road contract, are complete and in use as seen below.

Photo 2.8: Reconstructed Town Roads.



Source: Field Surey, October 2011

The majority of the remaining CBD roads are under construction. However, there is need for the new County of Bomet to avail resources for routine maintenance of all the access roads in the town.

The unclassified roads within the municipality do not have adequate width. There is a need to make special effort to mark out the required width and arrange for its surrender. The residents should be made to appreciate that they themselves need adequate road width. A notable initiative is that under the Municipal Council of Bomet through LATF funds, and KURA through Fuel Levy funds have undertaken routine maintenance of road in town to ease the travel time within various wards.

Photo 2.9: Unclassified Roads in the Municipality



Source: Field Surey, October 2011

2.11.5.3 Non – Motorized Transport

Boda-boda terminology has now replaced the bicycles and now refers to the motorcycles too. Boda-boda – Motorcycle in most cases, bicycles and walking are widely used forms of transport in town. The road network within the town needs to be expanded to accommodate the pedestrians and cyclists (boda-boda). The recent development in the CBD has not adequately taken care of the motor cycles, bicycles and walking modes.

The following NMT improvements are necessary;

- Pedestrians** Improve sidewalk networks within developed areas to create people friendly neighbourhoods which allow and encourage walking
- Bicycles** Expand bicycle routes within the Municipality for a municipal wide cycle track network
- Motor cycles** Improve town roads and feeder road to motor able conditions and expand bicycle / motor cycle routes within the Municipality for a municipal wide bicycle / motor cycle track network.

2.11.6 Street Lighting

There is also lack of street lighting in the town even though the town has economic activities starting as early as 4:00am and going on until 10:00pm at night. Only a small part of the town in the CBD along B3 road has street lights. All the other centres of Silibwet, Kapkwen, Tenwek, Merigi and Longisa do not have street lighting.

2.11.7 Bus Park

There is congestion of vehicles in the central business district due to the inefficient utilization of the bus park by the Matatu operators. The council has enforced its parking bylaws to control the traffic congestion in the central business district and especially along the B3 road which passes through town.

The current bus park is adequate in the immediate term and can decongest town. There is need for the council to develop a second bus park for northward bound vehicles and leave the current one for southward bound vehicles.

The Bus Park is generally in fair condition as the *carriageways* are well paved though showing signs of starting to wear out.

The parking- lane markings are non-existent leading to haphazard parking of mini-buses and Buses.

The Bus Park is not fenced, however the kiosks around it act as a fence and a solid waste dumping site within it is functional. Emptying of the transfer station is regularly done by the Municipal council. There is a public toilet facility at the centre of the bus park and is functional. The lighting system in the Bus Park is also not adequate.

The Bus Park is in fairly good condition only requiring urgent routine maintenance.

2.11.8 Lorry Park

Not so many transit trucks stay overnight before proceeding on their journey into Southern Nyanza and Tanzania. It was observed that the few that stay overnight are precariously parked along the B3 road. Counting the number of trucks for two nights indicated 3-6 trucks are parked overnight. It was observed that during the day repairs are carried out on some of the trucks before they leave. Thus, a transit facility for lorries is urgently required in the long term.

2.11.9 Railway transport

The town has no railway line passing through town or a railway station. In the long-term this will be a necessity.

2.11.10 Air transport

The existing air strip is too narrow; it is fenced and has two fabricated units for offices and security. The facility is only used by chartered aircrafts. The facility requires more land, development of the runway and convenience facilities. There have been proposals to acquire more land for the airstrip, develop the runway and convenience facilities and upgrade the airstrip to national standards in the immediate term.

2.11.11 Fire Station

There is no fire station in Bomet, however there is one fire engine. This is normally located at the municipal offices. There are proposals to develop a modern fire station on a piece of land which has been set aside for this purpose. This facility is long overdue.

2.11.12 Markets

The council has one market in the town CBD which is small and not well utilized. Most of the trading activities take place in open air markets with inadequate amenities. Currently there is a proposed market under construction near the bus park. There are other market centres within the township in the satellite of Silibwet, Longisa, Tenwek and Kapkwen (Itembe). All these markets need to be developed to modern market standards in the short term to facilitate commercial activities within the township.

2.11.13 Stadium

There is no stadium in town. The current open space being used as a stadium is a department of social services playground. It serves the purposes, however there is land set aside for development of the stadium below Bomet Teacher's College. In order to promote development of sporting and other activities the facility should be developed in the short-term where proposed.

2.11.14 Show Ground

There is no show ground in town. Show business as a promotion and exhibition of commercial development activities and opportunities is yet to be developed here.

2.11.15 Electricity

Electricity is provided by Kenya Power and Lighting Company (KPLC). The main office covering Bomet area is based in Sotik town. The CBD and the satellite centres; Silibwet, Kapkwen (Itembe), Longisa and Tenwek are well served. Strengthening of the supply in town is currently being undertaken through installation of a high voltage line from Engoina Substation and a new substation located in the town centre. The areas outside the CBD and the satellite centres; Silibwet, Kapkwen (Itembe), Longisa and Tenwek in principle have access to electricity, even as the capacity of transformers is not fully utilized particularly in these areas. Some transformers have as few as two customers. Some residents do not connect to electricity as they deem the related costs to be high even if they are within a 600m radius of a transformer.

The frequent power black outs were attributed to:

- Low Voltage

- Tree falling on power lines
- Lightening striking transformers
- Interruptions due to normal inspection and maintenance of electricity supply system.

2.11.16 Telecommunications

Telecommunication services have become the engine of development which if well deployed and utilized can enhance efficient and effective communication within the town thus improving investments opportunities within the town.

2.11.16.1 Fixed Wire Telephone

Bomet town is not well covered by fixed wire telephone services; however there is good coverage by the Orange Telkom Kenya Limited, which is fairly distributed in the central business district (CBD) of the town, mainly in the Government Departmental Offices and key business premises. However the peri-urban areas have a lower connectivity or no services at all, these include Kapkwen (Itembe), Longisa, Silibwet and Tenwek. The telephone exchange has adequate capacity, of which up to 70% is underutilized. The main challenge faced by the service provider is poor connectivity due to competition from mobile and wireless services providers.

Currently fiber optical cable laying is underway. The underground installations are often damaged while carrying out works on other services such as water, road works etc.

2.11.16.2 Mobile and Wireless

The entire municipal area is covered by all mobile and wireless phones, Safaricom, Airtel, YU and Orange mobile phone service providers. They present a more reliable alternative to fixed wire telephone. Safaricom, Airtel and YU also provide money transfers services, offering more options to traditional banking and postal services business.

2.11.16.3 Internet and Data Transfer Services

Internet and data transfer services are provided through broad band. There are several internet service providers including Orange Telkom, Airtel, Safaricom, YU, etc. This is mainly done in cyber cafes in town. Other internet connections are done directly to the residents and businesses that require the service.

2.11.16.4 Postal Services

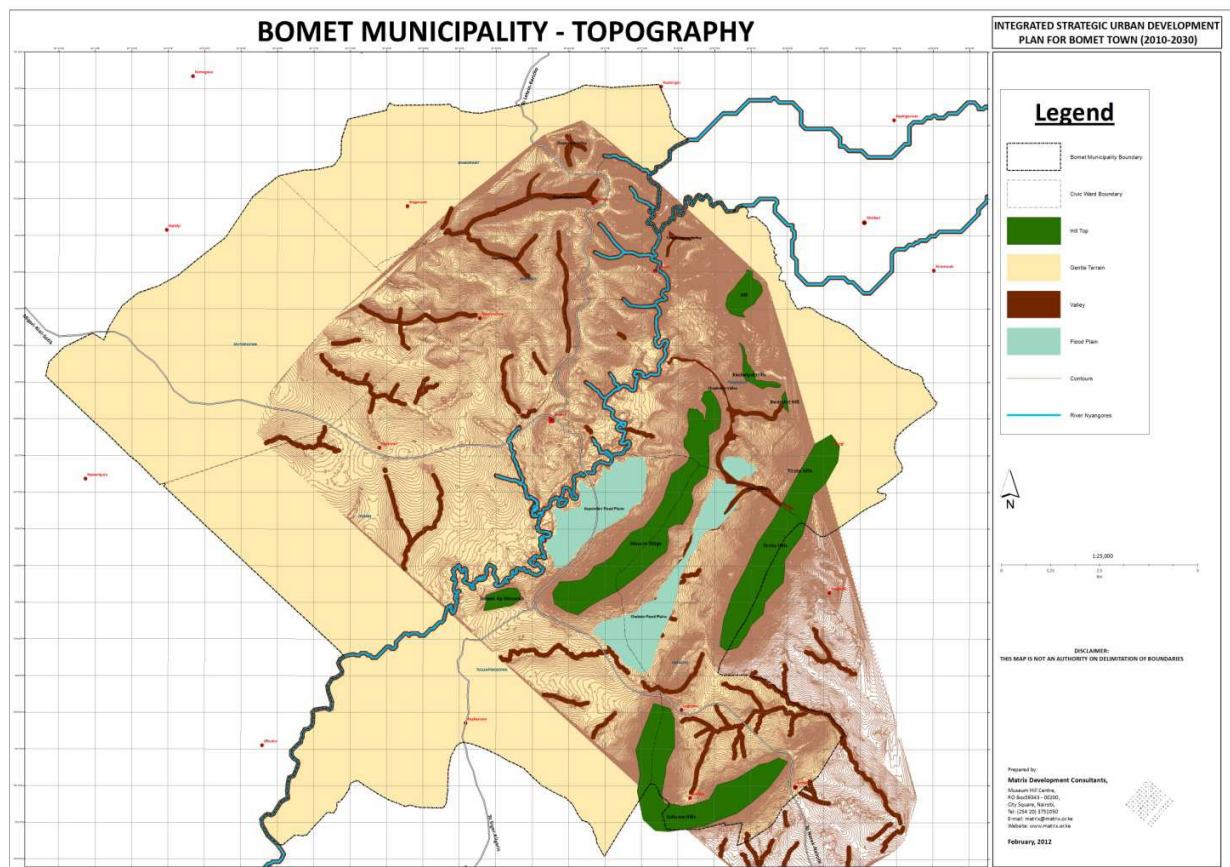
Postal services in Bomet are offered by the Posta Corporation. Posta Corporation is the sole provider of rental letter box services. There are however other providers of courier services for letters and services. These are mainly bus companies and security firms. There are also money

transfer services through mobile phone companies. There is need to modernize the provision of this service and introduction of sub-post offices within the municipality in future especially in the satellite centres.

2.12 ENVIRONMENT

Bomet municipality has a favourable environment for human settlement. It is characterized by gentle topography that gives way to flatter terrain in some areas. The overall slope of the land is towards the south; consequently, drainage is in that direction. The main river in the municipality is river Nyangores which flows from south west Mau forest, and proceeds southwards through Tenwek. Bomet district (including the municipality) receives rainfall throughout the year with the long rains occurring from March to May and the short rains from August to October. Apart from November and December all the months have mean rainfall of between 1100mm and 1500mm.

Map 2.10: Topography of Bomet Town



Source: Matrix Development Consultants, 2012

This leads to wet conditions, which make road construction and maintenance quite expensive.

The mean monthly temperature is 18°C; the coldest months are July and August with monthly temperatures of 17.6°C and 19.8°C respectively. The cool condition favours dairy, tea, coffee, maize and pyrethrum farming in the district. Generally, the temperature in the district is influenced by relief winds.

Table 2.35: Bomet Average Weather by Month

Month	Temperature °F				Average Rainfall (mm)	
	Average		Absolute		Daily	Monthly
	max	min	max	min		
January	67.1	48.4	83.8	40.5	3.3	99
February	65.5	48.0	83.3	-23.8	3.7	111
March	64.9	48.2	85.5	33.8	6	180
April	63.3	50.4	81.3	45.0	7.4	222
May	64.8	47.7	83.7	44.6	8.8	264
June	62.2	47.5	90.0	43.3	4.2	126
July	61.0	46.9	82.4	44.2	3.7	111
August	63.7	47.5	77.0	32.0	5.4	162
September	64.4	47.3	81.0	32.0	5.3	159
October	64.4	47.1	91.4	39.2	4.1	123
November	61.3	46.8	80.1	-22.0	3.7	111
December	64.8	48.7	83.3	44.6	1.8	54

Source: Meoweather, 2011

The soils are generally fertile with altitude, temperatures and rainfall as the main determinant of farming practices in each area. Clay soil which covers 43.6% of the district does not allow water to percolate easily and therefore toilets (pit latrines) overflow pouring the sludge on the surface thus causing a threat to human health. The area under forest also has potential for forest products such as bee keeping and the home of animals like monkeys and abundant bird life.

The municipality faces major environmental challenges such as poor solid and liquid waste management, loss of biodiversity, water pollution, land degradation, soil erosion, poor sand harvesting and quarrying practices.

The high demand for construction materials and fuel wood has led to high rate of tree felling as compared to the planting rate while the quarrying for both building stones and sand in

unsustainable way and without any rehabilitation plan for the sites is impacting negatively to the environment. Pollution from urban centers to nearby rivers is also a major challenge.

The details of the main environmental challenges within the municipality are presented in chapter 3 section 3.1

2.13 URBAN GOVERNANCE

2.13.1 Institutional Systems

Urban development in Bomet has hitherto been characterized by numerous institutional stakeholders and actors most of the times competing or working at cross purpose to each other. Some of the key actors in Bomet are summarized in *Annex II*. The situation in Bomet can be directly attributed to the fragmentation and diffusion of institutional responsibility¹¹. Most importantly, BMC lacks effective and appropriate internal institutions to coordinate urban development with committees made of elected councilor being one of the organs guiding development. Furthermore, existing investments and provision of social and economic infrastructure has largely taken place in the absence of strategic structure and land use plans. Other notable challenges of urban institutions in Bomet revolve around:

- A number of overlapping responsibilities and gaps evident between and among various agencies
- Bureaucratic procedures for planning and building plan approval processes
- Lack of a clear and compelling vision
- Uncoordinated urban development sectoral policies
- Capacity gaps hindering urban development institutions to execute their mandates, roles and responsibilities.
- Absence of a predictable platform of engagement for actors in the urban development sector.
- Insufficient monitoring, control and evaluation indicators and mechanisms

Noteworthy is the fact that that future institutional arrangements shall be guided by provisions of the Constitution of Kenya 2010, legislation on Urban Areas and Cities as well as the County Government Act. These instruments assign different roles to different stakeholders hence reducing potential conflict of interest. Importantly the National Urban Development policy formulation and coordination function and service and infrastructure delivery function have clear actors.

¹¹ Urbanization Studies to Inform the Formulation of an Urban Development Policy For Kenya

2.13.2 Urban Management

Bomet town is currently managed directly and indirectly by many agencies with each agency seeking its own budget based on its own priorities. There has been little evidence of integrated planning or coordinated approach between various agencies or even integration of services. In addition, professionals are seldom employed with crucial service delivery becoming the secondary responsibility of semi skilled staff/personnel. Consequently, the town is now faced with the triple challenge of current deficiency in quality and quantity of facilities, services and growing urbanization¹². Furthermore the cost of providing various services has not been commensurate with the expected return and when provided is plagued by financial distress.

Through the repealed Local Government Act¹³ the BMC primary function has been to mobilize resources and provide services within their areas of jurisdiction. The Act also provided for sources of revenues to finance the delegated functions. Some of the services and facilities expected of the BMC include health, primary education; refuse collection, water and sanitation, and fire protection services, establishment and maintenance of public markets, bus parks and slaughter houses, housing and implementation of social welfare programmes among others.

In practice however, their systems for management and resource allocation have been largely inefficient in terms of addressing and meeting the service delivery needs. To remedy the situation, future urban centers shall be guided by provisions of the Urban Areas and Cities Act 2011 which provide for the competitive appointment of a Town Management Board and a Town Manager. Further the establishment of a county public service commission through the county government act 2012 is expected to address some of the capacity gaps evident within the council.

2.13.3 Safety, Security and Disaster Management

2.13.3.1 Types of Crimes and Violence

There are various types of crimes that occur in the wards, they include carjacking, breaking into shops, domestic violence, theft, and mugging. The residents are also aware of the crime hotspots in the town. . Proper planning and provision of services could play a key role in crime prevention in the area. The crime hot spots should be earmarked for construction of public utility facility or lighting if it is within town in order to be able to minimize the occurrence of opportunistic crime.

¹² Ibid

¹³ The Law will stand repealed and replaced by the Urban Areas and Cities Act

The main causes for crime and violence cited by the respondents are unemployment, poverty, disputes, with the victims being mainly women, men and youth while the perpetrators are mostly men and the youths. The crimes have implications such as loss of money, collapse of family unit, loss of business etc.

The *Table 2.36* below depicts areas of high crime, nature of crime and time when the crimes occurs. The areas of crime are mainly along the roads, near bars, open fields and the types of crimes are thuggery, *ngeta* (muggings).

Table 2.36: Crime Hotspots in Bomet Town

Areas of crime	Time	Type of crime
-Nyore's River Bridge		" <i>ngeta</i> " (muggings)
-300 metres from Tarakwa market	11.00pm	Thuggery
-Cheboin-Kongitik road	10pm to 3am	Thuggery
-Chetugana Raiga		Thuggery
-Kambi shetani		" <i>ngeta</i> " (muggings)
-Kamukunji		Thuggery
-Kisii road		" <i>ngeta</i> " (muggings)
-Nyorngores River		Thuggery
-Raia		Illicit brews and drugs
-Sachore	11.00pm	Thuggery
-Siribirwet		Thuggery
-Soi garage		" <i>ngeta</i> " (muggings)
-Bomet Teachers College		" <i>ngeta</i> " (muggings)
-Tenwek Junction		" <i>ngeta</i> " (muggings)
-Township	9.00 pm	" <i>ngeta</i> " (muggings)

Source: Bomet Rapid Appraisal Report 2011

With regard to safety in schools, it was reported that it is generally safe when children are in school, however there is need to take comprehensive safety measures in the schools within the Municipality and develop mitigation plan, i.e. ensuring that the schools are well fenced in order to monitor those entering the schools and interacting with the children. The school administration can also ensure that facilities like toilets are safe for use.

Besides proper planing other short term interventions towards crime prevntion should include enhanced civic enngagement such as enouraging meetings on security matters between residents

and local administration, having intensive police patrol and setting up patrol bases for Administration policemen, this is a common practice in all the wards and should be enhanced.

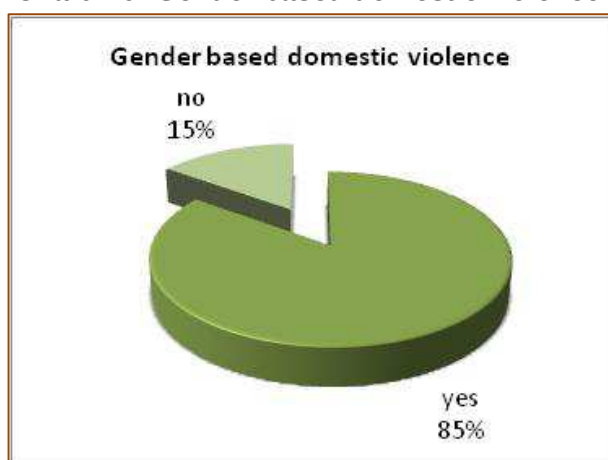
2.13.3.2 Policing

Many of the residents consider the role of police as inadequate. Of all the respondents who participated in the survey, only 46% reported to have police posts in their ward, while 54% reported that there was none. The residents therefore cannot feel safe and protected, there is need to increase police posts in the wards and also encourage communities to ensure that no local criminals are harboured in their midst, thus encouraging community policing.

2.13.3.3 Gender Based Violence

Gender violence is also quite prevalent at household level and women are the main victims. This is mainly caused by abuse of alcohol and drugs which results in the collapse of family unit and abuse of children in general. The occurrence of gender based violence is illustrated in the *Chart 2.9* below where 85% reported this is a common occurrence and only 15% said it was not. This calls for family life education and propagation of family values by stakeholders in the town.

Chart 2.9: Gender based domestic violence



Source: Bomet Rapid Appraisal Report 2011

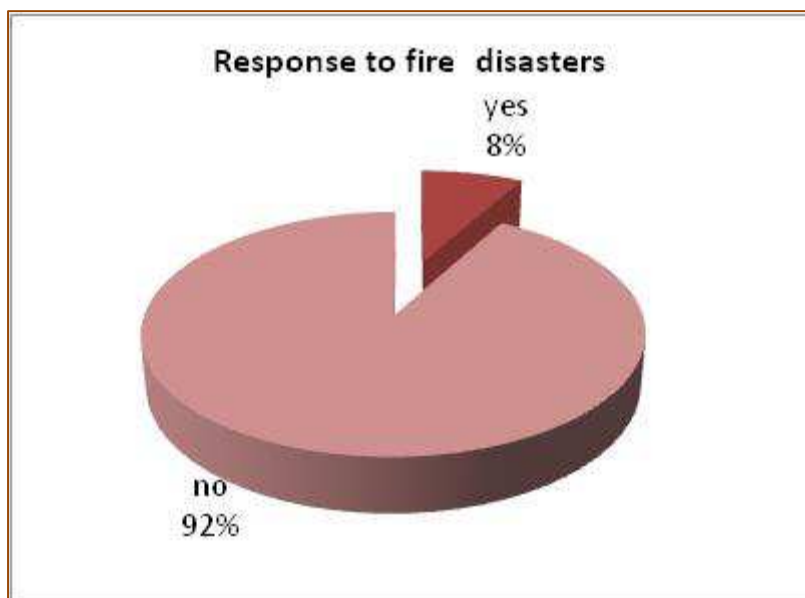
The most affected households are those whose head abuses alcohol, homes in the rural areas, homes and villages where illicit brews are common such as those in Singorwet Sub-location and mostly Kipsigis households.

2.13.3.4 Disasters

In terms of disaster mangemnet, there are various types of disasters that occur in Bomet Municipality. These are road accidents, accidental fires and arson. The Council's response to

disasters was rated at 8% by the respondents and 92% reported that they do not know. See *Chart 2.10* below. Preparedness for disaster is low in the municipality; therefore all efforts should be made to make the council more responsive.

Chart 2.10: Disaster Preparedness in Bomet Town



Source: Bomet Rapid Appraisal Report 2011

The town is hardly equipped to effectively deal with disasters such as fire. Though there is one fire engine, there is no fire station nor are there adequate personnel within the municipal department equipped with requisite skills in fire fighting. Other challenges include lack of supervision of building construction, poor lighting, lack of fire extinguishers in buildings and lack of emergency response ambulance. The survey established the existence of a police station, prison remand and law courts in the town.

2.14 STAKEHOLDERS CONCERNS

The whole planning process was intended to be as participatory as possible and involved various stakeholders where the concerns and expectations of the people of Bomet were expressed. These were captured in Workshop reports and gave details of what stakeholders brought out in the various meetings touching on the situation in Bomet and what they expect to be improved. Table 2.37 summarises these issues.

Table2.37: Stakeholders Submission of the current situation of Bomet town during the Visioning Workshop

	Group I TOWNSHIP WARD	GROUP II SINGORWET WARD	GROUP III EMKWEN WARD	GROUP IV MUTARAKWA WARD	GROUP V ITEMBE WARD	GROUP VI TULUAP MOSONIK WARD	GROUP VII CHEBOIN WARD
<u>REPRESENTATION & ADMINISTRATION</u>	3 wards were merged to form 1 ward, the Township Ward	Proper leadership to address challenges			Inadequate Security	Mushrooming of market centres at Sachora, Kapkesosio and Kibisorwet	- Increased awareness by residents of Longisa to have a plan - Longisa is becoming a ghost town where no people are using the market - Strategic location makes it fast growing - Existing market centre (Youth Farmers) is run privately
<u>INFRASTRUCTURE & SERVICES</u>	10Km tarmac road in CBD and tarmacked estate roads - One line street lighting - Water plant expanded - Power upgraded - Bus park	- Telecommunication network change to mobile phones - No road linkages to other wards/locations which are markets to Singorwet - Poor road construction (Incompetence of road contractors) - Low coverage by electricity grid - Water project set to serve 1500 persons at initial stage	- Inadequate power supply (100% coverage in market centre and 20% in rural centres) - Hydro-electric power - Impassable roads in most areas of the ward - Inadequate water supply - No sewerage system in market centres	- Electricity installed through rural electrification - Maintenance works on feeder roads	- Poor feeder road - Low connectivity of Electricity - Poor storm water drainage - No bridges - Poor Housing - Under-utilised airstrip	- Roads are passable (Graded and Murrammed) - Low coverage by electricity grid only serving public institutions - Encroachment of road reserves	- Tarmac road (Narok-Kaplong) - Improved road network connectivity - Poorly maintained rural roads - No development plan for Longisa centre - Improved electricity coverage
					1 dispensary		

	Group I TOWNSHIP WARD	GROUP II SINGORWET WARD	GROUP III EMKWEN WARD	GROUP IV MUTARAKWA WARD	GROUP V ITEMBE WARD	GROUP VI TULUAP MOSONIK WARD	GROUP VII CHEBOIN WARD
<u>HEALTHCARE</u>		1 dispensary	Adequate Health facilities	2 dispensaries	Poor sanitation (Public toilets)	3 dispensaries	Increase in dispensaries
<u>POPULATION</u>	Approximately 50,000 people.						
<u>AGRICULTURE & LIVESTOCK</u>		- Rich agricultural and arable land - Inadequate market for agricultural produce - No milk cooling plants	- Shortage of farming equipment - Inadequate marketing of agricultural produce - Poor certified seeds	- Decline in agricultural profitability - Collapse of East Sotik Cooperative Society resulting in low milk production - High cost of inputs - Poor maize seed - Low morale of farmers - Lack of field training - Unstable prices of agricultural produce		- Improved farming (use of fertilizer and certified seeds) - Dairy farming improved (Milk cooling plants in neighbouring areas) - Coffee farming Introduced at Kyogong and - Reduced plot sizes due to increased population	
<u>EDUCATION</u>	University branches (Moi and Nairobi Universities)	21 Primary Schools 5 Secondary Schools ¾ of the population literate 1 polytechnic	- Dilapidated School Infrastructure 1 Library - Shortage of Teaching Staff - Inadequate Secondary Schools - Insufficient youth polytechnics	- Have more private schools 2 Secondary Schools - Improved school structures from timber to more permanent	10 Primary Schools 2 Secondary Schools 1 polytechnic 1 Private college	19 Primary Schools (7 more public and 2 more private) - Non-improvement of the 3 Secondary Schools to adequate standards	Increase in primary and secondary schools

	Group I TOWNSHIP WARD	GROUP II SINGORWET WARD	GROUP III EMKWEN WARD	GROUP IV MUTARAKWA WARD	GROUP V ITEMBE WARD	GROUP VI TULUAP MOSONIK WARD	GROUP VII CHEBOIN WARD
<u>COMMERCE & BANKING</u>	▪ 5 mainstream Banks ▪ More Hotels and Restaurants ▪ 1 Bakery	▪ 5 mainstream Banks ▪ More Hotels and Restaurants ▪ 1 Bakery			▪ No tourist attraction centre ▪ Low private investment despite lots of potential ▪ High unemployment rates		
<u>INDUSTRY</u>	▪ Korokwany Milling plant	▪ Korokwany Milling plant			▪ 1 tea Factory ▪ 1 potato factory ▪ 1 Milk Cooling plant		
<u>YOUTH</u>			▪ No youth employment centre				
<u>SOCIETY & CULTURE</u>				▪ Emergence of Sports clubs (Sach Angwan FC, Leldaet Athletic Club) ▪ Youth and women groups registered and benefiting from enterprise funds ▪ Culture strictly adhered to			▪ Improved living Standards

2.15 SYNTHESIS

2.15.1 Structuring Elements

Key spatial elements that have played role in determining the current structure of the Bomet Municipality include the B3 (Narok – Bomet – Kaplong) road running from South East to the North West and bisects the Municipality into two. The class C24 (Bomet – Silibwet – Litein) road running off the B3 road to the North.

Photo 2.10: Satellite View of Mega Structure of Bomet



Source: NASA Goddard Space Flight Center, TAGEO.com, October, 2011

The Nyangores river running North East to South West also bisects the Municipality into two; The Hills (Kyangong, Tiroti, Sugumerka and the Masare range), the local centres within the Municipality, the flood plains, the valleys; the location of the Central Business District and the fertile agricultural hinterland. Map 1 overleaf shows these structuring elements in Bomet.

2.15.1.1 Impacts of the Roads B3 and C24

The B3 road bisects the town into two and the C24 road running off the B3 road to the North. These provide the following possibilities:-

- They dictate the nature and direction of urban development.
- They facilitate the flow of vehicular traffic and goods along this mode.

Figure 2.1: Sketch Depicting Major Road Corridors in Bomet



Source: Matrix Development Consultants, May, 2012

These two roads provide one big challenge, that of promoting linear development of the town thus preventing a compact and efficient concentration of key urban functions. *Fig 2.1* above depicts the two major corridors in Bomet.

2.15.1.2 The Nyangores River

This river bisects the Municipality into two and has restricted urban growth across its boundary. *Fig 2.2* below depicts the Nyangores river.

Figure 2.2: Sketch of River Nyangores' Conduit within Bomet

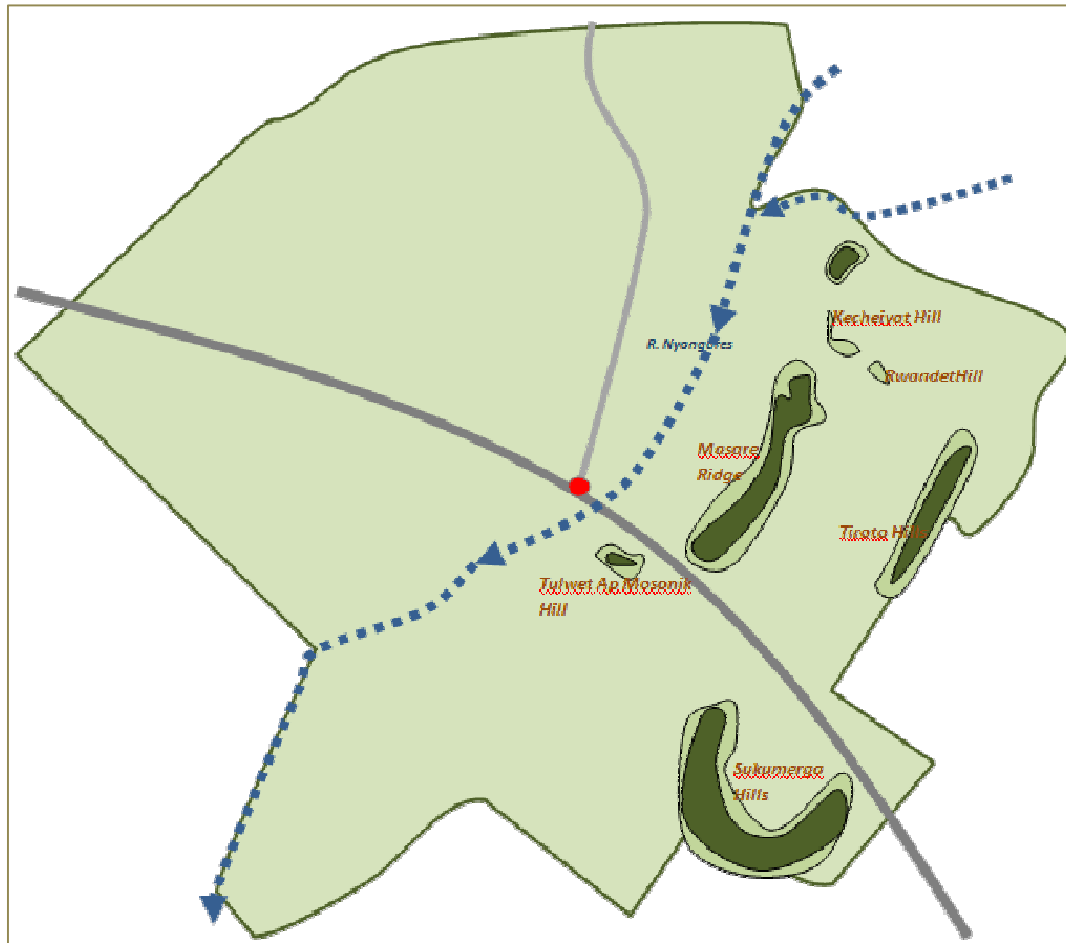


Source: Matrix Development Consultants, May, 2012

2.15.1.3 The Hills

These include Kyangong, Tiroti, Sugumerka and the Masare range. They impact greatly on the weather situation in Bomet as the Municipality lies to the windward side of the Masare range. The hill tops themselves are rocky and have become a major source of quarry stone and aggregates in the Municipality.

Figure 2.3: Sketch Depicting Hills within Bomet



Source: Matrix Development Consultants, May, 2012

of trends, patterns and gaps.

2.15.2 Key Planning and Development Challenges/Issues

2.15.2.1 Environment

This section highlights the major environmental issues identified within the municipality and their causes.

2.15.2.1.1 Solid waste

Solid waste management was identified as the most significant environmental problem within the town. Its collection, storage, transportation and safe disposal is a major challenge to the town residents and the local authority. A mound of uncollected waste was identified mainly in the built up areas in the commercial, bus parks, markets and residential areas where it is generated. Many of those areas had garbage dumped in the open with the resultant health and environmental

consequences. The waste blocks the town storm drainage system causing flooding during the rainy spells. The areas mostly affected by poor waste collection services are the CBD, bus park, low income residential areas and the secondary centres.

The major waste components identified included plastics, plastic paper, paper, glass, metals, wood and organic material mainly from food throwaways. Plastic bags strewn in the commercial and residential areas are a big environmental menace. It pollutes the land, blocks the storm drainage system and is a serious health hazard to cattle and goats when they feed on it. The plastic affects all the components of the urban ecosystems.

The main sources of plastic bags are from packaging of traded goods from the supermarkets, shops and other traded commodities.

Waste collection, transportation and disposal are the responsibility of the municipal council. The council does not provide waste bins to the residents. Residents buy their own waste bins for primary waste storage. There are only a few street bins in the CBD. The council claims to have installed some street bins in the CBD which they claim were stolen.

Many town residents throw waste in the open where human scavengers, cattle, goats and dogs scatter it as they ravage for feeding and material recovery. Sometimes the council takes long to collect waste resulting to waste rotting and producing foul smell. It also becomes very favourable ground for disease causing vectors such as mosquitoes and other pathogenic organisms. Wind blows plastic papers from the waste heaps while floods carry the waste into the storm and water sources in the town. Lifting of waste from the ground to the refuse trailer is a difficult task since it involves manual transfers of waste by council workers. The loading process generates stench, including at the bus stops, markets and other busy/crowded areas.

The council uses open trailer mounted on a tractor to collect and transport waste from CBD and some residential areas to the dumpsite. The trailer is not adequate to cover the entire town. They are not enclosed and therefore go spilling waste as it is transported to the dumpsite. The collection trucks are not licensed by NEMA as required by EMCA waste management regulations 2006. The council personnel handling waste are not provided with protective clothing such as overalls, nose masks, hand gloves as required by the Public Health Act, Waste management regulations 2006 and industrial safety act.

The collected waste is transported for disposal to the illegal dumpsite next to St. Michaels Primary school about one kilometer from the CBD. The site is an abandoned quarry occupying about 2.5 acres. Waste is dumped on the site without being covered. The site is not fenced and is close to human settlements. Cattle and goats were seen grazing in the site and feeding on the deposited waste (plates showing the dumpsite & surrounding).

Medical waste such as medicine bottles, needles, syringes, used bandages and other medical wastes were identified on the site. The neighbours reported night dumping of medical waste including human foetus by private vehicles in the dumpsite. The site is yet to undergo an Environmental Impact Assessment as required by EMCA, EIA & A regulations 2003.

Minimal material recovery or recycling activities were identified in the town save for some scavengers who were recovering some valuables from the dumpsite. The council has no programs or incentives for material recovery/recycling to involve the town stakeholders such as the private sector, CBOs, NGOs, youth/women/community groups or individuals.

The council does not provide solid waste management services in the secondary towns. Some market residents throw waste in the open while others deposit it in shallow waste pits.

The municipal areas which are rural/agriculture in character are not provided with solid waste collection services by the council. Waste disposal practices in those areas mainly involve feeding of livestock with the organic material or throwing waste in the shambas including the inorganic components.

2.15.2.1.2 Human and Wastewater disposal

The town has no sewer facilities. It uses septic tanks and pit latrines for human and waste water disposal. Waste water from domestic, car washing and other urban activities is deposited on the land and in water bodies without treatment. It is a major source of miscellaneous smells and disease causing vectors in the town. In some areas raw sewer was seen leaking and flowing freely polluting land, water and air through bad smells.

The council uses an exhaustor to empty septic tanks and pit latrines within the town. The exhausted sludge is deposited at a lagoon which was seen to be over spilling and discharging the waste water to the land and the nearby river.

2.15.2.1.3 Degradation of Water Resources

There was evidence of degradation of surface water resources from ecosystem misuse, riparian encroachment and pollution. This affects the aquatic ecosystems and water quality.

The rivers passing through the municipality were turbid with silt. The silt in the rivers was from the upstream catchment areas, soil erosion from the town and agricultural land within the municipality. There is water resources riparian encroachment by human settlements, mainly farming activities which entail removal of the riparian vegetation thereby enhancing river bank erosion and deposition of eroded soils from the adjacent land. Used oils and greases from the informal sector garages, storm and waste waters and solid wastes usually end up in the natural water resources.

There is potential for underground water pollution from the pit latrines especially where their densities are high such as in the low income areas.

Car washing next to river Nyangores pollutes the river with soapy and dirty water which flowed freely back to the river.

Fertilizer and agro-chemicals from the adjacent agricultural activities end up in the rivers resulting to eutrophication and water pollution respectively. The agricultural activities within the municipality have similar impacts to the water resources and wetlands within the area. Uncontrolled fishing has the potential of depleting fish quantities in the rivers.

Most rivers are being degraded by a combination of siltation, reduced inflow, over fishing and pollution. Some swamps have been encroached and cleared for agriculture, settlements and other human activities.

2.15.2.1.4 Loss of Vegetation Cover

The municipality is experiencing loss of vegetation through development intensification, infrastructure development (mainly road network), clearing for agriculture, energy (90% of energy comes from wood and charcoal), and building materials (mainly timber). This is an undesirable trend that alters the urban ecosystems adversely, through reduced carbon sequestration and climate control, loss of animal fodder and habitat, reduced water retention capacity, increased erosion and loss of aesthetic beauty. The problem is most serious in areas with more intense development such as the Central Business District (including the bus parks, markets and informal sector areas), low income areas, roadsides and services centres. The recreation grounds within the municipality are devoid of trees.

Another ecological dynamic is the replacement of the indigenous vegetation with exotic species including agricultural species. This was observed in the commercial, residential, agricultural and in all land uses within the municipality. Trends in urban greening and beautification are based on planting of exotic tree species, shrubs and ornamentals.

Loss of vegetation cover along the water courses and water catchment areas mentioned earlier is a worrying environmental trend.

Efforts by the council, communities and town stakeholders to intensify vegetation cover were minimal.

2.15.2.1.5 Land Degradation

Land degradation refers/implies to reduced land quality for the intended use. Land and soil erosion by water and wind is a significant environmental problem within the municipality in the agricultural land use, riverbanks, unpaved roads, and bare land spaces. Gully erosion along the roads is very

common while wind erosion from the specified areas generates dust during the dry periods (plates).

Land hazards created by open civil works storm drainage, quarries and brick making sites are a common feature in the town(plates).They pose accidents risks to the residents and collect storm water creating favourable breeding grounds for mosquitoes and other diseases causing agents. Uncollected solid waste, used oils and greases from the auto garages, fertilizer and agro-chemicals and other waste from various urban activities are degrading the land and the soils. Mounds of materials from excavated construction and demolition sites are deposited on the site instead of being taken to the official council dumping site.

There was evidence of degradation of the hills in the form of loss of vegetation (mainly the indigenous species), soil erosion, reduced water sources and abandoned quarry sites. The causes of the identified degradation were from deforestation, increased human settlements and population densities, over subdivision of land, quarrying, overgrazing and unsustainable agricultural practices.

2.15.2.1.6 Flooding

Flooding is a perennial problem within the municipality because of the general flat land terrain, lack of and blocked storm drainage system, low lying grounds and extensive black cotton soils which are very prone to flooding. The storm drainage system in the town is not effective. A short storm of rain gets the town flooding. This increases water logging, soil erosion, muddy patches and creates breeding areas for mosquitoes and disease causing vectors. The town gets very muddy during the rainy season.

2.15.2.1.7 Air Pollution

The section highlights both outdoor and indoor air pollution in the town. The forms of outdoor air pollution identified were dust from open spaces and unpaved roads, smoke mainly from the burning solid waste, foul smells from rotting garbage, toilets and pit latrines. Air pollution from vehicle exhaust due to burning fossil fuels is escalating as the number of vehicles increase in the town.

Indoor air pollution emanated from use of unclean domestic energy such as kerosene, charcoal and wood (up to 90% of the cooking energy in the municipality comprises either wood or charcoal) which is widely used in the town especially residents in the low income areas, who cannot afford cleaner sources of energy such as gas and electricity. Dirty waterborne toilets and urinals especially in public places and pit latrines produce foul smell thereby polluting the indoor atmosphere.

2.15.2.1.8 Aesthetic Pollution

Aesthetic is critical to visual amiability and should be emphasized in the urban cultural landscape. Unplanned structures with poor building materials affect the visual impression. There is proliferation of outdoor advertising boards along the Sotik-Narok road, in the CBD and service centres nuclei. Some of the bill boards and sign boards are too large and not properly sited. They cause visual, pedestrian and movement obstruction, increasing chances of accidents and hindering mobility within the town. Some colours used on some buildings are not pleasing to the human eye. The unplanned settlements such as the kiosks, slums and uncollected solid waste affect the urban aesthetics. Removal of the vegetation cover has the same effect (plates)

2.15.2.1.9 Noise Pollution

High levels of noise usually above 70 decibels are undesirable and can cause audio problems including hearing impairment. Excessive noise causes stress, headaches, depression, loss of sleep, fatigue among other health and psychological effects .Loud noise with a potential to cause discomfort was identified from discotheques, bars, hooting vehicles at the bus parks, Jua kali activities, garages, workshops, and churches using loudspeakers for worship especially at night. Moving vehicles (especially trailers) generate noise from the engines and from static friction and motion on the road.

2.15.2.1.10 Poorly Maintained Public Recreation Grounds

Public recreation grounds are necessary for human rest and leisure.

The public recreation grounds in the town are poorly maintained. They have no trees, no park seats and lack public toilets and water points. Soil from construction sites is dumped in the central park.

2.15.2.1.11 Institutional, Legal and Policy Framework

This section looks at the roles of the institutions involved in environmental management within the municipality, the laws/bylaws and the policies.

2.15.2.1.12 Environmental management institutions

Various government ministries and parastatals have varying legal mandates in environmental management. Many of them concentrate on sectoral aspects of the environment such as Kenya Forest Services has the legal mandate of managing forests and trees while the Ministry of water manages the water resources.

2.15.2.1.13 Local Authorities and Environmental Management

The Local Government Act (cap.265)¹⁴ vests the responsibilities of environmental management in towns with the respective local councils. The responsibility is undertaken by sections in the councils except in large local authorities which have established fully fledged environmental departments.

The mandate of environmental management in the municipal council of Bomet falls within the clerk of works department whose responsibilities include solid waste management (collection, transportation and disposal), street sweeping and town beautification. It operates mainly within the local government act cap.265¹⁵ and is currently headed by a clerk of works who is a civil engineer. It also coordinates with the other stakeholders involved in environmental management within the municipality such as government ministries, parastatals, private sector, NGOs, CBOs and the general town residents.

The department is facing enormous challenges in undertaking its responsibilities because of limited capacity. It is poorly endowed financially, technologically and lacks the necessary human capacity to handle the environmental challenges within the municipality. The financial allocation is too little to meet its financial needs such as buying of environmental equipment such as waste collection vehicles, machinery, and their maintenance, enforcement and other environmental activities and programs. There is understaffing and lack of qualified human capacity to handle the complex environmental issues. Most departmental employees don't have training in environmental management but have only acquired related skills on the job.

2.15.2.1.14 Other Environmental Management Institutions

There are many other government ministries, departments and parastatals which are involved in one way or another in urban environment management within Bomet municipally. Ministry of environment and mineral resources, Ministry of water, Ministry of public health and parastatals such as the National Environment Management Authority, Kenya Forest Services are all involved in environmental management according to their legal mandates. For instance, NEMA oversees the general environmental matters in the country and districts including the towns as specified in the Environmental Management and Coordination Act (EMCA 1999), while KFS manages trees and forests in the country and districts as specified in the Forest Act of 2006. NEMA handles the weighty environmental matters such as Environmental Impact Assessment while the less significant environmental matters such as public waste dumping are handled through the Public

¹⁴ Law will stand repealed after the 2012 election cycle and replaced by the UACA act 2011 and County Government Act, 2012

¹⁵ Ibid

Health Act or the council by-laws. The district public health officer from the Ministry of public health works very closely with the municipality to handle public health and environmental matters though they are not answerable to the local authority. The NEMA district environmental officer is the secretary to the district environment committee which brings together all environmental stakeholders in the district including Bomet municipality.

2.15.2.1.15 Environmental Legal Framework

In previous years, Kenyan law relating to urban environmental pollution control has developed slowly but haphazardly as a response to individual and critical cases of pollution (Kamau 2005, Okidi, C.O.et al 2008). The existing legal regime is therefore fragmented and consists basically of common laws relating to negligence and nuisance, and statutory provisions dealing with water, air, wastes and toxic and hazardous substances (Kamau 2005). For a long time, the major legislative instruments used to control and regulate activities which are likely to cause water or air pollution in urban areas of Kenya were the ones shown in table 3.1. below.

Table 2.38: Legislation Regulating Air and Water pollution

ACT	FUNCTION
<i>Water Act Cap 372</i>	✓ list activities which can be termed as polluting and specific pollutants which are subject to control ✓ they specify the water bodies and aquatic life for which protection is provided ✓ they establish mechanisms for the prevention of pollution and empower relevant authorities to establish standards ✓ issue permits ✓ monitor pollution ✓ inspect pollution sources ✓ remedial measures in case of pollution. ✓ control and prevention of air pollution ✓ waste management regulation
<i>Public Health Act Cap 242;</i>	
<i>Merchant Shipping Act Cap 389</i>	
<i>Factories Amendment Act 1990</i>	
<i>EMCA</i>	

Source:

In addition, the lack of specific environmental quality criteria and standards renders the implementation and enforcement of the legal provisions largely ineffectual. Recently a new law in occupational safety and health has also been enacted to regulate the urban working environment. According to Kamau (2005) statute law, which remains the most significant legal framework for the control of pollution and for urban environmental management and protection in Kenya, has not been efficient enough in dealing with problems of pollution at the national level. Although it has made a good attempt to define actions and activities which are polluting and specific pollutants which are subject to control, it suffers from a number of handicaps, notably the absence of any specialized clean air or waste management legislation, the lack of generally applicable

environmental criteria and standards, overlaps between different environmental laws, and the different bodies with responsibilities under them, and finally lack of enforcement powers. It follows that until the new EMCA is able to prove itself, Kenya's hope in curbing water and air pollution will still remain highly dependent on efforts of local authorities, pressure groups and the self-management of industries. At the same time, the lack of a clear urban environmental policy in Kenya has remained a major limitation towards well managed urban environments in the country. Bomet municipal council mainly relies on the general nuisance by-law for environmental management including controlling illegal dumping of solid and liquid wastes. Comprehensive by-laws are lacking to control and regulate environment in urban areas. Enforcement of the existing bylaws is a big problem as the councils lacks adequate manpower for the purpose. Political interference in enforcing environmental by-laws and regulations was also noted. Councilors normally intervene for environmental offenders from their wards, adversely affecting enforcement. Lack of manpower reduces the department's capacity to monitor and enforce environmental bylaws.

2.15.2.1.16 Environmental Policy

Though the Kenya government has severally restated its commitment to sound environmental management (GoK, 2007), it lacks an umbrella environmental policy to guide environmental activities. The country participated in the Stockholm Conference on Human Environment of 1972 in Sweden that highlighted the importance of linking environment to development. But the country was committed to the conservation of its valuable environment long before that as reflected in the designation of protected areas as far back as the 1940s (Ogolla and Ojwang 1996). Consequently, United Nations Environment Programme (UNEP) was established with its headquarters in Nairobi to oversee global environmental issues. The Government of Kenya has formulated a wide range of policies for sustainable management and conservation of the environment and natural resources.

An umbrella policy on environment does not exist and is in the process of being developed. Similarly Kenya is still awaiting a national urban policy which is expected also to consider urban issues. The Sessional Paper No. 6 (1999) on Environment and Development has been the nearest equivalent to Kenya's policy on the environment. It was submitted to cabinet and parliament along with the EMCA Bill (1999). Whilst EMCA was endorsed by parliament, the Sessional Paper (1999) was neither discussed nor endorsed. Consequently, the Ministry of Environment and Mineral Resources (MEMR) is operating in the absence of an endorsed over-arching environmental policy to uphold EMCA. EMCA (1999) is therefore Kenya's principal legal instrument on the environment. It is a very ambitious legal framework which has led to the creation of NEMA and recently to the development of regulations, guidelines and standards for the environment. The instrument is

consistent with global trends in the environment (Manek 2001). However the framework has not sufficiently considered critical urban issues such as motor vehicle emissions, waste standards, waste recycling and noise regulations.

2.15.3 Stakeholders Involvement in Environmental Management

Stakeholders in urban environmental management include all the actors in several aspects of the urban environment and include the local authorities, relevant government ministries and agencies, private sectors, NGOs, CBOs, organized groups (such as women and youth groups) and the town residents.

Despite the council's lack of a policy on stakeholders' engagement in environmental management, it nonetheless engages them informally in different environmental management activities. The banking institutions resident within the municipality such as Barclays, Cooperative and Family banks and organized groups such as youth and school children sometimes partner with the council for tree planting and occasional clean up exercises in the town. The council has also entered into a symbiotic partnership with some private sector actors for environmental purposes. The partnership involves private sector beautification of roads and gardens with the council where the private sector gains advertising privileges in return for their financial support and involvement.

The structures for stakeholder's participation in environmental management in Bomet municipality are poorly developed. Lack of a guiding policy and appropriate incentives for stakeholders' engagement in environmental management has resulted to no or minimal involvement by majority of stakeholders. Consequently the enormous potential of the various stakeholders in sustainable urban environmental management remains largely untapped.

2.15.4 Environmental Awareness

Environmental consciousness dictates human activities that have a bearing on environmental sustainability. The higher the level of environmental consciousness, the higher the degree of environmental ethics.

A small number of environmental awareness programmes such as posters, public or group barazas, print and electronic media were operating in the town. As a result residents' environmental consciousness was measured as low as evidenced by indiscriminate littering; throwing of sugar cane chuff in the town, water riparian encroachment, cutting of trees among other indices. This cut across the socioeconomic strata.

2.15.5 Poverty and Environment.

Worldwide there is a strong relationship between poverty and environmental quality including in urban areas. In urban areas the poor bear the greatest burden of urban environmental risks because of the situation in which they are forced to live. Majority of the urban poor are the women and children.

The poor in Bomet municipality live in overcrowded substandard housing built of rudimentary materials such as mud, cardboards and old iron sheet walls; rusted iron sheet and plastics roofing. Overcrowding increases the risk of airborne infections and accidents. The residents of the low income in Bomet are not served by piped water and sanitation facilities and garbage collection services. Lack of these services increases the risk of intestinal infections and other communicable diseases.

The poor also contribute to local environmental degradation mainly because the town fails to provide them with the necessary basic services. Since solid waste is not collected in their settlements, they dispose of their waste in inappropriate dumping areas. Denied access to suitable land for housing, families may settle in the protected areas of the town or on fragile ecosystems such as wetlands. Disposal of human waste from over-water settlements in towns can be a major source of water contamination. When low-income groups engage in environmentally degrading activities, however, it is usually because they have no alternative.

The poor are understandably reluctant to invest heavily in improving the household or neighbourhood environment since they could be evicted at any given time. However, once given housing security, the same individuals often become substantial agents for environmental improvement.

The poor are defined as those members of a society who are unable to afford the minimum basic needs comprising of food, shelter and clothing. The official poverty level in the larger Bomet County is 52% (See Table 2.8 above). Poverty can be classified into two parts i.e. material poverty and relative poverty. It can also be classified into food poverty and overall poverty. Causes of poverty in Bomet County are many, ranging from HIV/AIDS prevalence, unemployment, and squatter/landlessness to illiteracy. It is further characterized by low incomes, high child mortality and dependence ratio.

The major causes of poverty have been identified among others as lack of community involvement in planning, handouts, poor infrastructure, collapse of agricultural marketing institutions, high cost of farm inputs, and delay in payment of agricultural produce, inhibitive cultural practices, corruption, crime and insecurity.

The poor rely heavily on natural resources for their livelihood. There is need to build on existing initiatives and strengthening ongoing process that take into consideration participatory planning and implementation of programs and projects that integrate environmental concerns into development planning and decision making which at the same time enhances sustainability.

2.15.6 Environmental Management Tools

Some environmental instruments such as Environmental Impact Assessment (EIA), Environmental Audit (EA) and Strategic Environmental Assessments (SEA) are supposed to be applied in environmental management as specified in EMCA.

EIA is undertaken for specified new projects before they commence. It is a critical examination of the effects of a project on the environment. An EIA identifies both negative and positive impacts of any development activity or project, how it affects people, their property and the environment. EIA also identifies measures to mitigate the negative impacts while maximizing on the positive ones. An Environmental Management Plan (EMP) to guide project activities is prepared.

On the other hand Environmental Audit (EA) is done on ongoing projects to monitor their impacts on the environment and to assess their adherence/compliance to the set environmental standards and EMP. Projects which require EIA & A are specified in the second schedule of EMCA.

Strategic Environment Assessment is used to integrate environmental consideration into policies, plans and programs. SEA is similar to EIA except that the latter deals with projects.

The objectives of Strategic Environmental Assessment is to systematically integrate environmental consideration into policy, planning and decision – making processes, such that environmental information derived from the examination of proposed policies, plan, programs or projects are used to support decision making by:

- Allowing sustainability principles to 'trickle down' from policies and plans to individual development projects within a particular programme.
- Ensuring that sustainability considerations are incorporated into objectives of policies, plans, programs or projects.
- Identifying environment and sustainability benchmarks by which impacts of policies, plans, programs or projects can be tested, and
- Evaluating whether the potential impacts of a proposed or existing policies, plans, programs or projects are likely to be in accordance with sustainability objective.

In the SEA process likely significant effects of a policy, plan, program or project on the environment, which may include secondary, cumulative, synergistic, short, medium and long term, permanent and temporal impacts are identified, described and evaluated in the environmental report. This also includes evaluation of alternatives.

The above environmental management tools are poorly applied in Bomet municipality despite many projects and programs such as construction of high rise buildings, operating of supermarkets, hospitals, hotels, and slaughter houses requiring them.

2.16 SOCIO-CULTURAL AND DEMOGRAPHIC PROFILE

2.16.1 Population Size and Growth

As discussed in *Section 2.4* above the characteristics of the population dynamics of Bomet are as follows

- Total urban population in Bomet Municipality grew by 3.2% annually over the 10 year period to 2009.
- Township Ward where the CBD is located has the highest population and comprised of 25% of the population in both 1999 and 2009.
- The inter censal annual growth rate for MCB was an average of 3.2% though some wards like Singorwet, Emkwen and Tulapmosonik grew at rates lower than this average.
- The highest growth of 4.41% was exhibited in Itembe, a smaller but fast growing rural township within MCB.
- From a population of 110,160 it is projected that the population of MCB will more than double to 228,419 in 2030 as detailed in *Table 3.2* below.
- Township ward where the CBD is located will grow by 2.2 times to stand at 62,000 residents in 2030.

Table 2.39: Projected Population of Bomet Municipality 2009 – 2030

Ward	2009	2012	2017	2022	2027	2030
Township	27,562	30,733	37,035	44,906	54,780	61,892
Singorwet	12,451	13,596	15,745	18,235	21,120	23,067
Mutarakwa	12,462	14,182	17,591	21,821	27,068	30,804
Itembe	11,541	13,135	16,297	20,221	25,090	28,558
Emkwen	15,853	16,834	18,606	20,564	22,728	24,134
Tuluapmosonik	16,841	18,464	21,529	25,112	29,300	32,146
Cheboin	13,450	14,912	17,718	21,065	25,059	27,818
MCB	110,160	121,856	144,521	171,923	205,145	228,419

Source: Projections based on 2009 Census data (Republic of Kenya, 2010)

The population of MCB is very young with those under 20 years of age comprising 56 % of the population in 2009. In 2009, the young person's dependency ratio expressing the age group 0-14 years as a share of the labour force (ages 15-60) is calculated at a high 90% while the old age dependency ratio (age group over 60 years) is a much lower 9%. This has important ramifications for future planning for the Town in terms of basic social services particularly educational and medical facilities as well as infrastructural services.

2.16.2 Household Size

Whereas in rural Kenya the mean household size nationally is 5.1 persons while the average for urban areas of Kenya is only 4 persons, the share of urban households that have more than 7 persons is 14%. In comparison for Bomet District as a whole, the mean household size is 6.1 persons and the share of households that have more than 7 persons is 43%, almost half of all households.

Compared to the whole district, it appears that household sizes in MCB are slightly smaller. As table 2.3. shows, the average household size across all wards was 5.5 while specific wards had sizes ranging from 5.1 in Township, Tuluapmosonik and Cheboin to 6.1 in rural Emkwen.

2.17 ECONOMIC AND INVESTMENT OPPORTUNITIES

2.17.1 Obstacles to Economic Growth in Bomet Town

The obstacles to economic development of Bomet are related to agriculture are low productivity and expensive farm inputs, also the poor infrastructure like poor roads are a limiting aspect since the transportation of farm produce is made very difficult. From the residents' perspective, the general obstacles are listed in *Table 3.3* below.

Table 2.40: Perceived Obstacles to Economic Growth in Bomet, 2011

▪ Leadership in cooperatives and the town due to corruption ▪ High costs of fuel and transportation of goods ▪ Inadequate water supply and sewerage services ▪ Poor feeders roads limiting transportation of produce/products ▪ Insecurity that limits working hours	▪ Variations in commodity prices demoralising the farmers ▪ Municipal council hikes of license fees ▪ Inadequacy business associations /forums leading to fragmented efforts ▪ Inadequate electricity supply network ▪ Expensive Farm inputs ▪ High costs of fuel and transport
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Matrix Development Consultants, 2011

2.17.2 Management of Obstacles to Economic Development

The respondents felt that the obstacles can only be resolved through dialogue between the business community and the Council so as to agree on rates and the general infrastructure development. They also stated that the community needs civic education so that they can demand for their rights and also play their role in the development of the town.

2.17.3 Non Conducive Business Environment

MCB must begin to view a thriving private sector as the source of more revenues to finance socio-economic activities in the Town. Currently there is no opportunity to utilize any planning tools to institutionalize the improvement of the business environment in the Town. In addition, there is a weak civic-private sector policy dialogue that can be used to provide a forum to discuss problems faced by the private sector. The civic and public officials need to further re-orient their attitudes to addressing the problems by engaging the private sector as a way of catalyzing private sector development. There were various complaints by the business sector related to harmonisation and coordination of business regulatory departments and agencies in relation to dealing with the private sector. There were too many overlaps and unnecessary interventions by both civic and public officials.

2.17.4 Underutilization of the tourism potential of the Town

Currently there is an acute need for better marketing of tourism attractions and facilities in Bomet. Whereas the Town has several historical sites and contemporary tourism sites, they are neither well known nor popularized.

Even if Bomet was to attract tourists, there is an acute lack of tourist class facilities within the Town. The Town needs at least 3 new tourist class hotels. Similarly, the community organizations need to participate in eco-tourism in the Town and its environs.

2.17.5 Facilities for retail and wholesale trade are lacking

Facilities for small scale activities are acutely lacking in the town. Despite the establishment of a new market in CBD, facilities will continue to be stretched. Hence there is an urgent need to improve retail and wholesale facilities in smaller centres as a strategy to disperse opportunities for non-farm employment.

2.17.6 Limited facilities for small and medium Industrial activities

Currently the only small scale industrial premise in the Town, the Jua Kali Sheds are in operational due to lack of water and electricity. There are no facilities even though there is a dedicated Industrial zone in the Town.

2.17.7 Low level of value addition in agro value chains with good potential

There is low productivity and expensive farm inputs, also the inadequate infrastructure like poor roads are a limiting aspect since the transportation of farm produce is made very difficult. Examples of what can be developed include growing potatoes in Singorwet, and aquaculture along Nyongares River. There are currently very little activities that focus on promotion of integrated value chain development in dairy, horticulture and aquaculture. There is little coordination with private sector produce purchasers and BDS providers to inculcate value chain analysis for agribusiness.

2.18 KEY ISSUES HOUSING AND HUMAN SETTLEMENTS IN BOMET

2.18.1 Planning and Plan Approval by MCB

There is inadequate planning capacity within Bomet municipal council to undertake and enforce spatial planning. Currently the council lacks a qualified Physical Planner. A Works Officer, who is the only technical personnel, oversees planning functions alongside all other building and engineering related tasks. There is also limited enforcement and monitoring of building/construction works.

In the short run, the municipal council should put in place an engagement partnership framework that will encourage other stakeholders to participate in a structured manner in the planning and building activities including approval and enforcement processes.

2.18.2 Poor State of Service Provision

There is a correlation between housing characteristics and services such as access to basic services, drinking water and sanitation and the likely exposure to diseases. Currently the town is largely un-sewered. The council uses manual exhausters to collect waste from sites, after which it is emptied in a temporary/makeshift sewer pond situated near the Show Ground. Data available indicates a total of 90 households currently use sewer, 159 septic tanks, and while there are 25 cess pools in Bomet urban areas (KNPHS, 2009) with Bomet town accounting for the bulk of this as shown in the *Table 3.4* below.

Table 2.41: Urban, Households by Main Mode of Human Waste Disposal at Various Levels

Location	Main Sewer	Septic Tank	Cess Pool	VIPs Latrine	Pit Latrine/ Uncovered	Bucket	Bush	Other
Bomet								

District	90	159	25	591	17,312	9	1,033	19
Rift Valley	67,352	40,898	4,113	43,592	479,066	1,031	17,788	576
Kenya	664,673	273,500	25,024	201,804	2,129,220	18,867	87,074	6,458

Source: KNPHS, 2009.

Residents mainly use pit latrines. Within Bomet District urban areas, about 591 households rely on VIP pit latrines and another 17,312 households use ordinary pit latrines. Regular flooding of pit latrines is a common problem in the area. Besides, many of them are located near water sources, in itself a major health hazard, a situation confirmed by 46% of the respondents who knew of relatives/cases of occurrence of water borne diseases in the previous twelve months proceeding this survey.

This is complicated by the fact that the area has a weak soil formation which is not suitable for the construction of pit latrines coupled with a big gap in terms of knowledge and practice in appropriate sanitation by the residents. The information was corroborated by health officials who indicated that many of the diseases attended to in the town are mainly water borne. Immediate short term measures should begin to focus on proper siting of pit latrines and introducing improved ventilated pit latrines. Strengthening of exhauster services can also be pursued as an immediate measure where residents construct concrete lined latrines which are regularly exhaustible.

The lower side of the town (the Nyangores River to the Keben/Chelsa stretch) which is freehold is also increasingly being transformed from agriculture to residential/commercial land uses without an elaborate sewer system. There is eminent danger of contaminating the Nyangores River, the main source of water to the town with raw human waste. Immediate short term interventions should focus on connecting this area to the proposed sewer system. High density settlements around the riparian area should be discouraged through proper zoning and enforcement (unless there is sewer and controlled sanitation e.g. proposed sewer facility to be set up/facilitated by World Bank, WWF-ESARPO.); otherwise the town's only water source will be contaminated with dire ill health consequences.

Water supply is characterized by low levels of coverage. This is indicated by low level of households with piped water which accounted for only 8%. Out of 476 households in the entire district with piped water connected to dwellings, 336 are in urban areas, and most likely are to be found in the large urban centres such as Bomet, Longisa and Itembe. Furthermore a number of households reported walking between a distances of 1-2 Kilometres to the nearest water points.

Whereas water for the town and domestic use is mainly extracted from Nyangores River, it is inadequately treated.

Solid waste generated in Bomet town is predominately inorganic matters such as paper, plastics, polythene bags and old clothes in addition to organic waste food and vegetable peels. Waste in Bomet town is predominantly burnt in open spaces /grounds which in itself is an environmental hazard. There are no well designated waste receptacles provided in the town.

There was limited electricity connection to households across the wards. Over 69% of the respondents reported that less than one percent of the households situated in the wards have electricity connections. This could be an indication of low level penetration of the rural electrification programme. Over 90% of households use charcoal, which is noted for its devastating effects to the immediate surrounding environment

2.18.3 Anticipated Growth due to County Offices

The siting of the county government offices in Bomet town will by no doubt increase the demand for housing (both rental and accommodation) yet the supply of housing is currently quite inadequate. Some of the short and medium term interventions should begin to focus on availing serviced land besides encouraging private and individual developers to avail low cost rental housing.

2.18.4 Land Values

Currently the perception is that the land values are quite high. It was observed during the visioning workshop that “land was prohibitively high” and hence limiting young people from participating in the building industry. Land speculation has been rising since 1992 after Bomet became a Town, and the trend may remain the same with the proposed location of county government offices in Bomet town. Bomet town immediate periphery provides an abundance of land which the municipal council can convert to a land bank in anticipation of growth in housing and other demands. The Southern part of the CBD is a suitable area for residential development.

Table 2.42: Cost of Land in Bomet town

Area	Plot Size	Cost (KES)
CBD	50×100	500,000
	1 Acre	~4 Million
5 km away from CBD	1 Acre	500,000
Emkwen	1 Acre	1 Million
Chepalungu*	1 Acre	500,000

Source: Field Survey. December, 2011

2.18.5 Land Systems and Land Subdivision

The CBD area of the town is characterized by the leasehold ownership of land, and was found to be fairly well planned, with roads, drainage etc while the other areas which are mainly freehold are unplanned and not serviced. Disturbingly, rapid and unplanned subdivisions are taking place in the municipality particularly in the freehold area. Besides, land is subdivided into unproductive parcels without provision or a clear long term provisions made for access and servicing. Compounding the situation are the cultural, traditional and beliefs systems which have in one way or the other contributed to this unsustainable subdivision patterns. This is more notorious in the lower side of the town abutting Narok-Sotik highway.

Land disputes were highly reported mainly as a result of disputes over ownership and subdivision. There is a lack of title deeds for the land parcels the residents are currently occupying. Similarly it was noted that there is also inadequate knowledge on land ownership. Misconception that “freehold tenure means that you can do anything on your land without regard to planning” has also largely contributed to unplanned growth of the town. Encroachment is rampant on some road reserves coupled with non observance of building lines and frontage setbacks.

2.18.6 Non-Compliance with Building Regulations in Bomet

Most housing units do not comply with existing building code, by-laws and standards. People are building and occupying houses without following due processes including occupation certificates. This presents a major safety violation. It was observed that people are living in uncompleted dwellings built mainly of semi permanent and temporary materials and the houses are in most cases devoid of the necessary services and amenities for human habitation in line with the right to adequate housing requirements.

2.18.7 Development Control and Standards

The housing sub sector in Bomet has adversely been affected by deficiencies in the municipal council to effectively undertake development control and enforcement. A series of zoning plans have been prepared in the last few years though their content and recommendations have not be observed and adhered to. This is partly due to: impunity to rules and regulations in the populace and officials; lack of capacities within the municipality, where until recently there was no technical personnel in the council. There is hardly any data collected on housing development by the municipality and other stakeholders.

In the short run, effort should be directed towards building and enhancing technical planning capacities-planning, engendering, environment etc. A structured framework between departments

with relevant capacities and also other stakeholders could begin to support the council on planning etc. Capacities should be devoted towards public education in planning.

2.18.7.1 Lack of Zoning Plans

Bomet town has suffered the malady of lacking adherence to the local zoning plan. The survey of Bomet town revealed that sub-divisions are not properly guided and controlled as the zoning plans are not approved and hence there are no clearly designated zones. This has resulted in an interpolation of incompatible and inappropriate uses across the town. The zoning problem is further complicated by the uncontrolled urban activities brought about by the elevation of the town to a district headquarters and municipality status. The situation exacerbated by the informality of the town structures and the lack of dichotomy between the rural and urban areas of Bomet, informed by perceived altitude that “no need for development control in freehold areas. My grandparents were buried here. It is ours”.

2.18.7.2 Poor Organization of building Layout

Many housing units are haphazardly distributed and organised over space a situation mainly observed around the freehold areas such as Chelsa, Keben, Mobet Christian Riverside, Twig Restaurant, Soy Garage, Umoja, Raia Framers and Chepturkana among others. Many structures do not observe building lines, setbacks and road reserves. Much more efforts will be needed in enforcing planning and construction by laws and standards.

2.18.8 Limited Linkages between Stakeholders and Actors

Previous development of housing and human settlement programmes and plans was primarily done by experts. However recent changes has now put emphasis on an integrated participatory planning model approach, as being key to enhancing the efficiency and effectiveness of public policy as a mechanism for addressing the mandates of the Constitution of Kenya, 2010 and delivery at the urban level through the Urban areas and cities act. Corresponding to the above is the draft National Housing bill 2012. One of the outstanding innovations that stand out in this Housing bill is the proposed establishment of a National Social Housing and Infrastructure Authority which creates a vehicle for delivery of social housing.

That Bomet town suffers from lack of appropriate institutional framework for stakeholders' engagement and coordination and effective communication cannot be gainsaid. As a result these stakeholders lack synergy in their interventions; hence the human settlements sub sector in the town is stagnant as exhibited by presence of temporary structures in the CBD. Although the potential for Public Private Partnership (PPP) exists in Bomet town as observed earlier; there is no

framework or capacity within MCB to engage different actors. The main movers and drivers of housing sector in Bomet town are plot owners, business community and the private sector investors. Other drivers include rapid urbanization due to increased private sector investors in the tea industry. These actors influence to a great deal the developments in the housing sector

2.18.9 Non Availability of Housing Finance

The poor state of housing in Bomet town and the environs is also largely attributed to the lack of settlements financing strategy. Given that housing competes for finances from lending institutions, financiers prefer lending for short term high yielding ventures where risk is low. This scenario singularly locks out housing developments within seemingly uneconomical viable urban towns such as Bomet that are not considered attractive enough due to perceived low rates of return. Secondly housing finance providers with facilities for peri-urban finance models have made few attempts to engage in large scale financing in the rural hinterland where towns such as Bomet are located. Thirdly, there exists little policy incentive to both long term developers and the end users (buyers) to carry out investment in peri-urban/rural housing.

Similarly, non traditional lenders such as government departments, parastatal, private companies and non-governmental organisations play an important role in the provision of housing. However in case of Bomet, this is currently relatively limited micro finance initiative by the Habitat for Humanity. The need to attract such investments should be recognised and programmes to ensure the promotion, sustained investment and growth be part of the mandate of the Bomet Strategic Plan.

2.19 OPPORTUNITIES AND CHALLENGES FOR THE HUMAN SETTLEMENTS SUBSECTOR

A few factors have been identified and which if maximised on can begin to ensure that the long term vision and promise of the town is achieved. This is particularly in propelling the housing subsector expressed as opportunities in the *Table 3.6* below. On the other hand we are aware of other factors that could hinder the achievement of the desired results expressed as challenges below.

Table 2.43: Opportunities, Challenges and Constraints for Human Settlements

Opportunities	Constraints/ challenges
1. Both situating of County offices in the town and the implementation of the devolved framework will provide an impetus for both physical growth of the town and development in general	1. Competition from outlying counties (Buret, Kericho, Narok)
2. Land is available within the lease which can be densified for human settlement	2. Unplanned growth and developments
	3. Lack of local contractors
	4. High cost of building materials (many

3. Land in freehold provides an opportunity to work with residents through appropriate methods such as joint planning and consolidation	of them have to be gotten from Kisumu Nairobi etc
4. Willingness of the residents to engage can be maximized on through developing a appropriate framework for engagement in urban development processes	5. Few external investors
5. Availability if natural resources (water from Nyangores River, bricks, timber) offer opportunity to introduce and popularise labour intensive and environmentally sensitive techniques and technologies.	6. Lack of training institutions for building, construction and engineering skills
6. Well performing schools	

Source: Study Team, 2011

TRANSPORT AND INFRASTRUCTURAL SERVICES

2.19.1.1 Challenges to Providing Infrastructure Services in Bomet Town

Provision of infrastructural services faces fundamental challenges which are outlined as follows:-

2.19.1.2 Telecommunications

Fixed Wire Telephone:

Challenges

- The main challenge faced by the service provider is the geographical spread of the town and the resulting long distances between Bomet and Tenwek, Bomet and Silibwet, Bomet and Kapkwen, Bomet and Longisa, and Bomet and Merigi.
- This is compounded by poor planning of the town. As its history has suggests, it just grew from a “boma”. Thus the concentration of the potential and existing services users is too dispersed.
- To a lesser extent the service provider is faced with high incidences of vandalism. The telephone wires are often stolen. This has been rampant in Silibwet, Itembe, and Longisa areas.
- The underground installations are often damaged while carrying out works on other services e.g. water, and road works.
- Reliability of these services is frequently affected by availability of electricity.

There is a huge potential for expansion of this service. The current provision is only based in Bomet CBD. The satellite centres (Silibwet, Itembe, Tenwek and Longisa) have a huge expansion capacity.

Issues

- The main issue here is the poor planning of the town. Fixed lines need a well planned town with roads having also equally adequate road reserves.
- Supply of electricity and availability throughout the day. These are 24 hour services.
- Satellite centres connectivity. How best can the satellite centres be linked.

Internet and Data Transfer Services:

Challenges

- Electricity power supply. Power supply covers reasonable parts of town. All satellite centre have power supply, however connectivity is very low. Less than 40% are connected to electricity supply.
- Power supply interruptions. It is mainly low voltage and physical interruptions.
- Fibre optical underground cables are not operational here.
- Other key challenges faced by the service providers are; the geographical spread of the town. It is long distances between Bomet - Tenwek, Bomet - Silibwet, Bomet - Kapkwen, Bomet -Longisa, and Bomet - Merigi. And this is compounded by poor planning of the town.

Potential

- The expansive nature of the town.
- The population growth.
- Development and growth of the technology sector.
- The current provision is only based in Bomet CBD and Tenwek centre. The satellite centres have a huge expansion capacity with the laying of the optical cable.

Issues

- The main issue here is the poor planning of the town. Fibre cable needs a well planned town with roads having equally adequate road reserves.
- Supply of electricity and availability throughout the day. These are 24 hour services.
- Satellite centres connectivity. How best can the satellite centres be linked?

2.19.1.3 Postal Services

Challenges

- The geographical spread of the town results to long distances residents have to cover to deliver and collect letters and parcels between Bomet - Tenwek, Bomet - Silibwet, Bomet - Kapkwen, Bomet -Longisa, and Bomet - Merigi. Further, this is compounded by poor planning of the town.

- This service is facing great competition from newly developed services such as letters and parcel delivery companies, email, internet, money transfer services.

Potential

- The expansive nature of the town.
- The population growth.
- Development and growth of the technology sector.

Issues

- The main issue is delivery of services mode. The service provider needs to address themselves to the changing trends in the country and the world.
- The poor planning of the entire town. In case services delivery was to be done to the door step of individual plots, there is need for good planning of town to facilitate this issue.
- Development of infrastructure especially roads.

2.19.1.4 Electricity

Challenges

- The geographical spread of the town and the resulting distances compounds the cost of laying out power lines and poles which is further compounded by poor planning of the town.
- The high cost of power grid development translates to high cost of consumer connectivity. This has discouraged residents who are even within power grid reach from connecting to power source.
- The frequent power black outs attributed to:
 - o Voltage drop
 - o Tree falling on power lines
 - o Lightning striking transformers
 - o Interruptions due to normal inspection and maintenance of electricity supply system.

Potential

- The expansive nature of the town.
- The population growth.
- The upcoming county governments. Bomet town will be the headquarter for Bomet County, this is a great opportunity for growth and development.
- Bomet is being proposed as one of the industrial centres of western Kenya.

Issues

- The poor planning of the entire town. Supply of electricity requires a well planned town and adequate road reserves.

- Development of infrastructure especially roads.

2.19.1.5 Water Supply

Challenges

- The geographical spread of the town. The satellite centres are spread far and wide. In the short term water supply schemes for each satellite centre of Silibwet, Itembe, and Longisa have to be developed separately
- This is compounded by poor planning of the town. The town is completely not planned. As its history has suggests, it is only part of the CBD that has a plan, while all the satellite towns are completely unplanned. The concentration of the services in relation to consumers is too dispersed.
- The sourcing of water supply through pumping is a major challenge. It means that each satellite centre has to have its own water supply and distribution network. This is currently the position and which is considered as not sustainable in the long run.
- The topography of the study area is characterised by undulating hills and valleys. This is a major challenge to water supply. It gives rise to very expensive distribution networks.
- Funding is a major challenge. Due to the expansive nature, the sourcing, treatment and distribution of water supply will be an expensive undertaking.

Potential

- The expansive nature of the town.
- The population growth.
- Existence of two major rivers within the town; River Nyangores together with River Kipsonoi are the major sources of water supply.
- The valleys through town form natural drainage profiles for the area and several permanent, seasonal and perennial rivers and streams define the study area. The land slopes mainly from North to South and to a lesser extent in the East-West direction with a number of ridges across the study area. There is a great potential of having one gravity water supply system for the entire town.
- By means of the upcoming county governments whereby Bomet town will be the headquarter for Bomet County, presents a great opportunity for growth and development of the water supply systems.
- Bomet has been proposed as one of the industrial centres of western Kenya.

Issues

- 3 The poor planning of the entire town. Water supply requires a well planned town with adequate road reserves.
- 4 Development of infrastructure especially roads to facilitate maintenance of the water supply network.
- 5 Provision of the water resource to the town residents in the short term. The entire town has no dependable water supply system. This must be addressed.
- 6 Management of the water supply undertaken by too many bodies. This will constrain development and delivery of this service.
- 7 Availability of land for location of the main infrastructure like dams and reservoirs, water intake, water treatment works, storage tanks and way leaves for trunk lines.
- 8 Utilization of the water resources available. The water as a resource is available. In order to avail the resource throughout the year, there is need for a proper and adequate storage infrastructure. This is likely to be through the construction of a water reservoir upstream on River Nyangores.

2.19.1.6 Solid Waste Management

Challenges

- A proper dumpsite site. Current dumpsite is temporary and is poorly managed.
- The geographical spread of the town Translates to the satellite centres being spread far and wide. It means each satellite town has to have its own dumpsite to facilitate the service being manageable in terms of management and investment costs.
- This is compounded by poor planning of the town. Especially planning and development of other infrastructural services that could support solid waste collection (mainly roads network and physical planning etc).
- Given the unplanned nature of the town, management of the service is made very complicated and costly.

Potential

- Land is available and can be acquired in good time, due to the nature of development on the land.
- The town is still young and development can be planned adequately to facilitate this service provision and management.

Issues

- The poor planning of the entire town. Solid waste management requires a well planned town and adequate road reserves. To facilitate collection of refuse from all parts town and deliver the same to sanitary landfill.
- Development of infrastructure especially roads.
- Availability of land for the location of main infrastructure like landfill site, transfer stations at the satellite centres (Silibwet, Kapkwen, Tenwek and Longisa) and leachate treatment site at the landfill site.
- Utilization of the solid waste resources available. Mainly as raw materials for recycling industry.
- Public awareness on the environmental requirement for collection, transportation and disposal of solid waste material.

2.19.1.7 Sanitation

Challenges

- The geographical spread of the town with satellite centres spread far and wide resulting in long distances between Bomet - Tenwek, Bomet - Silibwet, Bomet - Kapkwen, Bomet - Longisa, and Bomet - Merigi. In the short term it calls for separate sewerage collection network and treatment facilities for each satellite town.
- The town is completely not planned. This calls for planning to be undertaken first before comprehensive sewerage collection network and treatment facilities are developed.
- The topography of the town is characterised by undulating hills and valleys. This is a major challenge to development of sewerage collection network and treatment facilities. It gives rise to very expensive systems.
- Funding is a major challenge. Due to expansive nature of the town collection and treatment of sewerage will be an expensive undertaking.

Potential

- The expansive nature of the town.
- The population growth.
- The valleys through town form natural drainage profiles for the area and several permanent, seasonal and perennial rivers and streams define the study area. The land slopes mainly from North to South and to a lesser extent in the East-West direction with a number of ridges across the study area. There is a great potential that the entire town can be served through a gravity collection network and treatment system in the long term.

- The forthcoming devolved governments whereby Bomet town will be the headquarter for Bomet County, presents a great opportunity for growth and development of a gravity collection network and treatment system.
- Bomet is being proposed as one of the industrial centres of western Kenya. Sanitation services will be a key component in the development of the town.
- Land is available and can be acquired in good time for development of this service, due to the nature of development on the land.
- The town is still young and development can be planned adequately to facilitate this service provision and management.

Issues

- The poor planning of the entire town. Sewage collection network requires a well planned town and adequate road reserves.
- Development of infrastructure especially roads to facilitate maintenance of the Sewage collection network
- Availability of land for location of the main infrastructure like trunk lines, manholes and sewerage treatment works and way leaves for trunk lines.
- Provision of the sewage collection services to the town residents in the short term. The entire town neither has no sewage collection network nor a treatment have been developed in the past. This must be addressed.
- Management of the sanitation infrastructure has not been addressed adequately. This will constrain development and delivery of this service.

2.19.1.8 Drainage

Challenges

- The town is partially planned with large parts still unplanned comprising 85%of the area. This must be addressed first to facilitate protection of the natural drainage system and development of new drainage systems.
- The natural drainage systems are currently over private properties. There is need to develop a land acquisition plan to facilitate acquisition of the major Storm water Drainage corridors.
- Funding is a major challenge. Due to expansive nature of the town development of storm water drainage facilities will be an expensive undertaking.

Potential

- The expansive nature of the town.

- The valleys through town form natural drainage profiles for the area and several permanent, seasonal and perennial rivers and streams define the study area. The land slopes mainly from North to South and to a lesser extent in the East-West direction with a number of ridges across the study area. The valleys and ridges have created natural drainage systems whose way leaves needs to be acquired in the immediate future.
- The storm water can adequately and effectively drain to the existing rivers and drainage systems.
- Land is available and can be acquired in good time for development of this service, due to the nature of development on the land.

Issues

- The poor planning of the entire town. Storm water drainage collection network requires a well planned town with adequate road reserves.
- Development of infrastructure especially roads to facilitate maintenance of storm water drainage collection network.
- Acquisition of land where the natural storm water drainage systems fall. Natural storm water drainage has to flow through the natural path and not the planned path.
- Main cut off storm water drains have to be planned for and land acquired for the same. The areas badly affected are Kyokong and Kapsimbiri.
- Provision of the Storm water drainage collection services to the town residents in the short term, needs areas like Kyokong and Kapsimbiri, which have to be addressed immediately and as a matter of urgency.
- Management of the Storm water drainage collection infrastructure has not been addressed adequately. All the relevant authorities including KeNHA, KURA, KeRRA, Lake Victoria South Water Services and Water Resources Management Authority have addressed this issue clearly. This will constrain development and delivery of this service.

2.19.1.9 Road Transportation

Challenges

- The geographical spread of the town and the satellite centres spread far and wide translates to long distances between Bomet - Tenwek, Bomet - Silibwet, Bomet - Kapkwen, Bomet -Longisa, and Bomet - Merigi. In the short term it calls for development of the main road linkages between the satellite centres. To adequately link and facilitate traffic movement between all the centres is a major challenge.

- Other than the CBD the town is completely not planned. It may call for planning to be undertaken first before comprehensive road network planning and development is undertaken.
- The existing internal road networks are very narrow. 95% of the roads are below the basic requirement of road width of 9 m.
- The topography of the town is characterised by undulating hills and valleys. This is a major challenge to development of roads. It may call for development of an expansive network of roads and development of expensive structures to cross the valley and rivers within the township.
- Funding is a major challenge. Due to expansive nature of the town development of a comprehensive transport network will be an expensive undertaking.

Potential

- The expansive nature of the town.
- The population growth.
- The upcoming county governments. Bomet town will be the headquarter for Bomet County; this is a great opportunity for growth and development of an adequate road network within the township.
- Bomet is being proposed as one of the industrial centres of western Kenya. Road transport network will be a key component in the development of the town.
- Land is available and can be acquired in good time for development of the entire required roads network. The required road reserves can be acquired now for the future development of major roads infrastructure such as the By-pass roads, key interchange points and key river crossings. This is possible, due to the nature of development on the land and the current values.
- The town is still young and development can be planned adequately to facilitate this service provision and management.

Issues

- 9 The poor planning of the entire town. The good road network requires a well planned town with good planning connectivity.
- 10 Acquisition for planning purposes land for highways, trunk roads, national roads, access roads and streets. To ensure that the road reserves for each category of roads meets the required standards.
- 11 Provision of routine and periodic maintenance of access roads and streets in the short term, which do not fall under KeNHA, KURA, and KeRRA needs to be addressed urgently.

- 12 Short term decongestion of the CBD. There is only one bridge crossing on River Nyangores near the water intake. All residents have to cross here from both sides. In order to ease this traffic now and the near future, adequate provision for both vehicular and NMT crossing be provided on both sides. At least four.
- 13 In the long term alternatives routes be provided to ease congestion; to the west and east of the CBD in the form of By-pass roads.

2.19.1.10 Street Lighting

Challenges

- With the exception of the CBD, the rest of the town is completely not planned. To effectively plan for and deliver this service, adequate planning has to be done for the town.
- The high cost of power grid development and high cost of consumer connectivity has discouraged the development of this service.
- The frequent power black outs attributed to: Voltage drop and maintenance of the power supply systems.

Potential

- The satellite centres have a huge expansion capacity.

Issues

- The poor planning of the entire town. Street lighting requires a well planned town and adequate road reserves. This is a major problem.
- Development of this infrastructure depends on other key infrastructure especially roads to facilitate development and maintenance.

2.19.1.11 Parking for Buses, Matatus and Lorries

Challenges

- Poor planning or lack of planning. It is only the CBD that is planned; the rest of the town is completely not planned. To effectively plan for and deliver this service, adequate planning has to be done for the town.

Potential

- The satellite centres have a huge expansion capacity.

Issues

- The poor planning of the entire town. Parking space is dependent on the planned space, otherwise it will not be possible to develop this infrastructure. Development of this infrastructure greatly depends on especially roads to facilitate development and maintenance.

- Acquisition of land for all forms of parking in the short and long term. There is no land set aside for development of this infrastructure.

2.19.1.12 Railway transport

Challenges

- Lack of planning for the Railway Transport. In order to develop this service there is need for comprehensive plan for railway transport and setting aside adequate land to facilitate the development.

Potential

- For quick and rapid development of Bomet town to take place, introduction of railway services will have the tremendous effect of opening up the agricultural potential of Bomet Town and the Bomet County.
- Land is available and can be acquired in good time for development of all the required railway network and related infrastructure. The required railway line reserves can be acquired now for the future development of major infrastructure. This is possible, due to the nature of development on the land and the current values.

Issues

- The poor planning of the entire town. No attempts have been made to plan for a railway network. Railway line reserves and railway station require a planned town.
- Development of this infrastructure greatly depends on especially roads to facilitate development and maintenance.
- Acquisition of land for railway infrastructure in the short and long term. There is no land set aside for development of this infrastructure.

2.19.1.13 Air transport

Challenges

- Lack of planning for the Air Transport. It In order to develop this service there is need for comprehensive plan for air Transport and setting aside adequate land to facilitate the development.

Potential

- The nearest international airport is in Kisumu at least 160 km away. Development of an Airport in Bomet can serve areas as far as Nyamira, Kilgoris, Narok, Kericho, Buret and Sotik.
- There is a possibility that land can be acquired now because is reasonably available at reason cost.

Issues

- The poor planning of the entire town.
- Development of this infrastructure greatly depends on especially roads to facilitate development and maintenance.
- In the short term acquisition of land for expansion of the airstrip to an airport. In the long term acquisition of land for development of an international airport.

2.19.1.14 Fire Protection Services

Challenges

- Lack of planning for the Fire Protection Services. This service goes hand in hand with proper planning of town, adequate road network development and adequate water supply distribution network development. Without these support services it will be very difficult to adequately develop and deliver this service.

Potential

- The expansive nature of the town.
- The population growth.
- The town is still young and development can be planned adequately to facilitate this service provision and management.
- Land is available and can be acquired in good time for development of all the required facilities.
- This service is linked to the development of roads network and water supply and distribution network.

Issues

- The poor planning of the entire town. The town must be planned for these services to be developed and operated adequately.
- Development of this infrastructure greatly depends on especially road network and water distribution network. Without these two support services delivery of this service will be done under great constrain.
- In the short term acquisition of land for development of a fire station in the CBD.
- In the long term acquisition of land for development of fire stations in all the satellite centres.

2.19.1.15 Commercial services (Retail, Wholesale, Animals, Horticulture etc)

Challenges

- Inadequate planning or lack of enforcement of planning proposals. To effectively plan for and deliver this service, adequate planning has to be done for the town. This also has to go hand in hand with development of adequate road network, adequate water supply distribution network, sewerage collection network development and solid waste management services. Without these support services it will be very difficult to adequately develop and deliver this service.

Potential

- The expansive nature of the town.
- The population growth.
- The town is still young and development can be planned adequately to facilitate this service provision and management.
- Land is available and can be acquired in good time for development of all the required facilities.
- This service is linked to the development of roads network and water supply and distribution network, and sewerage collection and treatment systems.

Issues

- The poor planning of the entire town. Provision should be made for this service now. What is available is completely insufficient.
- Development of this infrastructure greatly depends on especially road network, water distribution network, Sewerage collection network, electricity supply network, street lighting network etc. Without these support services delivery of this service will be done under great constrain.
- In the short term, acquisition of land for development of markets at Longisa, Silibwet, Kapkwen and the CBD.
- In the long term, acquisition of land for development of modern commercial centres in Bomet CBD and all the satellite

2.19.1.16 Stadia Services (a national stadium to accommodate major national events etc)

Challenges

- Poor planning or lack of planning. To effectively plan for and deliver this service, adequate planning has to be done for the town. This also has to go hand in hand with development of adequate road network development, adequate water supply distribution network and sewerage collection network development. Without these support services it will be very difficult to adequately develop and deliver this service.

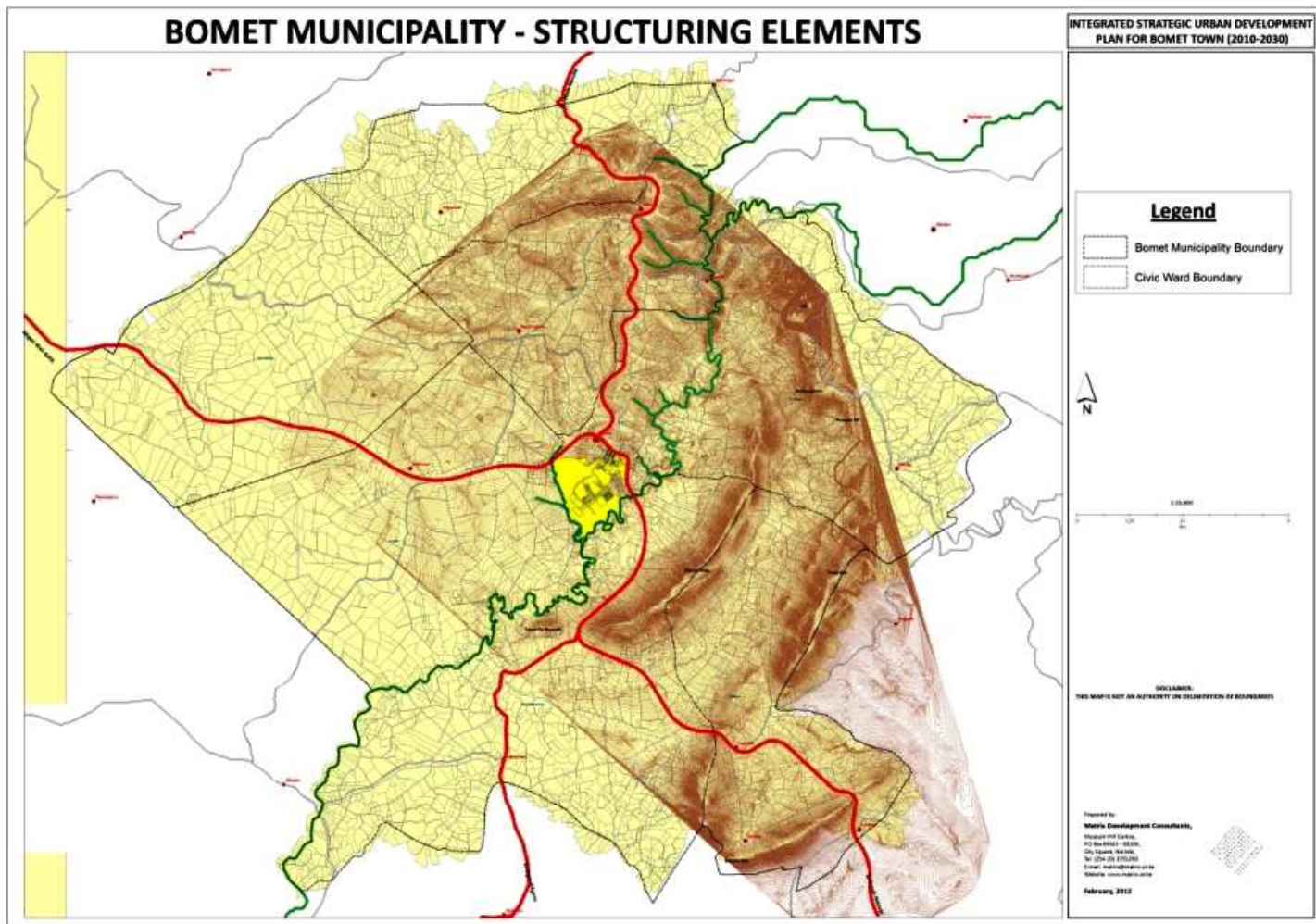
Potential

- The expansive nature of the town.
- The population growth.
- The town is still young and development can be planned adequately to facilitate this service provision and management.
- Land is available and can be acquired in good time for development of all the required facilities.
- Stadia services are linked to the development of roads network and water supply and distribution network, and sewerage collection and treatment systems.

Issues

- The poor planning of the entire town. Provisions should be made for this service now. What is available is completely insufficient.
- Development of infrastructure greatly depends on especially road network, water distribution network, sewerage collection network, electricity supply network, street lighting network etc. Without these support services delivery of this service will be done under great constrain.
- In the short term acquisition of land for development for a national stadia at Longisa, Silibwet, Kapkwen and the CBD.
- In the long term acquisition of land for development of international stadia in Bomet CBD and Longisa.

Map 2.11: Structuring Elements of Bomet Town



PART III: ALTERNATIVE SPATIAL DEVELOPMENT MODELS

3.1 CONCEPTUAL FRAMEWORK AND PROPOSED CONCEPT PLAN

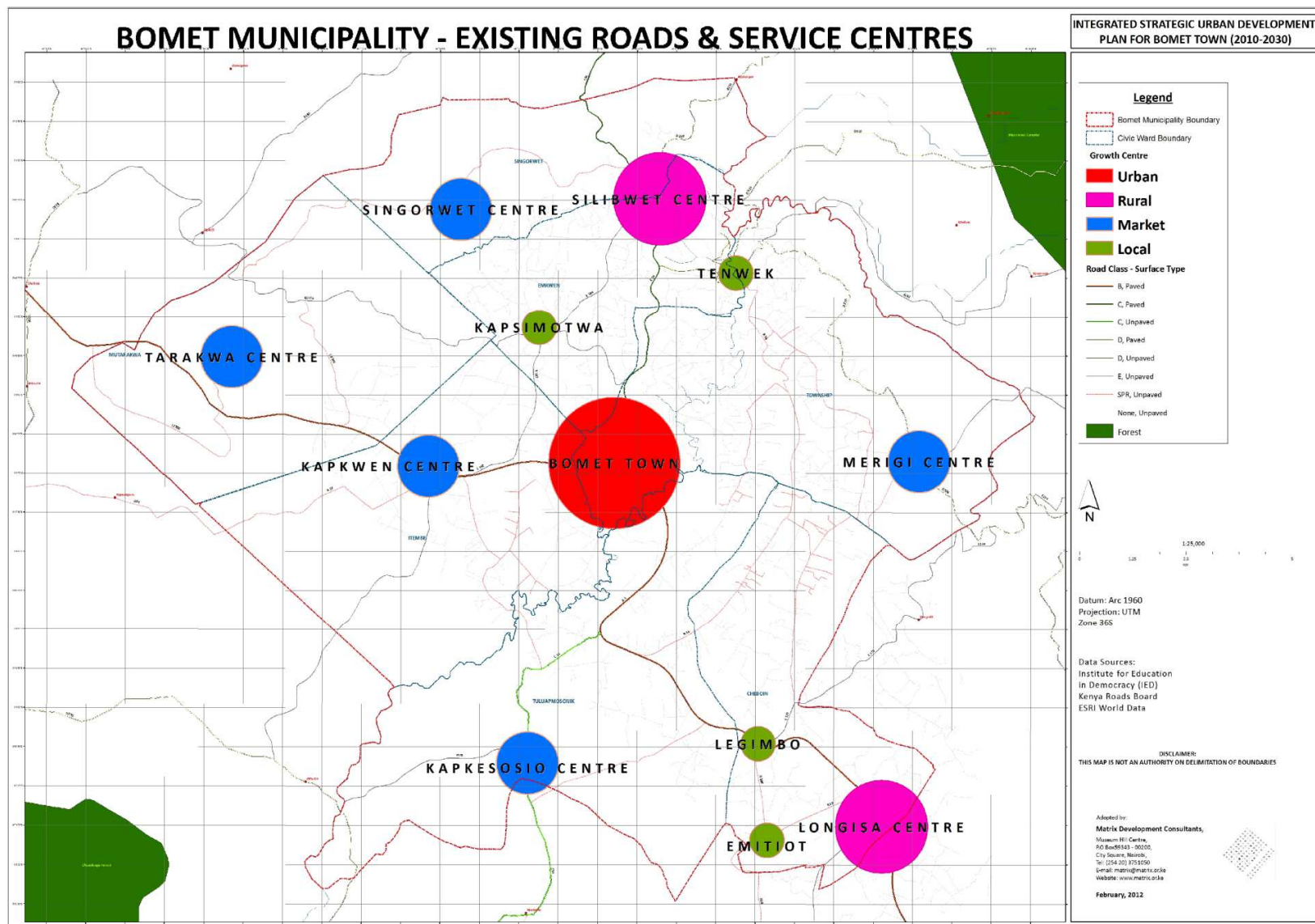
MCB constitutes the existing Bomet Town, which is the CBD and twelve other centres of various categories. All these centres provide services of different categories to the immediate hinterland. Table 5.1 below has attempted to highlight the different types of services being provided by each centre in order to arrive at a hierarchy of importance of these centres based on certain assumptions that we have adopted and explained below.

Table 3.1: Growth Centers in Bomet

NAME OF CENTRE	PRIMARY SCHOOL	SECONDARY SCHOOL	HEALTH FACILITY	POSTAL SERVICES	NO. OF SHOPS	RELIGIOUS INSTITUTIONS	SLAUGHTER HOUSE/SLAG	METAL FABRICATION	CARPENTRY	PORTABLE WATER	ELECTRICITY	CHIEF'S OFFICE	HIGHER EDUCATION	OTHER ADMINISTRATION	BANKS OR AGENCY	OPEN AIR MARKET	BUS PARK	TOTAL POINTS
BOMET TOWN	√	√	Health Cntr	P.O.	> 100	√	√	√	√	√	√	√	TTC (Private)	D.C's office	B	√	√	26
LONGISA	√	√	Hosp	Sub	50-100	√	√	√	√		√	√	MTC	D.O's office	A	√	√	22.5
SILIBWET	√	x	Disp	Sub	50-100	√	√	√	√	√	√	√	Narok Univ. Campus	x	A	√	√	21.0
(KAPKWEN) ITEMBE	√	√	Disp	x	20-50	√	√	x	√	x	√	√	x	x	x	√	x	11
KAPSIMOTWA	√	√	Disp	x	20-50	√	√	√	√	√	√		x	x	x	√	x	11.5
KAPKISOSIO	√	√	Disp	x	10-15	√	x	x	√	x	√	√	x	x	x	x	x	8.5
MERIGI	√	√	Disp	Sub	20-50	√	√	√	√	x	√	√	x	x	x	√	x	12.5
LEGIMBO	√	x	x	x	10-15	√	x	x	√	x	x	√	x	x	x	x	x	6.0
EMITIOT	√	x	x	x	0-5	√	x	x	x	x	x		x	x	x	x	x	3.0
SINGORWET	√	√	Disp	x	15-20	√	√	x	√	x	x	√	x	x	x	x	x	8.5
TARAKWA	√	√	Disp	x	10-15	√	x	x	√	x	√	√	x	x	x	x	x	9.5
TENWEK	√	√	Hosp	x	10-15	√	x	x	x	√	√	x	x	x	x	x	x	9.0

For every facility or service available one point is given except for offices of the D.C. – 4 points, D.O's Office -3 points, Chief – 2 points and Assistant Chief -1.5 points; Higher Education -2 points, Hospital – 3 points, Health Centre – 2 points, Dispensary 1.5 points; Bank – 3 points, Bank Agent – 1.5 point.

Map 3.1: Location of Growth Centres



Source: Matrix Development Consultants

3.2 ALTERNATIVE MODELS

3.2.1 Overview

There are many land use models which have evolved over the years such as the concentric rings', sector model, multi-nuclei, polycentric models and hierarchical multi-nuclei each with their own advantages and shortcomings as discussed below.

3.2.2 Alternative 'A' – Concentric Rings Theory

This theory was developed in the 1920's by Ernest Burgess who sought to model Chicago's spatial structure with regards to the usage of 'zones' around the city. These zones radiated from centre outwards in a form of rings. Attempts at applying this model to European cities have failed; as many cities in Europe have their upper class mostly at the periphery. As a summary the five names for each zone in the concentric zone model were given as follows: CBD, zone of transition, zone of independent workers, zone for better residences and commuter's zone.

The theory will not relate well to Bomet as eighty percent of Bomet Municipality is under non-urban use. Analysis of the existing CBD land uses shows that it is literally mixed and not according to the rings. Thirdly this model does not consider existing landscapes and is definitely very old. Lastly it does not consider car ownership.

3.2.3 Alternative 'B' – The Sector Theory: Hoyt's Sectoral Model

The model anticipates a city to develop in sectors instead of developing in rings. It accepts that certain areas of a city are more attractive for various activities, whether by chance or geographic and environmental reasons. As the city grows and these activities flourish and expand outward, they do so in a wedge and become a sector of the city. Simultaneously as growth takes place from the Central Business District outwards other sectors are bound to grow along linear features such as the roads and the railway.

The development of Bomet partly accepts this model in as far as the growth along the linear features in this case B3 road and C34 roads are concerned. However, it should be noted that eighty percent of Bomet Municipality is under non-urban use. Secondly Hyot's model assumes the land to be flat whereas in Bomet there are differences in terrain and drainage patterns and the presence of barriers such as the Nyangores River, the Masare range, Kyongong and Tiroto hills all of which have limited growth toward these barriers.

3.2.4 Alternative 'C' – The Multi-Nuclei Theory

In 1945 C.D. Harris and E.L. Ullman came up with a new land use model which they termed 'The Multiple Nuclei Theory'. They suggested that land use patterns in most large cities develop around a number of discrete centres or nuclei rather than a single centre as described in the concentric or sector models. This model accepts that even though a city may have begun with a CBD, other CBD's develop on the outskirts of the city to allow for shorter commutes from the outskirts of the city. This creates nodes or nuclei in the same city besides the CBD thus the name of 'multiple nuclei' model.

Ullman and Harris recognized that growth might occur around the main CBD and also around the sub-centres. These could incorporate industrial and commercial suburbs as well as peripheral residential growth. Hence each sub-centre may have a chance of developing its own activity specialization role according to the local situation. This model could apply in Bomet Municipality

3.2.5 Alternative 'D' – Polycentric Theory

Polycentrism is the principle of organisation of a region around several political, social or financial centres. A region is said to be polycentric if its population is distributed almost evenly among several centres in the different parts of the region. Polycentric refers to having many centres especially of authority or control. In the polycentric pattern, a business concentration is added in each sector and so many links are required to directly connect each sector to the CBD and all outside business concentrations. Transfers or lengthy journeys, which discourage ridership, can be prevented in the polycentric pattern only by connecting all sectors directly to all business concentration.

The polycentric model is a far superior model which presupposes a higher level of connectivity and accessibility. In the case of Bomet the centres and the existing CBD are still of lower category commercial and business centres and the applicability to Bomet as a municipality is limited. Secondly the various barriers in the form of structural elements will be a handicap to its application. This theory needs to be applied to a far much bigger and advanced region than Bomet Municipality.

3.2.6 Alternative 'E' – Hierarchical multi-nuclei model

This model is supported by the existence of several independent centers with the municipality. These centers are then ranked using the different levels and types of services being provided in order to arrive at the hierarchy of importance. Under this model, the leading centers are then allowed to grow and take up difference specialization roles. This particular model aptly fits the

situation in Bomet whereas can be seen on table 5.1, the Bomet town and other twelve centers have been ranked according to their service provision abilities.

Under this theory, Bomet town which is the leading center could be allowed to grow and expand while at the same time the other centers of Longisa, Silibwet and Kapkwen or Itembe are allowed to do the same. Kapkwen has been considered here due to its strategic location vis a vis Bomet town and the powerful role this center plays in the economy of Bomet Municipality particularly in the cattle trade as well as its famous weekly market.

3.3 PREFERED DEVELOPMENT STRATEGY

3.3.1 Overview

During the stakeholder meeting held in Bomet on 'Strategies and Proposals' the issue of how development should be allowed to take place in Bomet or in what form should the development be allowed to proceed was put forward to the congregation in a simplified manner. The two choices put forward were: First, for existing Bomet town to be allowed to continue to grow outward alone and secondly to allow the other centres of Silibwet, Longisa and Kapkwen to grow simultaneously as the Bomet town grows.

Almost unanimously the stakeholders opted for the second option that of allowing the centres of Longisa, Silibwet, and Kapkwen to grow at the same time as the Bomet town grows. This implies that the theory of "Hierarchical Multiple Nuclei Theory" had more resonance with the stakeholders and they want to see it implemented in Bomet Municipality.

3.3.2 Bomet Town

As shown in Table 5.2 Bomet town or the CBD is of a higher category than the other centres and provides the highest level of services in the primary, secondary and tertiary sectors. It houses the offices of the present District Commissioner as well as being the county headquarters for the new Bomet County. It houses the offices of both Municipal Council of Bomet and the County Council of Bomet. It provides financial services to the rest of the Municipality through several banks which are sited here. It provides residential accommodation to all the Central Government, Local Government officers and the business communities of all types.

It has thus rightfully assumed the role of the CBD for the municipality. Its growth and expansion should be encouraged in a planned manner.

3.3.3 Longisa Centre

This centre is located at the entrance to the municipality along B3 road from Narok. It is a centre with a very large hinterland. The brand new level IV hospital which has just been completed is located here and being right at the opposite end of Tenwek hospital will play an important role to the people on the southern side of the Municipality provided the services will be as competitive as the ones found at Tenwek. The hospital will be an attraction not only to the People of Bomet but also the neighbouring Narok district. As a result it will bring about more people to the centre and there will be demand for goods and services which would spur its growth and development. This will continue to be the most important commercial centre in south and south western side of the municipality and its growth should be allowed to continue in a well-planned manner. Various growth triggers will need to be sited at this center.

3.3.4 Silibwet Centre

Silibwet Centre is also an important centre and provides the next hierarchy of services. Tenwek mission hospital in its environs is one of the forces of attraction for people seeking medical attention at this hospital. Due to its favourable climate and good soils a number of strategic crops are grown here. These crops include tea, pyrethrum, potatoes, onions and a large variety of horticultural produce. There is an existing 'Trigaga' tea factory located here and a number of tea collection centres which are within the municipality and in the environs.

Because of its high potential the Silibwet centre could be left to specialize in the agro based industries which will add value to the agricultural produce originating from the municipality and environs. There is a very large fertile hinterland which will act as a catchment for these produce. Needless to say these agro based industries will be a source of employment for the people of Bomet and will bring about further demands for residential accommodation hence the need to plan land for residential use and other attendant facilities. This centre, as well should be allowed to grow and expand in a planned manner.

3.3.5 Kapkwen or Itembe Centre

The Kapkwen or Itembe centre is located also along the B3 highway. This centre is equally important as it houses the only auction ring for both dairy and beef cattle in the municipality. It is hoped that this centre will play a big role in the milk and meat industry. It is envisaged that the existing slaughter house will be shifted from the CBD and sited at this centre. Similarly the centre presently has a very important weekly market with very high attendance. Being a center with adequate flat land, it is hoped that the location of the industrial part here will spur growth and provide opportunity for the various agro based industries to take off.

The growth of the milk, meat and leather industries will bring about more wealth to the centre and will provide employment in these industries. The centre already has a big market for its beef cattle which are slaughtered here with a number of meat transport vehicles coming from as far as Nairobi seen operating here. These products need to be value added through creation of medium sized industries in the sub sector as well as the agro-industrial sector.

PART IV: PROPOSED SECTORAL DEVELOPMENT STRATEGIES AND MEASURES

4.1 OVERVIEW

This part pulls together and provides insights into a wide range of strategies that have been identified and if implemented will accelerate the realization of the goals and vision of Bomet town by the year 2030.

4.2 TRANSPORT AND INFRASTRUCTURE SERVICES

4.2.1 Guiding Principles

The guiding principles in the development of an infrastructure strategy for MCB include but are not limited to the following:

- To provide timely infrastructural services to accommodate the growth of Bomet town up to the year 2030 and beyond.
- To coordinate infrastructural services planning with land use planning as described in the strategic structure plan for Bomet town.
- To create infrastructural services network that maximizes citizens' choices of choices and options.
- To create infrastructural services network that conveniently links the various services. These shall enhance services provision (e.g. Road transport, water, sewer collection network, solid waste collection, fire and rescue services, delivery of parcels and letters, street lighting, drainage, etc.).
- To enhance aesthetics, environmental conservation, public health and minimize negative impacts of transportation system on existing neighbourhoods and businesses.

The infrastructural services strategies for Bomet have been determined based on the key infrastructural services interventions discussed below:

4.2.2 Road Network

4.2.2.1 Strategies

- Systems be put in place to prepare and maintain an updated road inventory for all roads (classified, access and streets, etc.) in the municipality. These shall cover but not limited to road condition survey, available road reserve, required road reserve, classification, to be done biannually. The roads be prioritized in order of need for opening up, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction.
- Prioritized roads be budgeted for and developed in accordance to the prioritized list.

- Systems be put in place to prepare and commence acquisition of land for road reserves as shall have been identified.
- Systems be put in place to identify and address short term traffic flow constraints in the entire municipality in the short term.
- Systems be put in place to identify and address long term traffic flow constraints in the entire municipality.

4.2.2.2 Programmes

- Establishment of a Programmes Unit/Department within MCB to deal with the development and management of the transport infrastructure.
- In the short term the following traffic constraints be addressed;
 - i. Four number vehicular and NMT river crossing be undertaken along River Nyangores, between Tenwek bridge to temporary crossing to Kapkasosio centre near the murrum and sand quarry.
 - ii. A road link is developed between the CBD and Tenwek Hospital.
 - iii. A road link be developed between the CBD and Kapkasosio Centre through the murrum and sand quarry.
 - iv. A road link be developed between Merigi through Kapsimbiri area to B3 at Kyokong schools.
 - v. Initiate long-term traffic management programmes to decongest the CBD through the development of By-pass roads. Critical long-term development in this direction are the following By-passes;
 1. **Eastern By-Pass:** the eastern by-pass is envisaged to comprise of two distinct roads;
 - i) D236 from Silibwet centre through Merigi to immediately where the road crosses municipal boundary, and the road turns join B3 to Longisa centre.
 - ii) The section to Longisa will be a new road alignment.
 2. **Western By-Pass:** the western by-pass is envisaged to comprise of two distinct roads;
 - i) E184 between Junction with C24 near Silibwet to Kapkwen (Itembe), and
 - ii) E182 from Kapkwen centre to mid-section of E182, the by-pass turns crosses River Nyangores and joins C14 near Kapkesosio schools.

3. **Kapsimbir Loop** - Similarly improvement of the road through Kapsimbiri from the bridge opposite Tenwek to B3 near Kyokong schools, also linking to B3 to allow free flow of traffic from town centre to the eastern part of town.
 4. **Western Loop** - On the other hand improvement of L1 will allow traffic flow to the West, especially the town centre to join the proposed western by-pass.
- The MCB undertakes a master plan for development and maintenance of all classes of roads in the municipality. This to include acquisition of land for long term development of roads infrastructure.

4.2.3 Parking Facilities

4.2.3.1 Strategies

- Systems be put in place to prepare and maintain an updated parking inventory for all parking requirements in the municipality. These shall cover but not limited to parking condition survey, available parking, required parking spaces to be done biannually. The parking areas be prioritized in order of need for opening up, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction.
- Prioritized parking areas be budgeted for and developed in accordance to the prioritized list.
- Systems be put in place to prepare and commence acquisition of land for parking spaces as shall have been identified.
- Systems be put in place to identify and address short term traffic flow constrains in the entire municipality that relate to parking.
- Systems be put in place to identify and address long term traffic flow constrains in the entire municipality that relate to parking.

4.2.3.2 Programmes

- Establishment of a programmes unit / department to deal with the development and management of the transport infrastructure. This to include a section for parking spaces.
- In the short term the following traffic constrains be addressed;
 - i. Improvement of the existing Bus Park at the CBD.
 - ii. Development of new parking facilities in the CBD, Silibwet, Tenwek, Kapkwen and Longisa for Buses, *Matatus*, Motorcycles and private vehicles.
 - iii. Development of new parking facilities in the Kapkwen and Longisa for Lorries.

- The municipality undertakes a master plan for development and maintenance of all types of parking spaces in the municipality. This to include acquisition of land for long term development of this infrastructure.

4.2.4 Non-Motorized Facilities

4.2.4.1 Strategies

- Systems be put in place to prepare and maintain an updated NMT facilities inventory for all within the municipality. These shall cover but not limited to NMT facilities condition survey, available NMT facilities, required NMT facilities etc. These be done biannually. The NMT facilities be prioritized and documented in order of need for opening up, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction are documented.
- Prioritized NMT facilities be budgeted for and developed accordingly.
- Systems be put in place to prepare and commence acquisition of land for NMT facilities as shall have been identified.
- Systems be put in place to identify and address short term NMT traffic flow constrains in the entire municipality that relate to parking.
- Systems be put in place to identify and address long term NMT traffic flow constrains in the entire municipality that relate to parking.

4.2.4.2 Programmes

- In the short term the following NMT traffic constrains be addressed;
 - i. Four number of NMT river crossing be undertaken along River Nyangores, between Tenwek bridge to temporary crossing to Kapkasosio centre near the murrum and sand quarry.
 - ii. A NMT link be developed between the CBD and Tenwek hospital.
 - iii. A NMT link be developed between the CBD and Kapkasosio centre through the murrum and sand quarry.
 - iv. A NMT link be developed between Merigi through Kapsimbiri area to B3 at Kyogong schools.
 - v. Provision for adequate footpaths and cycle tracks network on the existing roads; Along B3 from Kapkwen to Kyogong and C24 to Tenwek turnoff form CBD at the Bus park entrance.

- The municipality undertakes a master plan for development and maintenance of NMT facilities in the municipality. This to include acquisition of land for long term development of this infrastructure.

4.2.5 Railway Transport

4.2.5.1 Strategies

- Systems be put in place to identify and address long term railway transport needs for the entire municipality.

4.2.5.2 Programmes

- The municipality undertakes a master plan for development of Railway transport in the municipality. This to include acquisition of land for long term development of this infrastructure.

4.2.6 Air Transport

4.2.6.1 Strategies

- Systems be put in place to identify and address long term Air transport needs in the entire municipality and in the region.

4.2.6.2 Programmes

- Acquisition of land for expansion the existing air strip to national standards.
- Undertake rehabilitating and extending the runway and construction of a terminal building with related amenities with Kenya Airport Authority as a partner.
- The municipality and Kenya Airports Authority as a partner to undertake a master plan for development of air transport in the municipality to international standards. This to include acquisition of land for long term development of this infrastructure

4.2.7 Road Safety and Security

4.2.7.1 Strategies

- Systems be put in place to prepare and maintain an updated Road Safety and Security inventory for existing facilities within the municipality. These shall cover but not limited to road safety and security facilities condition survey, available facilities, required facilities etc. These be done biannually.

- The road safety and security facilities be prioritized in order of need for opening up, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction are documented.
- Prioritized road safety and security facilities be budgeted for and developed in accordance to the prioritized list.
- Systems be put in place to prepare and commence acquisition of land for road safety and security facilities as shall have been identified.
- Systems be put in place to identify and address short term road safety and security constrains in the entire municipality that relate to road safety and security.
- Systems be put in place to identify and address long term road safety and security constrains in the entire municipality that relate to road safety and security.

4.2.7.2 Programmes

- In the short term the following Road Safety and Security constrains be addressed;
 - i. Provision of street lighting in strategic areas of the CBD, Tenwek, Silibwet, Kapkwen and Longisa.
 - ii. Development and provision of road safety measures in identified sections of B3; from Longisa centre to Kapkwen centre and B24 from junction with B3 to Silibwet centre.
 - iii. The Road Safety and Security measures be incorporated to all new the development project and programmes being undertaken in the municipality through a by-law.
- The municipality undertakes a master plan for development and maintenance of road safety and security measures in the municipality. This to include acquisition of land for long term development of this infrastructure.

4.2.8 Storm Water Drainage

4.2.8.1 Strategies

- Systems be put in place to prepare and maintain an updated storm water drainage system inventory for the facilities within the municipality. These shall cover but not limited to storm water drainage network facilities condition survey, available facilities, required facilities etc. These be done biannually.
- The storm water drainage network facilities be prioritized in order of need for opening up, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction are documented.

- Prioritized storm water drainage network facilities be budgeted for and developed accordingly.
- Systems be put in place to prepare and commence acquisition of land for storm water drainage network facilities as shall have been identified.
- Systems be put in place to identify and address short term storm water drainage network constrains in the entire municipality.
- Systems be put in place to identify and address long term storm water drainage network constrains in the entire municipality.

4.2.8.2 Programmes

- In the short term the following storm water drainage network constrains be addressed;
 - i. Cutoff drain at Kyogong area.
 - ii. Major drain lining in the special planning area.
 - iii. Line CDB main drains – identified 4 no. Storm water drains.
- The municipality undertakes a master plan for development and maintenance of storm water drainage network measures in the municipality. This to include acquisition of land for long term development of this infrastructure.

4.2.9 Water facilities

4.2.9.1 Strategies

- Systems be put in place to prepare and takeover management and development of water supply and distribution in the entire municipality.
- Systems be put in place to prepare and maintain an updated water supply facilities inventory for the facilities (public and community) within the municipality. These shall cover but not limited to water supply facilities condition survey, available facilities, required facilities etc. These be done biannually.
- The water supply facilities be prioritized and documented in order of need for new supply, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction are documented.
- Prioritized water supply facilities be budgeted for and developed accordingly.
- Systems be put in place to prepare and commence acquisition of land for water supply facilities as shall have been identified.
- Systems be put in place to identify and address short term water supply needs in the entire municipality.

- Systems be put in place to identify and address long term water supply needs in the entire municipality.

4.2.9.2 Programmes

- In the short term the following water supply constraints be addressed;
 - i. Municipality forms a water and sanitation company to take over operations of the existing water supplies and distribution facilities.
 - ii. Develop and implement an improvement master plan for the existing water supply and distribution facilities.
 - iii. Supply water to all residents in the CBD, Kapkwen, Bomet/ Silibwet Junction (junction of B3 and B24) and special planning zone.
- The municipality undertakes a master plan for development and maintenance of water supply system in the municipality. This to include; development of a gravity water supply and distribution system on River Nyangores, and acquisition of land for long term development of this infrastructure.

4.2.10 Sewerage Facilities

4.2.10.1 Strategies

- Systems be put in place to prepare and takeover management and development of sewerage collection facilities in the entire municipality.
- Systems be put in place to prepare and maintain an updated sewerage collection facilities inventory for the facilities (public and community) within the municipality. These shall cover but not limited to; condition survey, available facilities, required facilities etc. These be done biannually.
- The sewerage collection facilities be prioritized and documented in order of need for new development, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction.
- Prioritized sewerage collection facilities be budgeted for and developed in that order.
- Systems be put in place to prepare and commence acquisition of land for sewerage collection facilities as shall have been identified.
- Systems be put in place to identify and address short term sewerage collection needs in the entire municipality.
- Systems be put in place to identify and address long term sewerage collection needs in the entire municipality.

4.2.10.2 Programmes

- In the short term the following water supply constraints be addressed;
 - i. Municipality forms a water and sanitation company to take over operations of the existing sanitation facilities.
 - ii. Develop and implement an improvement master plan for the existing sanitation facilities.
 - iii. Connect all CBD residents to the newly developed sewerage treatment works.
- The municipality undertakes a master plan for development and maintenance of sanitation facilities system in the municipality. This to include; development of a new sewage treatment works near the murrumbidgee and sand quarry near Kapkasosio schools and acquisition of land for long term development of this infrastructure.

4.2.11 Institutional Considerations

4.2.11.1 Strategies

- Systems be put in place to prepare and address programmes financial needs for new development, routine maintenance, periodic maintenance, rehabilitation, reconstruction, and construction for facilities within municipality.
- Systems be put in place to prepare and undertake sourcing for development funds for all programmes to be undertaken within the municipality.
- All programmes be prioritized in accordance to need and be funded for development in accordance to the prioritized list.
- Systems be put in place to prepare and ensure that funds are made available for acquisition of land for long term facilities development.

4.2.11.2 Programmes

- In the short term the following funding constraints be addressed;
 - i. Establishment of operational systems for programmes unit for all programmes and formation of water and Sanitation Company.
 - ii. Funding of immediate emergency programmes for all the sectors.

The municipality undertakes a master plan on how to source and fund for short and long term programme. This is to cover programme in all sectors and should address how to get support from local, national, regional and international development partners for the development agenda for Bomet financially.

4.3 ENVIRONMENT STRATEGY

The section proposes environmental strategies and action plans to mitigate environmental destruction and ensure development of Bomet town with environmental sustainability. A summary of sectoral environmental components and issues has been done and recommendations given accordingly.

4.3.1 Solid waste management

4.3.1.1 Issues

Poor management of solid waste was identified as the most significant environmental problem in the town, with the following issues;

- Littering and dumping in open places
- Poor street sweeping
- Lack of primary waste storage bins mainly at household level and in commercial streets
- Poor collection coverage and frequency
- Poor transportation and disposal techniques
- Dumping in an illegal dumpsite
- Lack of protective clothing for waste handlers
- Plastic menace
- Weak LA environmental management institution
- Inadequate waste handling technology
- Inadequate funding
- Weak legal framework and enforcement
- Minimal waste recovery/ recycling
- Mixing of municipal waste with hazardous waste mainly medical waste

4.3.1.2 Strategies/plans

- Council to pass by law requiring all town residents to have waste bins
- Council to install street bins and elevated masonry waste storage cubicles for ease of waste collection
- Increase waste collection coverage and frequency
- Adopt the seven instruments proposed for plastic management for Kenya (UNEP, 2005) in Box 4.1 below.
- Use enclosed and NEMA licensed waste collection vehicles.

- Close and relocate the illegal dumpsite to the official dump site. Fence and plant trees along the new dumpsite boundary and cover deposited waste with soil.
- Provide protective clothing to waste handlers.
- Establish a department of Public Health and Environment (PHE) in the council to handle solid waste management among other environmental issues. The environmental section can later be elevated to a fully-fledged environmental department.
- Provide adequate waste handling technology.
- Make waste management bylaw and build enforcement capacity for the existing waste management laws.
- Promote waste recovery/recycling.
- Handle and dispose hazardous waste separately from the normal municipal waste. Follow hazardous waste management guidelines.

Box 4.1: The Proposed Plastic Management Policy for Kenya.

1. A ban on plastic shopping bags that are less than 30 microns in thickness.
2. Consumer awareness and anti-littering campaign.
3. Promotion of voluntary schemes such as a national code of practice for retailers.
4. A plastic bag levy collected from suppliers.
5. Support for development of environmentally-friendly alternative bags.
6. Support for development of an effective plastic bags recycling system.
7. Support for development of a managed disposal system to cater for the plastic bags that will enter the waste stream irrespective of the measures taken.

Source: UNEP, 2006

4.3.2 Waste water disposal

4.3.2.1 Issues

- Disposal on Land and in water bodies
- Lack of sewer in the entire town

4.3.2.2 Strategies/plan

- Provide sewer especially in CBD and the high density areas

4.3.3 Degradation of water resources

4.3.3.1 Issues

- Riparian encroachment

- Pollution from eroded soil, oils, greases, agrochemicals, urban storm, waste water, car washing and solid waste.
- Increased human settlements/population, over subdivision of land into small parcels, overgrazing, poor agricultural activities, removal of indigenous vegetation and planting of eucalyptus trees at Sinoko swamp and other water source areas.
- Potential of underground water pollution from pit latrines.

4.3.3.2 Strategies/plans

- Observe 10-30 metres wide riparian reserve from the high water mark on all water bodies and keep it under natural vegetation cover.
- Control water polluting sources/agents.
- Discourage more human settlements/population and land subdivision to a minimum of one acre near water sources. Control grazing and agricultural activities in the swamps, wetlands and other water catchment areas. Replace the eucalyptus trees with indigenous vegetation. Formulate detailed environmental management plan for the swamps and other water resource areas.
- Control human activities at or near the water sources. Use the waters sources sustainably for domestic, livestock and small scale irrigation, fishing, recreation and ecotourism. Form a water users/ stakeholder's management committee and formulate a comprehensive environmental management/action plan to help in managing the water resources.
- Provide sewer or waterborne toilets to stop potential of underground water pollution.

4.3.4 Loss of vegetation cover

4.3.4.1 Issues

- Loss of vegetation cover from urban development intensification, infrastructure development, building material quarrying, agricultural activities, energy source and livestock feeding
- Replacement of indigenous species with exotic species

4.3.4.2 Strategies/plans

- Increase vegetation cover town wide with dominant indigenous species such as Acacia species, Markhamia Ficus Lutea, Ficus natalensis, Ficus Sur, Ficus sycomorus, Ficus thonn, ingii, Albizia species, Kroton species, Podocarpus falcatus, Prunus Africana,

Bamboo among Lutea, others. (The District forest officer to advice on more indigenous species)

- Use carbon credit mechanisms to promote tree planting. This involves annual financial payment for keeping some agreed woodlot (Contact NEMA office for details).
- Promote efficiency in wood fuel utilisation
- Promote use of non-wood building materials and energy sources
- Practice agro forestry
- Control livestock grazing in urban beautified areas

4.3.5 Land degradation

4.3.5.1 Issues

- Soil erosion from water(including urban storm) and wind
- Open holes, trenches, pits, quarry sites, abandoned water wells and pit latrines
- Land pollution from used oils and greases, agrochemicals, solid and liquid wastes
- Dumping of building demolition and excavated materials
- Flooding
- Unsustainable human settlement and activities on the hills.

4.3.5.2 Strategies/plans

- Control soil erosion on roads and bare spaces including “shambas” through the use engineering road side erosion control techniques, plant vegetation cover, terrace sloppy areas and pave dusty roads and footpaths
- Provide covered urban storm drainage system
- Backfill open holes and abandoned quarries on the land
- Control the specified land pollution sources/agents
- Ensure building demolition and excavated materials are dumped on council authorized sites.
- Discourage human settlement and unsustainable agricultural practices on the hills. Control land subdivision to a minimum of one acre on the sloppy areas and near the water sources.
- Introduce mountain ecotourism activities.

4.3.6 Flooding

4.3.6.1 Issues

- Flooding of built up and low lying areas
- Lack of or blocked storm drainage systems
- Disease vectors breeding grounds

4.3.6.2 Strategies/plans

- Provide underground storm drainage system in densely built up areas and keep it free from blockage
- Drain flooded areas
- Enhance sustainable management of upstream water catchment areas to avoid downstream flooding
- Use engineering and environmental flood control measures
- Use integrated disease vector control measures in the flooded areas

4.3.7 Air pollution

4.3.7.1 Issues

- Vehicle exhaust and smoke from burning materials mainly solid waste.
- Foul smells from rotting garbage and pit latrines
- Dust from roads, footpaths and bare grounds
- Indoor air pollution from use of wood, charcoal and kerosene as energy sources, smelling unkempt urinals and waterborne toilets

4.3.7.2 Strategies/plans

- Ensure vehicles meet exhaust emission standards
- Promote use of non-motorized transport, organize it and provide the necessary supporting infrastructure such as cycling lanes and parking grounds
- Control open burning of materials including solid waste especially in crowded areas
- Safely dispose rotting organic matter and improve hygiene standards in pit latrines, urinals and waterborne toilets to kill the foul smells
- Pave roads/footpaths and improve land vegetation cover to contain dust
- Promote use of cleaner domestic energies such as electricity and liquefied Petroleum Gas to control indoor air pollution

4.3.8 Aesthetic pollution

4.3.8.1 Issues

- Visual pollution from many, large and poorly sited outdoor advertising billboards and sign boards.
- Poorly sited illegal structures (e.g. kiosks) built of rudimentary materials
- Vegetation removal

4.3.8.2 Strategies/plans

- Siting of outdoor advertisement billboards and signs boards to be approved and regulated by council physical planning department
- Control illegal structures and building materials
- Enhance greenery and town beautification

4.3.9 Noise pollution

4.3.9.1 Issues

- High noise levels from churches, bars and discos, bus park, loud speakers' advertisements and moving vehicles.
- Lack of enforcement of the national noise standards

4.3.9.2 Strategies/plans

- Promote use of acoustics materials and measures at the noise sources.
- Discourage use of loud speakers.
- Discourage heavy traffic from densely populated areas
- Enforce EMCA noise standards.

4.3.10 Public recreation ground

4.3.10.1 Issues

- Poorly maintained recreation grounds with no trees.

4.3.10.2 Strategies/plans

- Identify and establish public recreation grounds at strategic positions within the town. Buy or acquire land compulsorily
- Encourage sharing of private(e.g. hotels) and institutional (e.g. schools, churches) recreation grounds with the general public
- Factor provision of public recreation grounds in future town development plans

4.3.11 Institutional, legal and policy framework

4.3.11.1 Issues

- Weak /lack of environmental management department in the council
- Weak/ overlapping environmental legal framework and Poor enforcement

4.3.11.2 Strategies/ plans

- Establish environment section in the council's department of public health to address urban environmental issues. Rebrand it department of public health and environment and work towards establishing a fully-fledged department of environment in the council
- Strengthen environmental laws and avoid overlap. Create enforcement capacity.

4.3.12 Stakeholders involvement

4.3.12.1 Issues

- Poorly developed stakeholders involvement structures
- Poor participation incentives
- Minimal public/ private partnership
- Poor community involvement

4.3.12.2 Strategies/plans

- Strengthen structures for stakeholders participation in environmental matters
- Broaden incentives to attract wide participation
- Broaden and strengthen public/ private partnership
- Enhance community participation

4.3.13 Poverty and environment

4.3.13.1 Issues

- Poverty is an agent of environmental degradation
- The poor suffer most blunt of environmental degradation

4.3.13.2 Strategies/plans

- Reduce poverty by initiating economic empowerment programs for the poor
- Work with the poor in improving their neighbourhood environments
- Channel the bulk of environmental resources and programs to the poor

4.3.14 Environmental awareness

4.3.14.1 Issues

- Low environmental awareness promotion
- Low residents' environmental consciousness
- Poor environmental ethics

4.3.14.2 Strategies/plans

- Promote community environmental awareness through electronic and print media(including poster),publics meetings, organized sector forums, youth and women

4.3.15 Environmental management tools

4.3.15.1 Issues

- Low/ no application of environmental management tools such as EIA, EA and SEAs in urban projects, policies and programs

4.3.15.2 Strategies/plans

- Ensure/promote and monitor application of environmental management tools where necessary.

4.4 ECONOMIC AND INVESTMENT STRATEGIES

4.4.1 Strategic Focus on Three Thematic Thrusts

All stakeholders in Bomet are agreeable to the fact that there is a need to catalyse economic activities in the town in order to transform the economic profile of the Town. Given the emerging County system of government, Bomet Town will be expected to be the centre for a wide range of partnership initiatives to leverage resources and expertise beyond the Council in order to address the economic development challenges of accelerated and shared economic growth as well as job creation in the Town. Proposed activities and programmes towards that end are based on 3 thematic thrusts:

1. Improving the capacity of MCB business regulatory regime to be amenable to the promotion of private enterprise;
2. Increasing selected agricultural sector value chains' productivity and stimulating other sectoral opportunities; and
3. Stimulating non-farm employment and income generating opportunities.

4.4.2 Growth Sectors

As part of the field work, the Study Team endeavoured to establish from the Bomet residents what the growth sectors are in the Town. According to the respondents, the growing sectors are **agriculture, business, education, and boda boda transport services**. However in the same sectors, some aspects were seen to be declining, e.g., in agriculture, maize growing, dairy farming, potatoes growing, pyrethrum growing and also small scale businesses and food crops as indicated below in *Table 4.1*.

Table 4.1: Economic Activities with Perceived Growth or Decline Trends, 2011

Participants	Growth Sectors	Declining Sectors
Mixed Group	-Agriculture/vegetable farming -Business -Education -Informal sector/jua kali -Public works/ construction industry -Tea farming -Transport –mainly bodaboda and motorcycle taxis	-Agriculture (coffee) -Bar/hotels -Cabbage growing -Dairy farming -Food industry -Livestock trade -Maize farming -Potatoes farming -Pyrethrum farming -Recreation investments -Small scale business/shops -Posho mills

Source: Matrix Development Consultants, 2011

Transportation sub-sectors like *boda boda* taxis have grown by leaps and bounds but have brought in hazards like numerous accidents affecting the cyclists and pedestrians. The sector is also unregulated and support facilities in the town are minimal. This sector needs planning, close regulation and support in terms of provision of parking bays, picking and dropping zones within the town. The declining sectors in agriculture require revamping by the line ministries and private sector service providers.

In order to improve growth and accelerate development, there is need for improvements in services like credit provision, supply of electricity and inclusion of business community in the formulation of bylaws, improving market facilities, provision of security and the revitalization of Kenya Cooperative Creameries (KCC). All the growth acceleration pointers are listed below, and these are some of the areas that the plan for the town should focus on what is shown in *Table 4.2*.

Table 4.2: Indicative Growth accelerators for Bomet, 2011

▪ Access to credit and loans ▪ Adequate electricity supply ▪ Adequate water supply and sewerage services ▪ Improving on business management ▪ Dialogue and involvement of business community in formulation of bylaws ▪ Establishment of industries and factories ▪ Creating Forums for business association	▪ Having a Good market facility ▪ Improvements of feeder roads ▪ KCC revitalization ▪ Market for selling products ▪ Reducing cost of inputs through bulk buying ▪ Security improvements ▪ Stability in commodity prices and production
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Source: Matrix Development Consultants, 2011

In order to raise the competitiveness of Bomet, MCB in collaboration with the Bomet County government will need to:

- a) Review and harmonize the business licensing regime in the town and other relevant bye-laws to make them pro-business; and
- b) Facilitate provision of improved infrastructure in the town and surrounding localities.

There are specific sectoral areas where the residents felt there is need for focus and how the support can be provided. These are summarised in *Table 4.3* below.

Table 4.3: Suggested Sectoral Growth Focus for Bomet, 2011

Tea industries & other farmer related enterprises	• Forming cooperatives to augment the services of the Municipal council by investing in infrastructure development to enhance agriculture productivity	• Support from the municipal council and the community in ensuring transparency and accountability
Private sector – large businesses	• Developing associations to facilitate and lobby for improvement of the town • Increasing investment and formation of association to promote urban development • Participation in key investments of the council	• County Administration • Facilitate public –private partnerships for the growth of the town • Financial institutions • Funding of businesses
Private sector – small businesses	• Develop cooperatives to participate in investments for the growth of the town • Working with municipal council to improve the livelihood of the community members through support of various businesses. • Ensuring the provision of key amenities and services that support the growth of their business.	• County Administration good will • Access to credit from finance institutions and Micro-finance • Financial support • Municipal Council infrastructure support

Women groups	• Awareness creation • Lobbying for women involvement at all levels of urban planning and development • Promoting the role & participation of women for the growth of the town • Supporting women driven initiatives and investment in scaling up urban development	• Advocacy for change & involvement • CBOs support in Awareness creation • Credit from Donors • Micro-finance capacity building on credit management • NGOs support in capacity building • Resident Associations moral support
Youth groups	• Lobbying for jua kali sheds to facilitate job creation for the youths • Promoting the provision of essential facilities for the youths and • Promoting youth development initiatives to reduce youth unemployment and addressing other needs of the youth in urban planning and development i.e. the need to have recreational facilities and jua kali sheds • Supporting and promoting vocational skills development to enhance self-reliance among the youths	• Advocacy for change & involvement • Credit from Donors • Financial support from Micro-finance institutions • Municipal councils moral support • NGOs support incapacity building • Resident Associations goodwill

Source: Matrix Development Consultants, 2011

4.4.3 Existing Opportunities

The opportunities that can be utilized by Bomet Municipality according to the interviewed residents mainly dwell on agricultural production enhancement, improvement of infrastructure, and empowerment for the residents as tabulated in *Table 4.4*.

Table 4.4: Suggested Existing Business Opportunities for Bomet, 2011

Opportunity	Reasons
Tea production and factories	Can engage the tea factories to support roads improvements and in addressing tea productivity through public-private partnerships
Several shopping and trading centers	Opportunities to invest in jua kali sheds for the youths and construction of stalls to improve livelihoods for women
Land availability	Expansion of town amenities and required infrastructure
Closeness to Mulot trading centre	Easy to access to markets for products in the neighbouring districts
Availability of land for town expansion	-Adequate land for Expansion and development of town and For essential facilities development
Availability of vibrant of cooperative societies	Very good resource in facilitating infrastructure investments if well utilized by the management and members
Available water resources	Easy for water supply expansion
Dairy industry	Can generate and create more employment opportunities for the youths and women
Proactive business community willing to support urban development	Ready to participate in town expansion and development
Quarry for sand and building blocks	Available materials for improvement of housing and estates development

Source: Matrix Development Consultants, 2011

4.4.4 The Need to Develop Agribusiness

Agribusiness is a broad concept that covers input suppliers, agro-processors, traders, exporters and retailers. Agribusiness provides inputs to farmers and connects them to consumers through the financing, handling, processing, storage, transportation, marketing and distribution of agro-industry products. First comes agricultural input industry for increasing agricultural productivity, such as agricultural machinery, equipment and tools; fertilizers, pesticides, insecticides; irrigation systems and related equipment. Secondly, agro-industry involves the value addition in food and beverages; tobacco products, leather and leather products; textile, footwear and garment; wood and wood products; rubber products; as well as construction industry products based on agricultural materials. Thirdly, equipment for processing agricultural raw materials is important and this includes machinery, tools, storage facilities, cooling technology and spare parts. Lastly, but not least important, is various services, including financing, marketing and distribution firms, including storage, transport, ICTs, packaging materials and design for better marketing and distribution.

From the discussion in chapter 2 above, it is clear that agribusiness still needs to be developed in Bomet, by catalyzing farming plus all the other industries and services that constitute the supply chain from farm through processing, wholesaling and retailing to the consumer.

4.4.5 Rural Urban Linkages for Development of Bomet

In Bomet the growing rural urban areas interdependent through the constant interchange of people, goods, capital, ideas and information must be acknowledged. Well-managed urban Bomet will continue to act as trading and processing centres for agricultural produce. It will also act as a crucial service hub, providing infrastructure connections, business and administrative services, and markets. In addition, the “multi-spatial household”, i.e. a household with members living in different locations in order to take advantage of employment or educational opportunities in different locations, is now a well-established feature as a result of improved means of transport and communications. Recognition of rural-urban linkages has become all the more important in light of the ongoing decentralization of government functions.

In order to further develop rural-urban linkages in Bomet MCB will:

- a) Encourage agro-processing enterprises close to urban areas to support livelihoods for both urban and peri-urban residents;
 - b) Encourage specific programmes granting support to small- and medium-sized enterprises in urban areas to be funded by the national and Bomet county governments;
- and,

- c) Sustain the focus on the establishment of infrastructure linking urban and rural markets to enable both urban and rural residents to access both markets.

4.4.6 Some Quick Wins and Priority Projects for Economic Growth of Bomet

4.4.6.1 Quick-Win Projects

There are certain projects that can catalyse business in Bomet are relatively cheap and easy to implement. They can also be designed to head off community frustration at delays to more substantial improvements of the town that can be often dogged by long processes and procedures. *Quick Win* projects can bring about vital gains in the well-being of residents. The *quick win* projects which can be implemented very first and also realize good results for the town were mainly improvement of access roads, electricity network, construction of markets, revitalisation of maize milling, having polytechnics, market centre improvement, KCC factory revitalization, potato processing factories and specific wards are shown in *Table 4.5* below as suggested by the different groups that participated in the FGDs.

Table 4.5: Suggested Quick Wins and Priority Projects for Business in Bomet

Ward	Group	Priority project	Reasons
Kapsimotwa Mixed		Improvement of feeder roads	To improve agriculture productivity hence promote investments in the town
		Improve education facilities to transform the youth	Enhance youth ability for employment initiatives
Cheboin Mixed		Construction of market at Cheboin with stalls and sheds for business	Improving business in the municipality
Singwet Mixed		Electricity network & connection improvement	Improving business and living conditions
Mutarakwa Mixed		Market centre improvement	Improving business in the centre
		Maize milling industry improvement	Improve food security and incomes
Tuluapnmosonik Mixed		Polytechnic for vocational skills development for the youths	To reduce youth unemployment
Tuluapnmosonik Women		Expansion of town amenities and required infrastructure development like roads to link up with Mulot trading centre easily	Easy to access markets for products in the neighbouring districts
Kapsimotwa Mixed		Market centre improvement	Improve trade
		KCC factory revitalization	Support dairy farming
		Potato processing factories	Boost potato production

Source: Matrix Development Consultants, 2011

4.4.7 Improving Market Competitiveness of Bomet Tea

There is an urgent need to improve market competitiveness of tea produced by the smallholder tea growers in Bomet through dissemination of information, knowledge and skills using the most efficient and available extension pathway so as to achieve quality and food safety assurance through certification to meet customer demands. A project (Tea Research Foundation, 2010) has been proposed to FAO that aims to achieve this through training and dissemination of information and knowledge on good agricultural practices (GAP) to the farmers using FAO proven group training models such as farmer field schools (FFS). The tea extension staff will also be trained on pesticide residues. A comprehensive MRL's traceability mechanism will be established to cater for smallholder tea sub-sector in the region whereby supervised field trials will be set up in collaboration with the respective institutions.

4.4.8 Indicative Employment Effects of the Proposed Activities

4.4.8.1 CBD

The Jua Kali Sheds can be increased in numbers to create work spaces for more artisans. The current existing sheds (about 500m² of working space) if increased as suggested by **expansion** of new sheds by about 1000m² of working space for artisans working outside the sheds could create additional employment of about 100 artisans and workers.

It is also suggested that to provide more hotel facilities, 2 new tourist class hotels in the town can be built. This would create employment for not less than 1000 direct and indirect workers.

On the retailers Sheds next to Bus Stop, there are existing sheds under construction (about 150m² of mini shops) with a potential to create employment for about 200 retailers.

4.4.8.2 Silibwet (Merigi Centre)

As proposed it is envisaged that more dairy cattle farms (e.g. 100 each 2 acre zero grazing farms) would create employment and incomes for about 500 new farmers. The proposed establishment of a slaughter house (200m² of space), and a potato processing factory (500m² of space) would additionally create employment for at least 1200 people. It is also proposed that there be established two new storage centres each 500m² of space for onions. An important crop that shows promise and can be increased is pyrethrum production (e.g. 100 each 5 acres of new farms). The above new measures could create employment for an additional 500 people. Tea is widely grown in the area and it is proposed that farms be introduced to growing new Purple tea variety known as TRFK 306 (e.g. 20 each 10 acres of new farms). Initially this could

create employment for at least 200 people though the benefits would be felt much later when harvesting starts.

4.4.8.3 *Itembe (Kapkwen)*

Itembe shows a lot of promise for further development of dairy cattle farms and it would be possible to vigorously promote e.g. 200 each 2 acre zero grazing farms. This would catalyse the establishment of a slaughter house (500m² of space) and an improved cattle auction shed (1500m² of space). A new Agro Industrial Zone (e.g. for processed tea and other products) totaling 3000m² of space which could all together with the other measures create employment for at least 1500 people.

4.4.8.4 *Kapkesosio, Tarakwa, Cheboin and Singorwet Centres*

In order to encourage additional retail trade new sheds for retail trade (about 300m² of mini shops) could be established as well as new small scale Jua Kali sheds of about 2000m² of working space for artisans. These would create employment for at least 500 people.

In order to encourage tourism, the Kipsigis Heritage site at Arorwet Valley in Kapkesosio should be popularized through a new tourist facility at the same location (restaurant and small lodge of about 1000m² space). This would create employment for at least 150 people.

4.4.8.5 *Kapsimotwa*

The area is emerging as a promising dairy cattle farms and this can be further catalysed by encouragement of establishment of new activities, (e.g. 200 each 2 acre zero grazing farms). In addition, potato growing (e.g. 500 each 10 acre farms) can further increase incomes in the area. Hence a small Agro Industrial Zone (e.g. for processing potatoes) with facility totaling 500m² of space and a new small dairy for processing **new milk** products with facility totaling 1500m² of space could be established. Increased fishing activities can be catalyzed through fish ponds along banks of River Nyangores (e.g. 250 each 0.5 acre ponds). These have the potential to create many employment and income opportunities.

4.5 HOUSING AND SETTLEMENTS STRATEGIES AND PROGRAMMES

4.5.1 Overview

This section outlines action plans strategies and programmes for the housing and settlement sector as envisaged at this stage of the plan preparation. The proposals will be critical in

ameliorating the housing challenges in Bomet bearing in mind the constitutional requirement and the eminent litigations by residents. Where possible these proposals are expressed in terms of short, medium and long term activities, strategies and programmes.

4.5.2 Housing and Informal Settlements

The main problems related to housing and human settlements and that have been discussed in detail in preceding sections include: inadequate housing, under investment in low and middle income housing, inadequate rental housing, emergence of “slum type housing” in freehold areas, lack of adherence to zoning plans and weak capacities for development control and enforcement within MCB, among others.

4.5.2.1 Strategies

These shall include:

- Short term measures include re-planning of different parts of the town, thereby extending planning guidelines, norms and services to the free hold areas;
- In the short and medium term and in consultation with national and County governments, develop appropriate incentives to encourage private sector participation in housing delivery that meet the requirement of “adequate housing”
- Support the formation of housing cooperatives and groups.

4.5.2.2 Programmes

These shall include:

- Create collaborative and networking framework to encourage increased housing stakeholders participation particularly government participation and spending in local housing through existing institutional frameworks such as Civil Servants Housing Scheme and National Housing Corporation (NHC) and any other new institutional arrangement that may emerge from the devolved governance.
- Inculcating Slum Prevention Strategy with particular focus on free hold areas
- Develop public education programmes: on various themes and aspects of building/construction; Education on rational use of land; Awareness/Education on innovative techniques of building decent and affordable construction; regular education on the content and implication of the various bills and policy in land sector, new building and planning Bills and Regulations; observance of road reserves and setbacks among others.

Further recommendations on housing and informal settlements in the area around the CBD include:

- Re-planning of freehold areas around the CBD covering settlements next to Twig Restaurant, Soy Garage, Umoja, Raia Framers and Chepturkana among others.
- With adequate services (sewer , roads, electricity etc.) high-density-low income residential developments are recommended
- Plots next to Keben/Chelsa Junction including Chelsa, Keben, and Mobet Christian Riverside should be re-planned. These areas should be zoned for Medium density-Middle Income residential.

4.5.3 Land Use and Housing

Some of the land related challenges identified include high cost of land, excessive sub-division, encroachment on road reserves and way leaves etc.

4.5.3.1 Strategies

These shall include:

- Short term measures should include community education on appropriate space standards, disadvantages of excessive subdivisions and proper use of land
- Involvement of community in setting aside and safe guarding land for roads and services.

4.5.3.2 Programmes

These shall include:

- Surveying and titling of plots particularly in freehold
- Identifying land for land banking and developing appropriate basic infrastructure

4.5.4 Building Materials

Challenges include high cost of building materials, inadequate building materials such as sand, poor infrastructure etc.

4.5.4.1 Strategies

These shall include:

- In the short term assess the suitability and quality of the sand from various local sources.
- Introduce more sustainable quarrying techniques to ensure environmental safety and increased output of the product in a sustainable manner.

- In the medium term interventions should focus on injecting new improved and energy efficient brick making techniques to ensure uniformity should be encouraged.
- Introduce innovations in the building material sub-sector.
- In the short-medium term proper guidelines on production and use of bricks and other alternative materials should be introduced, promoted and aggressively disseminated throughout the planning areas.

4.5.5 Planning Related Constraints Affecting Housing

The main planning related challenges that have bearing on housing include inadequate planning capacities, poor implementation of development control and zoning regulations, limited enforcement and monitoring of building/construction works, chaotic building layouts in free hold areas etc.

4.5.5.1 Strategies

These shall include:

- In the short run, the municipal council should put in place an engagement partnership framework that will encourage other stakeholders to participate in a structured and predictable manner in the planning and building activities including approval and enforcement processes.
- In the short to medium term employ technical staff with sound planning and building competencies (planners , architects, engineers)
- Ensure enforcement of development standards and regulations with emphasis on self-regulations.

4.5.5.2 Programmes

These shall include:

- Formation of a broad based “Bomet Stakeholders Planning Sub Committee”- to raise the profile of Planning and Building in the area.
- Public education on planning on various aspects of building/construction
- Education on rational use of land and community based self-regulatory framework.

4.5.6 Non Adherence to Planning and Distribution Standards

The existing planning and housing codes and standards should be applied bearing in mind current and future priorities of Bomet town as identified during consultations. The proposals should be assessed based on the criteria of how satisfactorily they meet the needs of the

residents. The following infrastructure and services that are indispensable to guaranteeing adequate living conditions should be considered during the planning process;

4.5.6.1 Strategies

This could include the following

- Undertaking a boundary demarcation exercise to ensure access to the most proximate amenities is achieved
- Preparation of a local physical development plan
- Promotion of integration with respect to social, economic, physical and institutional aspects of development;
- Promote the integrated and balanced development of rural and urban areas in support of each other;
- Promote the location of residential and employment opportunities in close proximity to or integrated with each other;
- Optimise the use of existing physical and social infrastructure;
- Provide for a diverse range of land uses at all levels (local and regional);
- Discourage urban sprawl;

4.5.7 Poor State of Service Provision

Housing related infrastructural services such as sewer, water and electricity are inadequate within Bomet Municipality. Developments without regard to riparian reserve are also a major problem.

4.5.7.1 Strategies

These shall include:

- Immediate to short term measures should begin to focus on proper siting of pit latrines and introducing improved ventilated pit latrines. This can be done in partnership with relevant public and none- state organisations.
- Strengthening of exhauster services can also be pursued as an immediate measure where residents construct concrete lined latrines which are regularly exhaustible.
- High density settlements around the riparian area should be discouraged through proper zoning and enforcement. This is particularly the case for the settlements next to river Nyagores. Encourage rain water harvesting
- Develop and promote appropriate technologies for service provision.

4.5.7.2 Programmes

These shall include:

- In the medium-long term provide an elaborate sewer system
- Extending services to the freehold area.

4.5.8 Non Availability of housing finance

Provision for housing finance remains a major challenge in Bomet. This challenge will be addressed through the following strategies and programmes

4.5.8.1 Strategies

These shall include

- Intermediate and short term measures that focus on the review of regulatory framework that hinder access to housing finance
- Encourage cooperatives and societies to invest more in real estate including land banking
- Encourage non-conventional housing finance approaches towards housing improvement and construction ventures
- Develop five year plans on estimated housing demand growth to match projected increase in households

4.5.8.2 Programmes

- Develop site and service schemes
- Provision of home improvement finance

4.6 REVENUE ENHANCEMENT STRATEGY

There seems to be a significant level of uncertainty in estimating the amount of RMLF grant due even in the very near future. Collections from local revenue sources amount to about 50% of budgeted yields. This is so because the council is not enthusiastic in pursuing collection of local revenues as government grants are sufficient for the performance of budgeted activities.

The council has consistently complied with requirements that it:-

- Uses part of LATF fund on debt resolution and for purchase or development of capital assets to progressively increase its net worth; and
- Prepares and submits a revenue enhancement plan (REP) outlining measures to be taken to increase its gross revenue in the ensuing financial year. The council has also signed Performance Contracts with the Ministry of Local Government and with its senior

officers individually. There are no efforts to harmonize contracted performance targets with those in the Revenue Enhancement Plans (REPs) and in the approved budgets which form the basis of all council operations. Performance evaluations seem to be more focused on attaining targets set in performance contracts than those in the budgets.

4.6.1 Summary of Key Areas of Concern

1. The Council lacks the professional expertise it requires to analyse, formulate, and review policies and strategies relevant to its operations.
2. The council has no influence over determination of the amount of intergovernmental grants which constitute about half of its annual revenue.
3. The council's operations normally result in revenue deficits as its total expenditure is generally more than revenue generated to finance it.
4. About half of the council's annual revenue is used on financing personnel costs, leaving the other half to finance services provision and assets base expansion and maintenance activities.
5. The council's capital asset base is insufficient to enable it maintain a meaningful level of revenue generating public services and (b) generate sufficient revenue to sustain provision of services to the satisfaction of its residents.
6. Single Business Permit (SBP) fee payment evasion is rampant and there is no database of individuals and businesses subject to it. This makes enforcement and monitoring of licenses revenue collection difficult.
7. Lack of detailed and up to date data bases on properties situated and businesses operating in the town make assessment, billing and collection of rates, land rents, Single Business Permits (SBPs) and other fees difficult.
8. Enforcement officers and market attendants are too few to control markets activity transacted in the trading centres over the town.
9. The council does not keep detailed and separate records to enable assessment of performance and viability of each of its user charge services.
10. User charge fees levied are generally low and cannot guarantee related cost recovery.
11. There are no sufficient parking places for buses, matatus, Bodabodas and the long distant travelling trucks which park in all the trading centres of the town and parking fees are improperly classified, recorded and reported under other fees.

12. The practice of the council is to apportion the available Resource Envelope equally to the wards results into small amounts that cannot finance meaningful and visible projects at ward level.
13. Performance contract targets for the Council and its officials are not based on and harmonised with the approved budgets and attention is more focused on attaining contracted performance targets than those in the operating budgets
14. Public private partnerships for municipal services provision has not been introduced in Bomet town
15. Evasion of payment of council taxes and other dues is common. Residents and council officials appear ignorant of their duty to pay council dues.
16. The council levies a site (unimproved) value rate which generates lower rates revenue yields than the improved (site plus improvement) value rate and the amount and timing of payment of contribution in lieu of rates (CILOR) by government is generally unpredictable.
17. These registers and even the valuation rolls are not up to date, especially regarding capture of changes arising from ownership, subdivision, registered use, and contact or physical address of owners of properties. However with the ongoing automation of services this should improve.
18. The council's property tax registers, valuation rolls and physical planning maps and registers are not digitally linked and cannot be simultaneously up-dated to assist it in assessments and invoicing of property taxes due.
19. The amount and timing of payment of contribution in lieu of rates (CILOR) by government is generally unpredictable.
20. The council's accounting, reporting and other financial management operations are not fully computerized and integrated.
21. Collection of markets and other user charge revenue is constrained by:-
 - i) Evasion of payment
 - ii) The council lacks enforcement officers with skills and knowledge to interpret and enforce council by-laws.
 - iii) The market attendants are overworked and too few to control markets activity transacted everywhere over the expansive municipality.
 - iv) The council does not keep a detailed and separate record for each user charge income and related expenditure and is therefore unable to assess the performance and viability of each of its user charge services.

- v) User charges levied are generally low and cannot guarantee related cost recovery.

4.6.2 Revenue Enhancement Reforms

4.6.2.1 Increase reliance on local revenue sources

To eliminate revenue deficits the council needs to enhance annual revenue yields from all its revenue sources to the point when its operations will be funded more by locally generated revenue than by externally sourced grants. The greatest potential for increased local revenue lies in charging property and agricultural activity taxes. The council area of jurisdiction extends over 700 square kilometers of livestock, tea and pyrethrum farms from which the council can collect land rates and farm produce cess.

4.6.2.2 Contribution in lieu of rates (CILOR)

The amount and timing of payment of contribution in lieu of rates (CILOR) by government is generally unpredictable. Government offices based in the town should be invoiced directly for rates and other local taxes due on the plots they occupy or use. The approved rate struck should apply to all properties as opposed to charging a reduced rate on lands used by government.

4.6.2.3 Single Business Permit (SBP) fee

Single Business Permit (SBP) fee payment evasion is rampant and there is no database of individuals and businesses subject to it. This makes enforcement and monitoring of licenses revenue collection difficult. The council should conduct a business's survey to set-up and regularly up-date a register of businesses operating in the Town. It should also review and up-date its licenses fees regularly.

4.6.2.4 User Charge Services Cost Recovery

The council is empowered by law to regulate and control the location and operation of certain persons, matters, premises, trades and occupations. The purpose of the SBP fees it collects for the permits it issues is to facilitate regulation and control. It is desirable that fees charged ensure recovery of the cost of providing the service or regulating businesses. However, the council's services user fees are generally low and cannot guarantee related cost recovery. The council should charge fees that ensure full recovery of related operating costs and contributes to surplus reserve fund to finance planned expansion of scale and coverage of its services and renewal or replacement of its capital assets.

Revenue generated by user charge facilities such as markets, ambulance service, and public conveniences, fully covers related staff, operating, and maintenance expenses and realizes reasonable savings contribution towards a fund for expansion of the scale and coverage of the service as well as for eventual renewal or replacement of the capital assets used.

4.6.2.5 Property Tax System and Integrated Geographical Information System (GIS)

The council does not maintain a complete register of owners, users and uses of all market plots in Bomet town and all its other trading centers. It should conduct a census of businesses and land parcels in its area to establish registers of their numbers, sizes, location, use, and details of owners. Registers so developed should be maintained and continually up dated by a system which ensures all transactions relevant to property tax assessment, invoicing and collection are captured and recorded promptly and accurately.

The council's tax/rates registers, valuation rolls and survey and physical planning maps and other records that carry information such as plot numbers, sizes, levels, location, ownership and of occupancy of buildings, roads, rivers, schools, recreational grounds, etc. should be digitally integrated so that data arising from transactions relevant to revenue mobilization is captured and recorded in all related registers simultaneously and stored in a Geographical Information System (GIS) for quick retrieval for improved assessment, invoicing and collection of revenue due to the council.

The council should review its property tax system. It has already developed a valuation roll which provides a basis for charging rates. It should seriously consider adopting improvement rating which has the potential to raise more rates revenue than the site value rate which is currently enforced.

4.6.2.6 Computerization

The council is installing a computerized accounting and financial reporting programme through adoption of the Local Authority Integrated Financial Operational and Management System (LAIFOMS), accounting software developed by the KLGRP to address the unique accounting and other information needs of local authorities in Kenya.

The council's accounting, reporting and other financial management operations are neither fully computerized nor integrated. It has installed stand-alone software / packages financial reporting, budgets preparation and presentation, payroll management and vote control. It should ensure implementation of all accounting modules of the LAIFOMS programme.

4.6.2.7 *Increase investment in operating and revenue generating assets*

The council's capital asset base is insufficient to enable it sustain quality services provision to its residents. It needs to substantially increase investment in operating assets and equipment. There opportunities for investment in operating assets and equipment for efficient services delivery e.g. in refuse collection / disposal equipment and in cess pit emptying equipment and also in income generating assets such as markets, bus parks and rental housing.

The current locations of the slaughter house and bus park in Bomet town are inappropriate. The council should consult with residents and stakeholders in selecting convenient sites for relocation of these and indeed other public facilities and in deciding whether to lease out the provision of slaughter house services.

There are no sufficient parking places for buses, matatus, bodabodas and Lorries which park in the town and its trading centers. In addition, parking fees are improperly classified, recorded and reported under other fees. It should provide properly designed, serviced, secure and convenient day and overnight parking areas for all modes of public transport

4.6.2.8 *Use of resource envelope*

The practice to apportion the available Resource Envelope equally to the wards results into small amounts that cannot finance projects with visible impact at ward level. It should instead prioritize and allocate funds to projects with potential to generate positive council wide impact.

4.6.2.9 *Apportionment of development costs to beneficiaries*

Borrowed funds are best suited for financing the development of bankable projects e.g. markets, bus-parks, slaughter houses) whose expected returns are sufficient to service the loan repayment. Justification for use of borrowed funds exists when both the residents and the council do not have resources to immediately satisfy a genuine public need e.g. development of an access road or sewer connection. The council may negotiate and secure the loan, apply it on development of the required facility, apportion the total cost of the facility to properties served by it, and recover the cost in the form of a special development rate loaded onto rates normally charged by those served by the facility). The council can then use the proceeds to service the loan and to manage the use and maintenance of the facility.

4.6.2.10 *Staff Capacities and competence*

The Council lacks critical professional expertise it requires to analyze, formulate, and review policies and strategies relevant to its operations. Its enforcement and markets staff are too few to control markets' activity in the trading centers over the town.

In the short-term run it should recruit appropriately qualified staff into the vacant positions of Town Treasurer and Senior Accountant.

In the medium and long-term, the councils should review its terms of service for its financial staff with a view to attract and retain appropriately qualified and experienced personnel. It should also expand its staff complement to levels consistent with the scale and spread of its operations. It should establish positions for and engage survey, financial, legal, engineering, public health, physical planning, environment planning and other technical expertise which are currently lacking.

4.6.2.11 *Property tax evasion*

The council should also recruit competent staff to enforce market by-laws and impose heavy penalties for confirmed cases of evasion of payment of council dues. Civic education programs for councilors, council staff and the wider public should be mounted to enhance their awareness of their responsibility pay taxes and other council dues.

4.6.2.12 *Adjustments in Costs Structure*

About half of the council's annual revenue is used on financing personnel costs, the remaining half is too small to adequately finance services provision and acquisition and maintenance of assets. To reduce the proportion of resources committed to staff costs and to review its costs structure to give prominence to services provision, the council needs to conduct job evaluations to rationalize employee jobs contents and to determine optimum staff positions per service/activity or cost centre. It should also develop appropriate training programmes for its policy makers and staff to ensure their increased and positive output.

4.6.2.13 *Grants and donor funds*

The purpose and use of grant and donor funds may not change significantly in the future. Some grants like the RMLF and bursary grants are given to the council for specific purposes while other grants may be availed for general purposes to finance both operations and capital investments. The council should present its funds requirements to managers of devolved public funds and to representatives of donor agencies based in the area. Such funds include the Education Bursary fund which facilitates access to education for bright children from poor backgrounds, the National Aids Control Council which supports advocacy against spread of HIV-AIDS, the Economic Stimulus Programme which develops / installs projects in strategic positions to spur specific economic activities. In 2009/10 the Economic Stimulus Fund availed a grant for development of a fresh produce market in the Town.

Development grants and donations may be given in cash with conditions requiring that they be used for development or acquisition of specific capital assets. Alternatively the donor community may develop or acquire assets and pass them over to the council as grants in kind.

4.6.2.14 Public Private Partnership (PPPs)

Where the council is not in a position to provide a service, it may contract it to private sector operators to provide the service with such conditions as will ensure sustained availability of the service at an affordable cost to all who need it. Services that can be privatized include water supply, solid waste management, slaughter houses, rental housing, nursery schools, markets, hotels, lodges and restaurants.

Public Private Partnership in municipal services provision and in problem solving is still a subject for further consideration by the council and interested private sector parties especially in connection with the provision of user charge services such as conservancy, markets, bus-park and slaughter house which can also be run effectively for the benefit of the general public by the council in partnership with the private sector.

Provision of public health and pre-primary school education mainly by religious organizations, NGOs and parents-teachers associations are good examples of private sector participation in the provision of public services in the town. The council should adopt policies and strategies that further promote private sector participation in provision of services needed by residents at the local level.

4.7 COMMUNICATION STRATEGY

Once the plan has been prepared, it will be necessary to keep both the council and other stakeholders informed about the planning activities and progress made in achieving investment proposals outlined in the BoISUDP 2010-2030 framework. There will, therefore, be need for effective communication and information sharing strategy that provides information to various stakeholders pertaining to the plan implementation. This is critical in order to solicit and sustain their wider participation, involvement and interest. Without fully understanding of the plan and its related aspects by all the key stakeholders (both municipal and external actors) chances of its success are minimal.

Indeed, MCB does not have a well-structured communication and information sharing strategy. The proposed communication and information sharing strategy is intended to be a multi-pronged set of actions to be implemented by the MCB. This will be for both its internal benefit as well as for its targeted external audience primarily to ensure the different actors within and without the council understand their roles during the BoISUDP 2010-2030.

Besides, as in other many local authorities in Kenya, the availability of information regarding public services is rarely made available to the intended recipients in MCB. During the feasibility study field visits, the team established that problems associated with the lack of a communication and information sharing plan within and without the Municipal Council of Bomet is extensive. More importantly it was established that the Council sparingly communicates or shares information on its plans. As noted by residents;

- Due to lack of channels of communication community participation was minimal,
- Feedback on possible interventions was nonexistent,
- The local community could not relate to Vision 2030 but they were clear, on the developments they would want to see in their municipality by the year 2030,
- The LA staff is inadequately skilled in terms of Communication skills, Public speaking ability and other Facilitation skills.

However, on a positive note, it was established that citizen involvement was carried out mainly through the following channels: chiefs' *barazas*/ public advertisements, civic education, invitation letters through respective committees, hand-outs, and mounting posters in public places. These are strategic entry points in operationalizing the communication strategy.

The flow chart below (Chart 4.1) summarizes some of the key actors that will be involved in the communication strategy during the plan preparation phase outlined in annex I.

Chart 4.1: Key Communication Strategy Actors



Source: Study Team, January 2012

In appreciating that communication is a two way process the proposed communication and information sharing strategy is designed to maintain and encourage meaningful dialogue during the plan implementation.

In essence, the communication and information sharing strategy for Bomet Plan will include the following:

- It generally encourages participation through structured information and awareness program, which spells out opportunities and avenues for engagement during the Plan implementation.
- To ensure that residents stay informed and are empowered to see through the strategy's implementation.
- Enhance a shared and common vision for the realization of BoISUDP 2010-2030
- To maximize the visibility of measures undertaken in order to fulfill the overall strategy.
- To ensure complimentary particularly given the multiple layers and other equally competing agendas within a devolved governance structure.

4.7.1 Principles of BoISUDP 2010-2030 Communication Strategy

- MCB shall ensure that the strategy is designed in such a manner that it shall apply to the whole planning cycle, including the monitoring and evaluation and reporting. It shall also be accompanied by effective and continuous documentation.
- MCB shall design the most suitable channels of information based on different needs and circumstances.
- Ensure that information provided about the Plan is accurate, relevant, accessible and regularly updated to develop mutual trust.
- The communication plan should be well resourced with both staff and financial resources

The communication and information strategy approaches should reach out to both internal and external actors.

The Internal Implications of the strategy should resolve current intrigues in services delivery such as lack of coordination amongst departments and sectoral agencies. Besides the organogram, MCB shall develop well-structured mechanisms for internal communication and coordination.

On the other hand, the external Implication of the communication strategy will be structured in a manner to ensure that external stakeholders and residents of Bomet municipality are more meaningfully involved in council affairs. Currently residents rarely have the chance to know what

the MCB plans for the town's sustainability and continued growth are. As a result the residents have largely been passive on matters involving urban development. The proposed MCB external communication and information sharing strategy therefore seeks to engage with the towns' residents and other publics on the governance and development plans of the town. Overall, the strategy will ensure public participation, compliance with legal requirements, alignment with Constitution 2010 and Vision 2030 and delivery of reports and other outputs on set milestones.

4.7.2 Actions and Activities

The communication and information sharing strategy will employ some of the following actions:

- Cause for the adoption of the vision statement to provide community focus, while generating and maintaining adequate levels of excitement amongst residents
- Conduct continuous civic education campaigns to articulate on the rights of town residents.
- Publicize and facilitate access to public platforms or meeting places
- Produce appropriate editorial media to provide a balanced and positive view and especially in regards to "crisis management" issues,
- Enable the preparation of statements in response to publicly-raised issues or queries.
- Establish documentation centers where public can access town plans and deliberation minutes.

4.7.3 Media for Delivering the Strategy

Taking cognizance of the need for proper control and direction of communication and information sharing within the council, MCB will design and utilize a mix of channels and tools as part of the communication and information sharing strategy.

The various channels will include but not limited to:

4.7.3.1 Email and Intranet for Internal Communication and Information Sharing

The flow of communication and information sharing within the council has long relied on the traditional memos, circulars letters and even word of mouth. In line with the aspirations of vision 2030 and the Constitution where ICT is expected to be key driver of delivering government service, a functional communication and information sharing system be adopted as soon as feasible followed by an effective email and intranet system to actualize the smooth flow of communication as well as sharing of information.

4.7.3.2 *Electronic and Print Mass media*

The MCB is expected to identify the popular mass media outlets in the jurisdiction for delivering the communication and information sharing strategy. Channels falling under this include radio stations, newspapers and television, where radio still remains the primary source of information in much of rural with newspaper and television penetration still lagging. These channels are useful for running advertising features mainly in newspapers, techniques that have been utilized by private companies to popularize products as well as expand and deepen market penetration. Similarly documentaries or infomercials are increasingly being used in the electronic mass media to disseminate relevant communication and share information.

4.7.3.3 *Media Visits and Briefings*

Closely related to the above, the proposed media visits and briefings will allow the MCB to control and direct content of communication and information sharing to the mainstream media for them to report objectively.

4.7.3.4 *Citizen Fora, Public and Meetings Workshops:-*

Public meetings/barazas and workshops have been one of the traditional vehicles for information dissemination and sharing in much of the republic. The expected changeover to the devolved government structure these are largely expected to take the format of citizen foras following the 2012-13 election cycle. To this extent it is now a legal requirement to provide information and generate important feedback from the various actors in the given jurisdiction. These may be meetings held quarterly or on a needs basis around key thematic areas and strategy milestones.

4.7.3.5 *Strategic/Breakfast Meetings*

To ensure maximum use of persons identified during the RRI as most influential in the town, it is envisaged that consultative meetings be arranged in varying intervals. These will target mainly leaders from the political, professional, media and development partners sectors and will take the format of breakfast /strategic meetings. Such meetings can be useful for synthesizing feedback received through other channels and make them practical/actionable.

4.7.3.6 *Social Media and Web 2.0 tools*

To build on the expected increased ICT capacity the MCB will seek to engage the residents particularly the youth through social media. This will involve the use of increasingly popular platforms such as Facebook, Twitter amongst other social media. This will further be supported

by other web 2.0 based communications and information sharing platforms which enable users to interact and collaborate with each other in discussions as moderators or contributors of content in these largely virtual community, such as blogs and interactive websites.

4.7.3.7 Stakeholder profiling

As noted earlier, the communication and information strategy approaches should reach out to both internal and external actors. MCB will Target communication and information to specific groups is intended to achieve specific goals and ensure community acceptance towards set objectives. Success of the strategy will be measured by analyzing the level of cooperation, implementation, sustainability, inclusivity and coordination in relation to achievement of wider goals of the Plan.

The profiling of the target audience will be an essential element in developing the strategy. The target audience comprise of the various actors involved in different areas in the plan preparation and urban development in general within the municipality. Some of the stakeholders key to the delivery of the overall communication and information sharing strategy for MCB include the Ministry of Local Government (MoLG), Municipal Council of Bomet, Physical Planning Department of Ministry of Lands and Settlement, Director of Urban development and Planning, the Consultants, other professionals, any other agencies and the stakeholders. The *Table 4.6* below provides for the different roles to be undertaken by the different actors to deliver on the overall communication and information sharing strategy.

Table 4.6: Target Audience and their roles/outputs

Target Audience	Roles/Outputs
Residents of Bomet Professionals bodies	Identify all community assets/resources and create a plan to take strategic advantage
CBOs, FBOs, NGOs, CSOs Women Groups/networks Vulnerable groups-youths	Connect local stakeholders and join forces with neighbors
leaders and officials of MCB Eminent leaders identified during the RRI from the area.	Create leadership that is inclusive, collaborative and connected
Governor and County Executive Ministry of Local Government Department of Urban Development- ODPM&MoLG Ministry of Lands and Settlement-Dept of Physical Planning	Joining with other jurisdictions to maximize limited resources.
Media	Market and report on progress

Source: Study Team, August 2012

4.7.4 Expected Outputs of the Communication and Information Sharing Strategy

Once the Communication and Information Sharing Strategy for the plan is operational, the following will be some of the desired outputs:

- Timely achievement of investment proposals and activities
- Decision making will be achieved quickly and with ease
- Reduced conflicts caused by miscommunication
- Promoted transparency in the decision making process

Greater participation of the residents in council's affairs through predictable feedback sessions

4.8 MONITORING, EVALUATION AND INSTITUTIONAL FRAMEWORK

4.8.1 Institutional and Governance structures

4.8.1.1 Overview

The effective implementation of the Bomet Strategic Urban Development Plan 2010-2030, will largely depend how well it is anchored within a clear and appropriate institutional framework. Furthermore once the BoISUDP plan has been prepared it is necessary that it is operationalised with sound governance structures and principles in line with aspirations of the new constitution. Therefore an effective urban governance system that promotes genuine partnerships and mutual relationships across various institutional spheres-local, civil societies, public and the private sector is desired to fully achieve/implement the proposals and programmes expressed in BoISUDP 2010-2030.

At the driving seat should be the MCB in guiding and championing other actors to ensure successful implementation of the plan. It therefore requires that the council system-both technical and political arm acts with resolve, consistency and integrity to ensure strict adherence to the provisions of the development plan¹⁶. Another equally important ingredient is the need to strengthen local capacities within MCB to effectively implement the BoISUDP 2010-2030. Capacity in the broad sense is indented to go beyond manpower, but also will encompass technology, coordination and other logistical resources in urban planning and development including enforcement of standards and guidelines.

.Finally, it's now a universally agreed principle that urban development plans and programmes need to have mechanisms that promote continuous assessment to establish to what extent the

¹⁶ This has been underscored as an integral element for effective plan implementation (see guidelines on Urban Planning and Development Control Manual , KLGRF,2009)

long term goals and objectives of plans are been achieved or realized. This introduces the need for an elaborate monitoring and evaluation (M&E) that is broad based and widely accepted and respected by key stakeholders.

4.8.1.2 Institutional Context

Different institutions are involved in different processes of development in Bomet municipality. Notably the most active institutions include the Municipal Council of Bomet and sectoral Government ministries and parastatals which interact in various processes of urban development. Non-governmental organizations and CBOs also play a critical role in urban development in the area. There are a number of CBOs operating in the area across various sectors but are faced with numerous challenges such as weak governance and leadership and inability to fully involve the community members in decision making processes leading to poor performance in service delivery.

There are also private sector players such as banks and cooperative societies. Generally there is lack of clear framework for effective engagement, participation and coordination of the different actors involved in the area. Capacities are also weak in many of the government institutions for instance there are inadequate planning capacities within the council for effective plan preparation and implementation. Community Based Organizations also lack adequate resources to run projects.

It is common knowledge that there is acute duplication and lack of collaboration in planning and implementation of urban development programmes and this has had negative impacts with regard to services delivery particularly in Bomet. Sectoral agencies and other devolved frameworks such as the LASDAP and CDF initiate urban development project separate from existing urban development plans. It is envisaged that proposed urban development interventions within the municipality channel their efforts through the avenue in terms of investment proposals outlined in the BoISUDP 2010-2030 to avoid the prevalent challenges. It is important that Central Government Agencies together with the county governments support Bomet municipality and other LAs in plan implementation by providing necessary technical and others inputs. In implementing their development projects, it is assumed that they will adhere to and support the Plan.

4.8.2 Participation of stakeholders in Urban Development of Bomet

4.8.2.1 Overview

Whereas citizen participation was hitherto not a critical element in the management and governance of urban areas, the new constitutional dispensation however envisages citizen participation as the cornerstone of governance. Principles of participation have been well laid out in the constitution as well as in the recently enacted urban areas and cities act. Similarly provisions for the same are provided in the devolved government bill which has an implication to the extent to which governance at the local level will be carried out. Participation in BoISUDP 2010-2030 will be effected at different levels in line with requirements of the Urban Areas and Cities Act that outlines various mechanisms for integrated urban planning and further within the devolved government structure which envisages citizen's fora at ward levels.

Bomet town suffers from lack of appropriate institutional framework for stakeholders' engagement and coordination and besides lack of effective communication mechanisms. As a result these stakeholders lack synergy in their development interventions. The active participation of wide range of actors involved within the realm of urban development must be pro-actively encouraged and sustained throughout the implementation of BoISUDP 2010-2030. Stakeholders and communities should actively participate in the Plan implementation in providing support across various areas (financial resources, manpower, development projects ideas/information, and monitoring and influencing plan implementation, building materials, dispute resolution among others). Although potential for Public Private Partnership (PPP) exists in Bomet town but as observed earlier there is no framework or capacity within MCB to meaningfully engage different actors. The participation of private sector, particularly in construction and building sector was observed to be quite inadequate.

A number of mechanisms have so far been established within Bomet that try to increase public participation in development processes. These could be strategic entry points for engagement during the Plan implementation, even though they are confronted with numerous challenges. Community members are for instance elected to the Local Authority Service Delivery Action Plan¹⁷ (LASDAP) and CDF¹⁸ management committees to represent the residents. Besides, as part of involving citizens in decision making processes, various channels are used by organisers to encourage community members to attend various meetings. These channels include chiefs'

¹⁷ LASDAP to be reengineered with the passing of the Urban Areas and Cities Act

¹⁸ CDF is expected to cease one year after the 2012-13 election cycle

barazas/ public advertisements, civic education, invitation letters through respective committees, handouts, and mounting posters in public places. These mechanism are however inadequate and need to be strengthened¹⁹. Other challenges related to participation include corruption, weak leadership and overall having stalled projects. The regulations of Bomet Municipal council and Bomet county council provide both a restricting working environment and also a motivating environment. Among the prohibitive aspects cited by the residents include high taxation, license fee and poor public relations by council's staff.

Within the Plan implementation period MCB will:

- Adopt the principles of participation as laid out in the constitution and enabling legislature including Urban Areas and Cities Act, Devolution Bill etc
- Systematically establish formal frameworks that allow participation, partnerships at various levels (citizens, private sector, civil society etc). Municipal-Community Partnerships (MCPs), Public Private Partnerships are good examples
- Build relations with both local and external investors in visioning and strategic planning processes built around the Plan.
- Encourage open dialogues/ consultations with the citizens within a structured and predictable framework
- Develop and institutionalize transparency enhancing mechanisms e.g. citizen score cards, public access to municipal records etc
- Set internal mechanisms that foster responsiveness to citizen complaints and requests
- Develop mechanisms that deepen awareness about the plan and other municipal and County Government agendas
- Constantly carry out stakeholders analysis and profiling to ensure wide and inclusive representation as possible in plan implementation processes

4.8.2.2 *Soliciting for Local Support and Ownership*

As noted in preceding discussions, it is important that the breadth of the Plan is mainstreamed and embraced within the council systems so that it remains within the broad council agenda. This may involve council officers referring to the plan wherever possible and relevant in reports to council, and prefacing any council media releases or articles with details of how the particular items of interest fit in within the plan (KLGRP, 2009). The political wing, particularly within the

¹⁹ Feasibility Study Report ,2011

authority and the county will be brought on board to both own and champion the Plan implementation.

MCB shall endeavor to prioritize issues that will motivate the community, and to design its plan activities around these issues. Quick win-win projects will be encouraged that begin to address most immediate needs of the residents. These will in turn form solid foundation for future engagement on more sustainable basis.

The *Box 4.2* below provides strategic entry points in form of interventions that will steer implementation of BoISUDP 2010-2030.

Box: 4.2: Key Interventions that Facilitate Plan Implementation

- 1. Infrastructure provision** –infrastructure provision can be used to stimulate and direct development in desired areas in accordance with the development plan. The Bomet Municipal Council should be proactive in the provision of trunk infrastructure in priority areas in order to promote private and public sector initiatives.
- 2. Social services provision:** urban authorities should ensure that the social services are developed alongside residential developments to encourage residents to enjoy the services in the neighbourhood and also reduce traffic congestion in the long run.
- 3. Land availability** is a critical aspect of plan implementation and measures should be taken to ensure adequate and timely availability (this could be done through land banking, resolution of land tenure issues etc)
- 4. Manpower Deployment and development:** Successful plan implementation will require trained and competent manpower. It is imperative that Bomet Municipal council employs the necessary staff in the relevant fields to oversee the plan implementation to its conclusion in conjunction with other players.
- 5. Technology:** need for computerized database (data capture, processing, storage, retrieval and application including dissemination); this requires putting in place the necessary hardware, software and skilled human resources. Through application of e-governance developers and professionals can begin to submit development applications and receive approvals on-line to make the process more efficient and transparent.
- 6. Integrated approach to services delivery**-an integrated package in delivery of services will be crucial in delivering the plan, encouraging an inter-departmental and across-agency coordination
- 7. Logistical Resources:** in addition to manpower covered above plan implementation will require resources such as transport, equipment (e.g. computers. GPS, digital cameras, survey equipment etc), finance, office accommodation, telecommunication. Coordination with other relevant authorities is crucial particularly in enforcement.
- 8. Zoning plan** interpret the structure/comprehensive plan and stipulate detailed development control standards. The plan should be embedded within the zoning plan of the area

Source: Adapted and improved on from Urban Planning and Development Control Manual, KLGRP, 2009)

4.8.2.3 Human Resource and Funding

Like many other councils in Kenya, MCB has serious inadequacies with regard to technical staff to undertake planning and implementation of urban development work. The council is also unable to raise sufficient revenue to meet its development needs. MCB will employ technical staff to ensure effective implementation of the Plan. Besides, increasing avenues for revenue collection, the Council will also develop framework for raising funds both internally and externally. Equally important is that the frontline staff and employees will continuously be capacitated and exposed through a funded exposure programme as they are the ones in direct contact with the public in services delivery.

4.8.2.4 Fast tracking and building synergies with other Initiatives

Currently there are no major integrated programmes within the Municipality. The Nile Basin Initiative recently initiated a programme focusing on design and expansion of Bomet Municipal Water supply and new sewerage disposal and treatment in the town. A feasibility report was prepared detailing project proposals and action plans and presented to the council. This programme is a good entry point for both development and implementation of BoISUDP 2010-2030

4.8.2.5 Legal Framework

With regard to the legal framework, planning within Local Authorities in Kenya in the previous services delivery arrangement was mainly governed by the Physical Planning Act Cap 286, the Local Government Act Cap 265 Section 166, the Public Health Act, and the Environmental Management and Co-ordination Act (EMCA) No. 8 of 1999. However with the new dispensation, the plan will largely be implemented within a new set of institutional and legal framework within the context devolved governance. The MCB will ensure that the BoISUDP 2010-2030 implementation conforms to the spirit of the Constitutional and other relevant legal frameworks such as the of the Urban Areas and Cities Act and the Devolved Government Bill etc.

4.8.3 Monitoring and Evaluation Mechanisms

4.8.3.1 Introduction

Monitoring and evaluation is an essential element of urban planning and development for it provides important feedback on performance and impact. However, this has been a neglected activity because of the lack of a legal framework for plan implementation and audit, and

inadequate resources and manpower. There will be attempts to improve monitoring and evaluation systems in MCB. The public with some capacity building can play a key role in M&E, though their participation in M&E is weak.

There is need to institutionalize and strengthen the M&E function in MCB by including a strengthened broad based community monitoring committee as part of Stakeholders Forum.

In MCB an M&E system can be an effective way to:

- 1.1 Provide continuous feedback to and get views from stakeholders on the extent to which BoISUDP is achieving its objectives,
- 2.1 Identify potential problems in implementation of BoISUDP at an early stage and come up with possible solutions,
- 3.1 Monitor the accessibility and usefulness of the Plan and activities to all stakeholders in Bomet Town and its environs, and
- 4.1 Monitor the efficiency with which the different components of the Plan are being implemented and suggest areas of improvements.

4.8.3.2 *Linking Municipal to National M&E System*

At the national level, the Government of Kenya has established M&E system for development programmes of which the Medium Term Programme (MTP) is expected to be evaluated through Annual Progress Reports (APRs) under the National Integrated Monitoring and Evaluation System (NIMES) in order to ensure its successful implementation.

The focal point for NIMES is the Monitoring and Evaluation Directorate (MED) of the Ministry of Planning and National Development's NIMES. Coordination of the national M&E function is placed in the Ministry of Planning and National Development which has requested all other government organs to establish sectoral M & E systems. The Ministry of Planning's M&E Department has prepared and circulated an operations and training manual for establishment of M&E systems.

NIMES was established in 2004 with an objective to providing the government with a reliable mechanism and framework for measuring the efficiency of government programmes and the effectiveness of public policy in achieving its objectives.

4.8.3.3 *Developing a M&E System for BoISUDP*

Although the BoISUDP is a long term plan up to 2030, the implementation of the various programmes can be staggered into phases or into five year programme implementation plan.

This will then facilitate the short term implementation of the various programmes as well as enable us evaluate the success or otherwise of the plan.

In this regard, the various programmes to be implemented need to be prioritized in terms of importance and as to where it should feature in the five year implementation programme. Monitoring should be both quantitative and qualitative. The strategy will identify key performance indicators for each strategic initiative. These will require refinement by the relevant stakeholders when initiating key initiatives. Measurement is easiest when clear objectives and indicators are developed at the time when the strategy or intervention is planned.

It is important to agree on who will be responsible for monitoring and evaluation and on the institutional mechanisms. The partnership set up in the first step above is one such institutional mechanism for ongoing monitoring and evaluation to ensure that the strategy continues to lead to the achievements of the targets.

In practice MCB needs to prepare monitoring and evaluation mechanisms for their plans and projects including the Strategic Development Plan as means of enhancing effectiveness, efficiency and transparency in service delivery. The participation of the public is also key for monitoring and evaluation, and where possible the use of language and concepts, which are simple and can easily be understood by the local community, is highly recommended.

For the BoISUDP, monitoring and evaluation (Table 4.1) should encompass the following:

- A description of the plans/projects to be implemented by the Council in a certain period of time,
- Details of the project including technical and financial inputs,
- Operational status and outputs of all the project components, and
- Remedial measures undertaken to ensure that outputs/impacts are well delivered. This should also include daily, weekly, monthly, quarterly and yearly operations and maintenance.

Table 4.7: M&E Framework for Bomet

Component	Comments on the desired ends from the housing and settlement plans/projects
Inputs	This should include among others technical, land legislations, and financial resources devoted towards a specific plan. -Also would include services provided by the council Should also indicate details of sourcing and cost
Outputs	Includes among others the products the project is expected to produce/deliver as a result of the inputs or services provided by the council -should also take note of the effect of the outputs e.g. facilities

Component	Comments on the desired ends from the housing and settlement plans/projects
Impacts	Examining if the plan/project goals or objectives have been met
Processes	-Measuring if both operational and implementation processes are being followed. -Aspects/level of community/beneficiary participation in plan implementation, taking note of special groups such as women, disabled and youth
Schedules	Measuring if the implementation of the plan is adhering to the stipulated time and budget lines -if there are delays, they should be recorded and reasons well noted

Source: Study Team, August 2012

Monitoring and evaluation processes will need to produce detailed reports for dissemination to other stakeholders.

Monitoring and evaluation processes will need to produce detailed reports for dissemination to other stakeholders.

PART V: INTEGRATED STRATEGIC URBAN DEVELOPMENT PLAN/ ISUDP STRUCTURE PLAN

5.1 SYNTHESIS OF THE PLAN

The projected population for Bomet municipality in the intervening five year periods 2012-2030 is given in the table below showing that by the year 2030, the total population of Bomet is expected to be 228,419 persons with total projected households of 32,631.

Table 5.1: Population and Household Projections

YEAR	TOTAL POPULATION	NO. OF HOUSEHOLDS HH SIZE – 7
2009	110,160	15,737
2012	121,856	17,408
2017	144,521	20,646
2022	171,923	24,560
2027	205,145	29,306
2030	228,419	32,631

Source: Projected from Republic of Kenya, 2010

Using the above population projections, the land use requirements were then projected for the various 5year periods and a 3year period 2027 – 2030 using the following assumptions:

- (a) Segregation of the population according to income levels i.e. 60% for low income, 30% for middle income and 10% as for high income earners.
- (b) Since 50% of the population is below 20years given a high dependency ratio. We have therefore projected land requirements using only 50% of the population.
- (c) Average household size to be 7 persons per household.
- (d) The development densities adopted are as follows: For high density – 35units/ hectare; medium density – 16 units per hectare; low density – 10 units per hectare.
- (e) The residential areas will be sewerred.
- (f) The minimum plot should be 450m²
- (g) Promotion of mixed development

Using the above mentioned projections and the various assumptions, the projected land requirements are as shown on table 10.2 below. The projected land requirements and the various assumptions were also used to prepare the various area action plans as well as the various zoning plans.

Table 5.2: Projected Land Requirements

		EXISTING LAND USE		PROJECTED LAND USES					
		2012		2012	2017	2022	2027	2030	%
	LAND USES	Ha	%	Ha	Ha	Ha	Ha	Ha	Ha
0	Residential	179.84	0.72	799	947	1127	1345	1498	5.96
1	Industrial	14.22	0.05	26.25	29.27	32.92	37.35	40.46	0.16
2	Educational	321.44	1.28	321.44	--	--	325.61	351.90	1.4
3	Recreational	72.84	0.29	97.21	126.11	160.49	201.52	247.2	0.98
4	Public Purpose	271.9	1.08	342.3	345.7	--	--	345.7	1.37
5	Commercial	93.67	0.37	100.67	--	--	--	100.67	0.4
6	Public Utility	52.02	0.21	57.42	57.46	--	--	57.46	0.23
7	Transportation	2809.15	11.71	3044.82	3304.50	3598.87	3936.94	4302.66	17.11
8	Deferred	68	0.27	--	--	--	--	--	--
9	Agriculture	21260.37	84.55	20354.34	19911.3	19398.90	18793.35	18199.40	72.38

Source: Study Team, September 2012

What is available land within the municipality is only 68 hectares within Bomet town. This is the existing council land that is currently undeveloped. Our land requirements as per the table above shows that we shall need a total of 2,641 hectares excluding the land under transportation – which leaves us with a big deficit. This deficit can only be met by tackling the different ways which can be used to bring agricultural land to urban use as discussed in Part II section 2.5.3.

5.2 URBAN GROWTH LIMITS

Before this plan intervention the existing land under urban use constituted 15% of the total land area in the municipality. With the land requirement projections this will only rise to between 25% to 27% of the total area of the municipality up to the year 2030. This will constitute our urban limit within the municipality. The importance of this is that the rich agricultural hinterland will remain, in order to provide the raw material source for the agro-Indus trial sector which is being

proposed and emphasized in this plan in order to make Bomet a vibrant and dynamic town it deserves to be.

5.3 LAND USE PROPOSALS

All the proposals which have been made under the various land uses have been put forward on the land most suitable for urban use as can be seen in the urban suitability map. The map was worked out taking into consideration of the structuring elements, analysis of the existing physical characteristics, the micro climate, infrastructural provisions as well as the logical directions of urban growth within the Bomet Municipality.

During the conceptual framework analysis it was agreed by the stakeholders during the strategies workshop (refer to 5.3) that the existing centers of Longisa, Silibwet and Kapkwen/Itembe should be allowed to grow just as Bomet town grows; instead of allowing Bomet town to grow outwards alone. This implied that strategic growth triggers will have to be proposed for Longisa, Silibwet and Kapkwen/Itembe in order to boost their growth.

For Longisa it was proposed to set up a wholesale and a new retail market so that agricultural produce from as far Merigi and even farther could be brought to Longisa at the markets. It was also proposed to set up a light Industrial Zone in a form of warehousing as well as cold storage facilities for the horticultural produce milk as well as for the aqua culture produce. Also for Longisa it was proposed that the small open air market in the middle of the existing shopping area to be converted to a recreational park. A stadium and a bigger recreational park are also proposed at Longisa opposite the BS highway.

At Silibwet it is proposed that due to its steep terrain the centre should continue to be a collection centre for the agricultural produce and that the industrial park to be sited at Kapkwen. Silibwet will however continue to play a central role in the Tea Industry with the Trigaga factory being sited here. It is proposed that local entrepreneurs to take up the chance of buying the tea from the factory in the wholesale form and repacking it in small consumable quantities by creating local brand names for the tea. Silibwet will also continue to play the key role of medical tourism with the Tenwek Mission hospital nearby.

An Industrial Park has been proposed to be set up at Kapkwen due to its flat terrain and the rich agricultural produce from Silibwet and Merigi and other neighboring area to provide the raw materials. Kapkwen having the existing cattle auction ring will also have a big slaughter house to cater for this animal husbandry sector. It is proposed also to set up an open air market and an

expanded commercial zone to cater for the demand for commercial activities at this centre. It is also proposed to set up a full-fledged airport combining the existing airstrip with the neighboring lands.

Within the existing Bomet town a new Bomet Stadium has been proposed. In the short and medium term a sewage treatment works has been proposed as well as the two public cemeteries. An Agricultural Show ground is also proposed to be set up since the site for it has already been provided for by the Municipal Council. On top of all the above a new commercial zone has also been proposed. It should be noted that since Bomet Municipality will be new Bomet County headquarters, this will generate a lot of activities in the form of new buildings for the headquarters of the new Governor and in turn will generate a lot of demand for accommodation hence adequate land of various densities have been proposed for residential purposes and also to cater for the demand which will be created once the various higher Educational Institutions are set up.

5.4 UTILITIES AND OTHER PROPOSALS

Apart from the proposals which were touching on the four centres there were general proposals which will affect the whole municipality.

5.4.1 Roads

The plan has proposed two major trunk roads which will aid in connectivity and mobility within the municipality. These are:

- Silibwet – Kapsimotwo-Kapkwet to join C14 road-Kapkisosio
- Youth Farmers-Merigi-Silibwet. The other important through minor roads
- Tenwek through the lower side of Masare ridge to B3
- Tenwek through the upper side of Masare ridge to B3
- Lower side of Masare ridge through Kapsimbiri to opposite Bus Park (with a bridge No. 5 connection at Nyangores)
- Lower side of Masare ridge through Kapsimbiri to B3 road opposite MCB offices. (with a bridge No. 4 connection at Nyangores)
- From proposed bridge No.4 to C 24 road going to Silibwet.
- From Bridge No. 5 to C24 road
- From C24 at Aisaic centre over Singorwet Centre to join the B3 at Kapmusa centre
- From East Sotik Centre through Kapsimotwa to Bomet town.
- From Singorwet through Bridge No. 6 to opposite Kolonget AGC church

- From Airstrip to B3 highway at lower side of Chepkosa swamp
- From Kapindege to B3 to upper side of Chepkosa swamp
- From B3 near Itembe water kiosk to Chebirir Centre
- From Chepkosa centre joining the proposed road from Itembe water kiosk.
- From Metipsu area to the B3 at the Church of Christ, Itembe.
- Proposed road to the proposed stadium, industrial zone and markets at Longisa

5.4.2 Bridges

There are six bridges which have been proposed in the Plan.

- Bridge No. 1 Crossing Nyangores river at Kipseyon
- Bridge No. 2 Crossing Nyangores at Tukwet-ap-Mosonik
- Bridge No. 3 Crossing Nyangores river below St. Michael school
- Bridge No. 4: Crossing Nyangores at Kapsimbiri near Raya Swamp
- Bridge No. 5: Crossing Nyangores at the upper side of Raya AGC Church
- Bridge No. 6: Crossing Kamasega river to Kolonget

5.4.3 Water

The Plan has proposed that water to be obtained from Mau Forest to be treated at Silibwet and then reticulated to most of the municipality by gravity.

Water Storage Tanks:

- At Kabungut near Kabungut secondary school
- Proposed storage tank at the proposed treatment works at Silibwet
- Bomet town storage tanks near Kambi Jerusalem – to increase capacity.
- Cheboin water storage tank near Mataringe AGC church.
- To expand capacity for the storage tanks at Longisa Hospital to serve the centre

5.4.4 Sewer

For the long-term proposal it is possible to serve almost 75% of the Municipality. If the sewerage treatment works is sited at Tulwet and Mosonik north of the river Nyangores.

5.4.5 Solid Water Management (Long Term)

This should be sited next to the proposal long term sewerage treatment works so that the Leachate from the sanitary landfill can be emptied into the lagoons.

5.4.6 Public Cemetery

In the long term land should be acquired for this use next to the site for the solid water management.

5.4.7 Aqua Culture

Bomet Municipality has a great potential of developing aqua culture at the Kapsimbiri flood plain or swamps. This swamp is over 100 hectares in extent. It has been documented that from one acre of land under aqua culture the farmers stand to make from 2.4 million to 3.6 million shillings per month. This plan has greatly emphasized this sector and has discussed the action plans under scenario 2 (chapter 9.1.2).

5.4.8 Lightning Arresters

Because of the prevalence of lightning the Plan has proposed setting up lightning arresters on top of the Tiroti, Masare range, Kyangong, Mutarakwa and Sugumerga hills.

5.4.9 The Rich Agricultural Areas and other Structuring Elements

This area constitutes a bigger part of the municipality and should be left to remain as it will continue to provide a source of raw materials for the agro-industrial role that has been proposed for Bomet. Moreover it will still remain as the source of food production for the industrial households. Urban agriculture in so many forms can be encouraged such as poultry keeping, zero-grazing. Bee keeping, rabbit and turkey rearing are also areas which need to be boosted.

The Plan recognizes the existence of some of the structuring elements of physical nature which inhibit normal developments in Bomet such as the Masare range, the Kyangong, Tiroti, Sugumerga and the Mutarakwa hills together with the valleys and the flood plains and the river Nyangores. These elements have dictated the form and structure of the urban area

The Plan gives proposals to tame some of the elements and have been discussed in the earlier chapters; what is of importance is that these elements should be utilized sustainably.

Last but not least the Plan has prepared detailed area Action Plans for Bomet town, Longisa, Silibwet and Kapkwen as well as the zoning plans which will guide development within the municipality. The last chapter has also provided a Plan Implementation matrix highlighting the programmes of action which need to take place and their phasing.

PART VI: ACTION AREA PLANS

6.1 AREA ACTION PLANS

During the conceptual framework analysis it was agreed by the stakeholders during the strategies workshop (*Refer to 3.3*) that the existing centers of Longisa, Silibwet and Kapkwen/Itembe should be allowed to grow just as Bomet town grows; instead of allowing Bomet town to grow outwards alone. This implied that strategic growth triggers will have to be proposed for Longisa, Silibwet and Kapkwen/Itembe in order to boost their growth.

6.1.1 Bomet Township

Within the existing Bomet town a new Bomet Stadium has been proposed. In the short and medium term a sewerage treatment works has been proposed as well as the two public cemeteries. An Agricultural Show ground is also proposed to be set up since the site for it has already been provided for by the Municipal Council. On top of all the above a new commercial zone has also been proposed. It should be noted that since Bomet Municipality will be the new Bomet County headquarters, this will generate a lot of activities in the form of new buildings for the headquarters of the new Governor and in turn will generate a lot of demand for accommodation hence adequate land of various densities have been proposed for residential purposes and also to cater for the demand which will be created once the various higher Educational Institutions are set up.

6.1.2 Longisa Centre

For Longisa it was proposed to set up a wholesale and a new retail market so that agricultural produce from as far Merigi and even farther could be brought to Longisa at the markets. It was also proposed to set up a light Industrial Zone in a form of warehousing as well as cold storage facilities for the horticultural produce milk as well as for the aqua culture produce. Also for Longisa it was proposed that the small open air market in the middle of the existing shopping area to be converted to a recreational park. A stadium and a bigger recreational park are also proposed at Longisa opposite the B3 highway.

6.1.3 Silibwet Centre

At Silibwet it is proposed that due to its steep terrain the centre should continue to be a collection centre for the agricultural produce and that the industrial park to be sited a Kapkwen. Silibwet will however continue to play a central role in the Tea Industry with the Trigaga factory being sited here. It is proposed that local entrepreneurs to take up the chance of buying the tea from the factory in the wholesale form and repacking it in small consumable quantities by

creating local brand names for the tea. Silibwet will also continue to play the key role of medical tourism with the Tenwek Mission hospital nearby.

6.1.4 Kapkwen Centre

An Industrial Park has been proposed to be set up at Kapkwen due to its flat terrain and the rich agricultural produce from Silibwet and Merigi and other neighbouring areas to provide the raw materials. Kapkwen having the existing cattle auction ring will also have a modern slaughter house to cater for this animal husbandry sector. It is proposed also to set up an open air market and an expanded commercial zone to cater for the demand for commercial activities at this centre. It is also proposed to set up a full fledged airport combining the existing airstrip with the neighboring lands.

6.2 ZONING PLANS

The built environment, the type, location and intensity of existing land use defines the character of the town. Understanding how much land is presently devoted to residential, commercial, open space and other uses as well as the locations of vacant and undeveloped properties is an important step in developing a vision for the future. The town's zoning and land use regulations are its central tools for controlling its array of land uses. These controls influence future development patterns.

Zoning regulations are motivated by the need to regulate the location of commercial and industrial activities. Modern zoning regulations divide land use into three types: residential, commercial, and industrial. Within each designation, more specific aspects of development (e.g., building proximity, height, and type) are also determined. Zoning is often used to maintain the distinctive character of a town or city. For residential areas, whereas some could argue that there may be adverse concerns of such zoning in relation to possible economic segregation, the consequences of not zoning would be juxtaposition of incongruent land use in a town like Bomet. Therefore, zoning endeavours to achieve harmonious, pleasant and compatible development in our town.

Zoning regulations should be subject to periodic review depending on dynamic changes and levels of

services and demand for various uses of land. The proposed zoning regulations for Bomet town, Longisa, Silibwet and Kapkwen centres presented below in Table 6.1. The table should be read together with the respective area zoning plans maps maps 6.1,6.2,6.3 and 6.4

Table 6.1:Zoning Regulations

Zone Code	Area Covered	Ground Coverage (%)	Plot Ratio (%)	Type of Development	Remark
RESIDENTIAL					
LOW DENSITY RESIDENTIAL					
RL1	Senior Govt Housing	50	35	Bungalows Masionette Minimum Plot size – 0.2 Ha unsewered to 0.1 Ha sewerred	Maximum Level – 2 Parking – 2 per dwelling Allow for Densification
RL2- RL5	1. Within Bomet township opposite county council offices across B-3. 2. West of C24 and North of B-3 3. South of St Michaels Primary and Secondary 4. West of the proposed airstrip	50	35	Bungalows Masionette Minimum Plot size – 0.2 Ha unsewered to 0.1 Ha	Maximum Level – 2 Minimum Road size 9m Parking – 2 per dwelling Allow for Densification Allow for 10% surrender for Public Purpose on Sub-division
RL6	Kapkwen	50	35	Bungalows Masionette Minimum Plot size – 0.2 Ha unsewered to 0.1 Ha	Maximum Level – 2 Minimum Road size 9m Parking – 2 per dwelling Allow for Densification Allow for 10% surrender for Public Purpose on Sub-division
RL7- RL11	Tenwek	50	35	Bungalows Masionette Minimum Plot size – 0.2 Ha unsewered to 0.1 Ha	Maximum Level – 2 Minimum Road size 9m Allow for Densification Allow for 10% surrender for Public Purpose on Sub-division
RL12	Longisa	50	35	Bungalows Masionette Minimum Plot size – 0.2 Ha unsewered to 0.1 Ha	Maximum Level – 2 Minimum Road size 9m Parking – 2 per dwelling Allow for Densification Allow for 10% surrender for Public Purpose on Sub-division

Zone Code	Area Covered	Ground Coverage (%)	Plot Ratio (%)	Type of Development	Remark
MEDIUM DENSITY RESIDENTIAL					
RM1-RM9	Bomet Town	50	75	Mansionets, bungalows, semi-detached Minimum Plot size – 0.05 Ha unsewered to 0.1 Ha sewer	Maximum level- 2 levels unsewered 4 levels on sewer Minimum Road width- 9m apartments allowed on different zones. Allow for 10% surrender for Public Purpose on Sub-division Parking – 1 per dwelling
RM10-RM12	Kapkwen	50	75	Mansionets, bungalows, semi-detached Minimum Plot size – 0.05 Ha unsewered to 0.1 Ha sewer	Maximum level- 2 levels unsewered 4 levels on sewer Minimum Road width- 9m apartments allowed on different zones. Parking – 1 per dwelling Allow for 10% surrender for Public Purpose on Sub-division
RM13-RM14 RM15 RM16-RM18	Silibwet Tenwek Longisa	50	75	Mansionets, bungalows, semi-detached Minimum Plot size – 0.05 Ha unsewered to 0.1 Ha sewer	Maximum level- 2 levels unsewered 4 levels on sewer Minimum Road width- 9m apartments allowed on different zones. Parking – 1 per dwelling Allow for 10% surrender for Public Purpose on Sub-division
HIGH DENSITY RESIDENTIAL					
RH1-RH6	Bomet Town(existing)	75	100	Row housing Mansionets Semi-detached Flats developments Minimum Plot size – 0.05 Ha unsewered to 0.03 Ha sewer	Maximum level – 2 levels unsewered 4 levels on sewer Minimum Road width – 9m apartments allowed on different zones. Setbacks – 3m from the boundary Parking – 1 per dwelling Allow for densification Allow for 10% surrender for Public Purpose on Sub-division

Zone Code	Area Covered	Ground Coverage (%)	Plot Ratio (%)	Type of Development	Remark
RH7 RH8 RH9	Ministry of works camp AP Line Police Line	75	100	Flats developments Minimum Plot size – 0.05 Ha unsewered to 0.03 Ha sewer	Maximum level – 2 levels unsewered 4 levels on sewer Parking – 1 per dwelling Allow for Redevelopment
RH 10- RH11	KAMBI SEITANI	75	100	Row housing Mansionets Semi-detached Flats developments Minimum Plot size – 0.05 Ha unsewered to 0.03 Ha sewer	Maximum level – 2 levels unsewered 4 levels on sewer Minimum Road width – 9m apartments allowed on different zones. Setbacks – 3m from the boundary Parking – 1 per dwelling Allow for densification Allow for 10% surrender for Public Purpose on Sub- division
RH12- RH15 RH16- RH19, RH23	Bomet Town Kapkwon	75	100	Row housing Mansionets Semi-detached Flats developments Minimum Plot size – 0.05 Ha unsewered to 0.03 Ha sewer	Maximum level – 2 levels unsewered 4 levels on sewer Minimum Road width – 9m apartments allowed on different zones. Setbacks – 3m from the boundary Parking – 1 per dwelling Allow for densification Allow for 10% surrender for Public Purpose on Sub- division
RH20 – RH22 – RH24 – RH27 – RH28 – RH30	Silibwet Tenwek Longisa	75	100	Row housing Mansionets Semi-detached Flats developments Minimum Plot size – 0.05 Ha unsewered to 0.03 Ha sewer	Maximum level – 2 levels unsewered 4 levels on sewer Minimum Road width – 9m apartments allowed on different zones. Setbacks – 3m from the boundary Parking – 1 per dwelling Allow for densification Allow for 10% surrender for Public Purpose on Sub- division

Zone Code	Area Covered	Ground Coverage (%)	Plot Ratio (%)	Type of Development	Remark
COMMERCIAL					
CB1 – CB6	Bomet Town (existing)	75	150	Commercial offices Flats-If Sewered Minimum Plot size – 0.05 Ha	▪ Minimum level – 4 levels ▪ Additional levels (From 4) with provision of a Lift ▪ Parking – 1.5 for every Office space ▪ Additional Parking for Cyclists ▪ Setbacks – 2m Front 1.5m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment
CS1 – CS5	Silibwet	75	100	Commercial offices Flats-If Sewered Minimum Plot size – 0.05 Ha	▪ Maximum level – 4 levels ▪ Additional levels (From 4) with provision of a Lift ▪ Parking – 1.5 for every Office space ▪ Additional Parking for Cyclists ▪ Setbacks – 2m Front 1.5m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment
CL1 – CL6	Longisa	75	100	Commercial offices Flats-If Sewered Minimum Plot size – 0.05 Ha	▪ Maximum level – 4 levels ▪ Additional levels (From 4) with provision of a Lift ▪ Parking – 1.5 for every Office space ▪ Additional Parking for Cyclists ▪ Setbacks – 2m Front 1.5m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment
CK1 – CK5	Kapkwon	75	100	Commercial offices Flats-If Sewered Minimum Plot size – 0.05 Ha	▪ Maximum level – 4 levels ▪ Additional levels (From 4)

Zone Code	Area Covered	Ground Coverage (%)	Plot Ratio (%)	Type of Development	Remark
					- with provision of a Lift ▪ Parking – 1.5 for every Office space ▪ Additional Parking for Cyclists ▪ Setbacks – 2m Front 1.5m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment
INDUSTRIAL					
IB1, IB2	Bomet Town (Industrial Area) Jua Kali stalls (Existing)	75%	100%	Godowns Cold Rooms Silos Minimum Plot size – 0.1 Ha Carpentry Metalwork Fabricating Minimum Stall size – 10×20m	▪ Maximum level – 2 levels ▪ Parking – 1 for every 10 workers ▪ Additional Parking for Cyclists ▪ Setbacks – 6m Front 3m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment
IL1	Longisa	75%	100%	Godowns Cold Rooms Warehouses Minimum Plot size – 0.1 Ha Carpentry Metalwork Fabricating Minimum Stall size – 10×20m	▪ Maximum level – 2 levels ▪ Parking – 1 for every 10 workers ▪ Additional Parking for Cyclists ▪ Setbacks – 6m Front 3m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment
ISL	Silibwet	75%	100%	Cold Rooms Minimum Plot size – 0.1 Ha Carpentry Metalwork Fabricating Minimum Stall size – 10×20m	▪ Maximum level – 2 levels ▪ Parking – 1 for every 10 workers ▪ Additional Parking for Cyclists ▪ Setbacks – 6m Front 3m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment

Zone Code	Area Covered	Ground Coverage (%)	Plot Ratio (%)	Type of Development	Remark
IK1	Kapkwen	75%	100%	Godowns Cold Rooms Warehouses Minimum Plot size – 0.1 Ha Carpentry Metalwork Fabricating Minimum Stall size – 10×20m	▪ Maximum level – 2 levels ▪ Parking – 1 for every 10 workers ▪ Additional Parking for Cyclists ▪ Setbacks – 6m Front 3m Back ▪ Provide pedestrian Walkways ▪ Allow for Redevelopment

PART VII: IMPLEMENTATION STRATEGY

7.1 CAPITAL INVESTMENT PLANNING FOR BOMET TOWN

7.1.1. The Need for a Process of Planning and Funding Capital Investments

Urban Capital investment can be defined as the investment related to the acquisition or building of new assets; or major repair and replacement of existing assets that have an economic life longer than one year and a value above a specified threshold. Hence Capital investment planning (CIP) in the context of this Plan for Bomet would include capital investment by the Council but would also include investment by the private sector through public-private partnerships (PPP). In this section we present only the capital items that will be borne by the Council and the County Government. Planning any capital expense ideally should be accompanied by planning for future annual costs and is good practice even if these costs initially can be estimated only approximately.

Though it was not specified in the TORs for this assignment, this section will provide a brief overview of the main capital investment needs for the Town, proposals for prioritizing their funding, and suggestions on how they can be funded.

7.1.2. Main Sectoral Investments Identified

Table 7.1 below gives a summary of the capital expenses for the period 2012 -2030

Table 7.1: Capital Expenditure Projects for Bomet Town. 2012 - 20130

Sector	Sub-Sector	Cost (million)
INFRASTRUCTURE	Road Transportation	29.5
	Parking	5
	Air Transport	24
	Railways	53
	Water Supply	18
	Drainage	9
	Sanitation	13200
	Solid Waste Management	17700
	Electricity	6300
	Fire Protection Services	700
	Security/ Street Lighting	1450
	Stadia Services	2150
	Internet & Data Transfer Services	680
	FixedWire Telephone	370
	Postal Services	1150
Sub Total		43809
ECONOMIC AND INVESTMENT	CBD Jua Kali Sheds	1200

Sector	Sub-Sector	Cost (million)
	Silibwet Agro Industrial Zone	1500
	Kapsimotwa Agro Industrial Zone	2000
	Retail Trade sheds in Kapkesosio, Tarakwa, Cheboin and Singorwet Centres	2000
Sub Total		8700
COST OF AVAILING LAND FOR PUBLIC UTILITIES	Bomet Town	45.8
	Silibwet	6700
	Longisa	15.8
	Kapkwon	70.2
Sub Total		6831.8
ENVIRONMENT	Solid Waste Management	44.2
	Protection of Water Resources	7
	Vegetation Cover	4
	Land Degradation	7
	Air pollution	5
	Public Recreational Grounds	2
	Poverty and Environment	10
	Stakeholders' involvement	2
	Environmental Awareness	1
Sub Total		82.2
HOUSING AND SOCIAL INFRASTRUCTURE		10000
Sub Total		10000
TOTAL PUBLIC INFRASTRUCTURE		69,422.8

Source: Matrix Development Consultants, 2012

As shown the total capital investments over the period amounts to Ksh.69.4 billion.

7.1.3. Funding the Investments

As discussed in Sec. 2.9 above, out of a revenue base of Ksh. 37 million annually, the Council spent about 34% of its annual revenue on personnel emoluments comprising councillor's allowances 13% and staff salaries and wages 21%. It applied 21% of revenue for services provision, 2% for maintenance, 20% for development or acquisition of new capital assets and 17% for reduction of outstanding liabilities. It would be impossible for the Council to meet even a small fraction of the capital costs described above.

As detailed in 7.2.below in the implementation matrix, it will be important for the Council to further detail the immediate, medium and long term investments as described below.

7.2. THE PLAN IMPLEMENTATION MATRIX

The Plan Implementation Matrix (PIM) below 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. It may not have been possible to capture each and every programme of action in the implementation Matrix but details of these programmes and activities are available in the detailed sectoral plans.

STRATEGIES AND PROGRAMMES FOR TRANSPORT, INFRASTRUCTURE AND SERVICES

Issue 1: Road Transportation

CHALLENGE/ POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with provision of roads network in town are: The geographical spread of the town. The set light centres spread far and wide. It is long distances between Bomet - Tenwek, Bomet - Silibwet, Bomet - Kapkwen, Bomet - Longisa, and Bomet - Merigi. The town is almost completely not planned. Other than the CBD. The existing internal road network are very narrow. 95% of the roads are below the basic requirement of		In the short term; Undertake strategic rehabilitation and maintenance of all existing roads and associated facilities starting with CBD, and followed by Kapsimbiri, Tenwek, Silibwet, Kapkwen and Longisa.	1. Municipality takes over development and management of roads infrastructure in Bomet town. 2. Development of GIS data base for Road Inventory. 3. Plan, design and prioritize the development of the entire municipality road net work. 4. Undertake strategic rehabilitation and maintenance of all roads currently in use. 5. Undertake strategic rehabilitation and maintenance of roads structures (Bridges, footpaths, road crossings etc) starting with CBD, and followed by Kapsimbiri, Tenwek, Silibwet, Kapkwen and Longisa.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Kenya Roads Board, Kenya National Highways Authority, Kenya Urban Roads Authority and Development Partners.	350
		In the medium term; Develop a master plan to cover; o maintenance and	6. Undertakes development and maintenance of CBD roads, linkages to Silibwet, Kapkwen, Merigi, Kabungut,	Medium term (5 – 10 years)		2,000

road width of 9 m. The topography of the town is characterised by undulating hills and valleys. This is a major challenge to development of roads. It may call for development an expansive network of roads and development of expensive structures to cross the valley and rivers within the township. Funding is a major challenge. Due to expansive nature of the town development of a comprehensive transport network will be an expensive undertaking. o		rehabilitation of all existing roads and associated facilities - o Opening up of new roads and - o Major development of road network in Bomet.	Longisa and Kapkasosio in the medium term. 7. Develop the vehicular and NMT traffic river crossings over River Nyangores at the six identified crossing points. 8. Undertake a masterplan and feasibility studies to develop transport infrastructure development to cover entire municipality. 9. Acquire adequate road wayleaves (Reserves) for development of roads.			
		In the long-term; Municipality undertakes and implements Roads Transportation masterplan.	10. In the long term; undertakes development of major traffic improvement in the form of By-Pass roads; Eastern By-Pass: the eastern by-pass is envisaged to comprise of two distinct roads; i) D236 from Silibwet centre through Merigi to Kabungut centre on B3. Western By-Pass: the western by-pass is envisaged to comprise of two distinct roads; iii) E184 between Junction with C24 near Silibwet to Kapkwen (Itembe), and iv) E182 from Kapkwen centre to mid	Long term (10 – 30 years)	Same as above	6,000

			section of E182, the by-pass turns crosses River Nyangores and joins C14 near Kapkesosio schools. Kapsimbir Loop - Similarly improvement of the road through Kapsimbir from the bridge opposite Tenwek to B3 near kyokong schools, also linking to B3 to allow free flow of traffic from town centre to the eastern part of town. Western loop - On the other hand improvement of L1 will allow traffic flow to the West, especially the town centre to join the proposed western by-pass to reconnect at Chebion centre on B3.			
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Issue 2: Parking

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with development of parking for Lorries, Buses and General Traffic in town; is lack of planning. It is only the CBD that is planned, the rest of the town is not.		In the short term , the municipality will to undertake; rehabilitation and expansion of existing car, bus and lorry parks in the CBD, and setlight centres of Silibwet, Kapkwen, Tenwek and Longisa.	1. Development and dissemination of parking facilities by-laws. 2. Development and management of Parking facilities in CBD.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Kenya Roads Board, Kenya National Highways Authority,	1,000

completely not planned. To effectively plan for and deliver this service, adequate planning has to be done for the town.					Kenya Urban Roads Authority and Development Partners.	
		In the short term, the municipality will to undertake; rehabilitation and expansion of existing car, bus and lorry parks in the CBD, and setlight centres of Silibwet, Kapkwen, Tenwek and Longisa.	3. Undertake a masterplan and feasibility parking facilities to cover entire municipality. 4. Acquisition of land for Parking facilities. 5. Development and management of Lorry Park at Kapkwen and Longisa.	Medium term (5 – 10 years)	Same as above	1,000
		In the long term; the municipality will implement the masterplan recommendations for whole municipality.	6. Undertake development of the masterplan recommendations on development and management of parking facilities.	Long term (10 – 30 years)	Same as above	3,000

Issue 3: Air Transport

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with development of Air Transport in town is lack of planning for the Air Transport. It is only the CBD that		Short-term: Acquisition of more land for the air strip improvements and expansion.	1. Acquire more land for expansion of the existing airstrip. 2. Expand and modernize the existing airstrip.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Kenya Airports Authorityand	100

is planned. In order to develop this service there is need for comprehensive plan for air Transport and setting aside adequate land to facilitate the development.					Vision 2030.	
		Medium-term: municipality to undertake feasibility study on the development of Air transport link in Bomet.	3. undertake feasibility study on the development of Air transport link in Bomet. 4. Identify suitable land for an international airport that could be built to international standards to serve Bomet, and surrounding areas.	Medium term (5 – 10 years)	Same as above.	300
		Long-term: Undertake development and implementation of the masterplan on development of an international airport.	5. Expand and modernize the existing airstrip. 6. Undertake development and implementation of the masterplan on development of an international airport.	Long term (10 – 30 years)	Same as above	2,000

Issue 4: Railway Transport

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with development of Railway Transport in town is lack of planning for the Railway Transport. It is		In the short term; municipality to undertake feasibility study on the development of railway transport in Bomet.	1. Undertake feasibility study on the possibility to link Bomet municipality to the national railway network through the Nakuru – Fort tenan railway line.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Kenya railways and Vision 2030.	50

only the CBD that is planned, the rest of the town is completely not planned. In order to develop this service there is need for comprehensive plan for Railway Transport and setting aside of adequate land to facilitate the development.		In the medium term; municipality to undertake acquisition of railway reserve to facilitate development of the railway network.	2. Acquisition of land for the railway net work and associated facilities.	Medium term (5 – 10 years)	Bomet Municipality, Bomet county Government, Kenya railways and Vision 2030.	250
		In the longterm; there should be a deliberate effort to introduce railway linkage to Bomet town from the national network.	3. Undertake a masterplan for the development and management of Railway Transport facilities in Bomet municipality.	Long term (10 – 30 years)	Same as above	5,000

Issue 5: Water Supply

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with provision of water supply in town are: The geographical spread of the town. The set light centres spread far and wide. In the short term water supply schemes for each set light centre of Silibwet, Itembe, and	CBD, Silibwet, Tenwek, Kapkwen, Longisa, and Merigi.	The proposed short term strategies are: - o Municipality forms a water and sanitation company to take over operations of all the existing water supplies and distribution facilities (Both public and Community schemes). - o Municipality rehabilitates all the existing water treatment works and extends the distribution network to CBD, Silibwet, Tenwek, Kapkwen, and Longisa.	1. Undertake management change for all the water schemes (Both public and community) to municipality. 2. Municipality to enact, implement and enforce bylaws on water supply, distribution and tariffs. 3. Rehabilitate and expand CBD water supply, treatment works and the associated network, Longisa water supply, treatment works and the associated network, and the community water schemes of;.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Water Resources Management Authority and Water Services Regulatory, Lake Victoria South Water Services Board and Ministry of	500

Longisa have to be developed separately This compounded by poor planning of the town. The town is completely not planned. As its history has it. It is only part of the CBD that has a plan, all the set light towns are completely not planned. The concentration of the services consumers is too dispersed. The sourcing of water supply through pumping is a major challenge. It means that all the set light centres has to have their own water supply and distribution network. This is currently the position and is not			Tenwek and Mogombet and all the small community schemes.		Water and Irrigation.	
		The proposed medium term strategies are: - o Municipality undertakes major expansion of the water treatment facilities and water distribution network for CBD, Silibwet, Tenwek, Kapkwen, and Longisa. - o Municipality undertakes major improvemet of management of water supply. - o Municipality Undertake a masterplan study to a develop gravity water supply systems.	4. Undertake major expansion of the water treatment facilities and water distribution network for CBD, Silibwet, Tenwek, Kapkwen, and Longisa. 5. Undertake major improvemet of management of water supply. 6. Undertake a masterplan study to a develop gravity water supply systems, from the main rivers (Nyangores and Kipsoin) to cover the entire municipality. Followed by feasibility studies and detailed designs.	Medium term (5 – 10 years)	Bomet Municipality, Bomet county Government, Water Resources Management Authority and Water Services Regulatory, Lake Victoria South Water Services Board and Ministry of Water and Irrigation.	2,500

sustainable in the long run. The topography of the study area is characterized by undulating hills and valleys. This is a major challenge to water supply. It gives rise to very expensive distribution network. Funding is a major challenge. Due to expansive nature of the sourcing, treatment and distributing of water supply will be an expensive undertaking.		The proposed long term strategies are: Implement the masterplan on gravity water supply and distribution system to cover the whole municipality.	7. Implementation of the longterm masterplan on; a. development of the gravity water supply system from the main rivers (Nyangores and Kipsoin). b. Storage and distribution to cover the entire municipality.	Long term (10 – 30 years).	Same as above	15,000
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Issue 6: Drainage

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with provision of Stormwater Drainage systems in town are: The town is poorly planned in	CBD, Kyogong, Kapsimbiri, and Tenwek area.	In the short term; To undertake remedial measures and improvement of all existing storm water drainages facilities within CBD, Kapsimbiri, Tenwek, Silibwet,	1. Rehabilitation and development of the CBD stormwater drainage.	Short term (1 - 2 years)	MCB, Bomet county Government, Water Resources Management Authority and	1,500

CBD and completely not planned in the setlight centres. The part of town that is not planned is over 85%. This must be addressed first to facilitate protection of the natural drainage system and development of new drainage systems. The natural drainage systems are currently over private properties. There is need to develop a land acquisition plan to facilitate acquisition of the major Stormwater Drainage corridors. Funding is a		Kapkwon and Longisa.	2. Development of stromwater drainage by-laws to guide development of stormwater drainage in in Bomet 3. Acquisition of stormwater drainage way-leaves for the CBD area.		Water Services Regulatory, Lake Victoria South Water Services Board and National Environmental Management Authority..	
		In the medium term; Develop a master plan for improvement of all existing storm water drainages facilities within CBD, Kapsimbiri, Tenwek, Silibwet, Kapkwon and Longisa.	4. Undertake a masterplan and feasibility studies to develop stormwater drainage system to cover entire municipality. 5. Acquisition of land for major stormwater drainage natural way-leaves for the entire municipality. 6. Development of CBD, Kyokongo hill, Kapsimbir, Silibwet, and Longisa stormwater drainage system.	Medium term (5 – 10 years)	Bomet Municipality, Bomet county Government, Water Resources Management Authority and Water Services Regulatory, Lake Victoria South Water Services Board and National Environmental Management Authority..	1,500

		In the long-term; The Municipality implements the storm water drainage master plan to cover the CBD and the set light centres on the planning and development.	7. Municipality undertakes development of stormwater drainage system in line with the masterplan. This be tied to the roads, water supply, sewerage and housing master plans. 8. Acquisition of land for natural and major storm water drainages facilities inline with the masterplan.	Long term (10 – 30 years)	Same as above	6,000
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Issue 7: Sanitation

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
		In the short term; • Municipality forms a water and sanitation company to take over water supply and sanitation management. • Municipality takes over development of sewerage facilities under the Nile Basin Initiative.	1. Municipality takes over development and management of sewage facilities in Bomet town. 2. Municipality to enact, implement and enforce bylaws on onsite disposal facilities 3. Municipality takes over development of the proposed sewage treatment facilities, in CBD under the Nile initiative.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Water Resources Management Authority and Water Services Regulatory, Lake Victoria South Water Services Board and National Environmental Management Authority.	200

Longisa, and Merigi. o This is compounded by poor planning of the town. The town is completely not planned. It may call for planning to be undertaken first before comprehensive sewerage collection network and treatment facilities are developed. o The topography of the town is characterized by undulating hills and valleys. This is a major challenge to development of sewerage collection network and treatment facilities. It gives rise to very expensive		In medium term: o Municipality undertakes development of sewerage facilities under the Nile Basin Initiative, to fully operationalization. o Undertake masterplan and feasibility studies to develop sewage treatment facilities and collection network to cover CBD, Silibwet, Tenwek, and Longisa centre.	4. Municipality undertakes development of the proposed CBD sewage treatment facilities and collection network for CBD financed by the Nile initiative. 5. Undertake masterplan and feasibility studies to develop sewage treatment facilities and collection network to cover CBD, Silibwet, Tenwek, and Longisa centre. 6. Undertake land acquisition for sewage treatment facilities near Tulusinonik and collection network wayleaves.	Medium term (5 – 10 years)	Bomet Municipality, Bomet county Government, Water Resources Management Authority and Water Services Regulatory, Lake Victoria South Water Services Board and National Environmental Management Authority.	3,000
		In the long term: o Implementation of a comprehensive sewerage collection and treatment facilities.	In the long term: 7. Implementation of a comprehensive sewerage collection and treatment facilities for the CBD, Silibwet, Tenwek, Kapkwen, Kapsimbiri and Kyokong areas. And other parts of the municipality.	Long term (10 – 30 years)	Same as above	10,000

systems. o Funding is a major challenge. Due to expansive nature of the town collection and treatment of sewerage will be an expensive undertaking.						
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Issue 8: Solid Waste Management

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with provision of Solid Waste Management in town are: o A proper dumpsite site. Current dumpsite is temporary and is poorly managed. o The geographical spread of the town. The set light centres	CBD, Silibwet and Longisa.	In the short term: Municipality relocates the existing solidwaste dumpsite to the proposed site for the CBD and identifies and develops two other sites; one at Silibwet and another at Longisa.	1. Municipality updates and develops solidwaste bylaws and guidelines 2. Open up and operationalize the new solidwaste dumpsite near the CBD, closes the existing one. 3. Municipality up grades the soildwaste unit to a department and equips it adequately operate.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Water Resources Management Authority and Water Services Regulatory, Lake Victoria South Water Services Board and National Environmental Management	20

spread far and wide. It means each set light town has to have its own dumpsite to facilitate the service being manageable in terms of operations, management and investment costs. o This is compounded by poor planning of the town. Especially planning and development of other infrastructural services that will support solidwaste collection (mainly roads network and physical planning etc). o The town is completely not planned. Management of the service					Authority.	
		In the medium term: Undetake a masterplan and feasibility studies to develop solidwaste management systems and to cover entire municipality.	4. Undetake a masterplan and feasibility studies to develop solidwaste management systems and to cover entire municipality. 5. Undetake land acquisition for the final solidwaste disposal site, near Tulusinonik.	Medium term (5 – 10 years)	Same as above	250
		In the long term: o Implement the solidwaste development and management masterplan and associated strategies.	6. In the long term municipality implements solidwaste management programmes in the masterpaln.	Long term (10 – 30 years)	Same as above	1,500

is made very complicated and costly.						
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Issue 9: Electricity

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
		In the short term – Undertake immediate measures to deliver electricity to households and business premises to within CBD, Silibwet, Tenwek, Kapkwen, Longisa and Merigi.	1. Avail and ensure electricity is connected to to all households and business premises CBD, Silibwet, Tenwek, Kapkwen, Longisa and Merigi.	Short term (1 - 2 years)	Municipality, County Government and Services providers (Kenya Power and Lighting Co. Ltd, etc), Kenya Electricity Generating Co. Ltd.	250

compounded by the town not being planned.. The high cost of power grid development and high cost of consumer connectivity. The frequent power black outs attributed to power interruption, Voltage drop, Tree falling on power lines and Lightning striking transformers.		In the medium term – develop a short term strategy to ensure electricity is available to all businesses, public places and residents within 2.0 km sq. within CBD, and 1.0 sq. km. within Silibwet, Tenwek, Kapkwen, Longisa and Merigi have been supplied with electricity.	2. Avail electricity to within 2.0 km sq. within CBD, and 1.0 sq. km. within Silibwet, Tenwek, Kapkwen, Longisa and Merigi to all businesses, public places and residents who require it within two years. 3. Initiate development of wind generated electricity	Medium term (5 – 10 years)	Municipality, County Government and Services providers (Kenya Power and Lighting Co. Ltd, etc), Kenya Electricity Generating Co. Ltd.	550
		In the long term develop a strategy to ensure that the power cost is fair to attract industrial investors to Bomet town.	4. Develop and implement a masterplan on generation of electricity and distribution to all businesses, public places and all residents. 5. Develop and implement a masterplan on development and generation of electric power locally. Through hydropower and windpower. 6. Develop and implement a masterplan on affordable electricity through development support for use of alternative electricity.	Long term (10 – 30 years)	Same as above	5,500

Issue 10: Fire Protection Services

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with development of Fire Protection Services in town is lack of planning for the Fire Protection Services. This service goes hand in hand with proper planning of town, adequate road network development and adequate water supply distribution network development. Without these support services it will be very difficult to adequately develop and deliver this service.		In the short term, the municipality will develop and equip fire station in the CBD.	1. Development and dissemination of parking facilities by-laws. 2. Establish and enforce fire protection services guidelines and policies. 3. Develop and equip fire stations at CBD. 4. Establish and enforce fire protection services guidelines and policies	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Kenya National Safety Board and Vision 2030.	100
		In the medium term, Undertake development and implementation of the masterplan on development of fire protection services.	5. Undertake a masterplan study and develop strategies on fire protection services.	Medium term (5 – 10 years)	Same as above	100
		In the long term, the municipality to implement the recommendations of the masterplan study.	1. Undertake development and implementation of the masterplan recommendations on development Fire Protection Services for Bomet municipality.	Long term (10 – 30 years)	Same as above	500

Issue 11: Security/ Street Lighting

		In the long term , the municipality will implement the masterplan recommendations for whole municipality.	6. Undertake development of the masterplan recommendations on development and management of security / street lighting.	Long term (10 – 30 years)	Same as above	1,000
services in town are: It is only the CBD that is planned, the rest of the town is completely not planned. To effectively plan for and deliver this service, adequate planning has to be done for the town. The high cost of power grid development and high cost of consumer connectivity. This has discouraged development of this service. The frequent power black outs attributed to: Voltage drop and	and Longisa.	setlight centres; Silibwet, Kapkwen, Tenwek, Longisa and Merigi.	the CBD, and at Silibwet, Tenwek, Kapkwen and Longisa.		Kenya Roads Board, Kenya National Highways Authority, Kenya Urban Roads Authority and Development Partners.	
		In the medium term , the municipality will undertake develop street lighting in the entire CBD, and the setlight centres; Silibwet, Kapkwen, Tenwek, Longisa and Merigi.	3. Development and management of the street lighting in the CBD, and at Silibwet, Tenwek, Kapkwen and Longisa. 4. Development and management of the street lighting along CBD – Kyokong road, CBD – Kapkwen road and CBD – Tenwek road. 5. Undertake a masterplan and feasibility studies to security / street lighting system to cover entire municipality	Medium term (5 – 10 years)	Same as above	350

Issue 12: Stadia Services

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The main challenges with development of Stadia services (a national stadium to accommodate major national events etc) in town is poor planning or lack of planning. To effectively plan for and deliver this service, adequate planning has to be done for the town.		In the short term, the municipality will develop the stadia in the CBD.	1. Development and dissemination of parking facilities by-laws. 2. Development and management of stadium at the CBD.	Short term (1 - 2 years)	Bomet Municipality, Bomet county Government, Ministry of Gender and sports, KAA, KPL and Vision 2030.	350
		In the short term, the municipality will; - develop a strategy to how the stadiums are to be developed and run. - Strategize on how to undertake a major stadium development with a sitting capacity of 120,000 people..	3. Development and management of stadia at Silibwet, Kapkwen and Longisa.	Medium term (5 – 10 years)	Same as above	800
		In the long term, Implementation of the masterplan study recommendations.	4. Development and management of an international Stadium in the CBD.	Long term (10 – 30 years)	Same as above	1,000

Issue 13: Internet & Data Transfer Services

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KSHS) x 1 MILLION
The key challenges are; Low connectivity of Internet and data transfer services Fibre optical underground cables are not operational yet. Low electricity supply connectivity. Power supply interruptions. Other key challenges faced by the service providers is the geographical spread of the setlight centres.	CBD, Silibwet, Tenwek, Kapkwen and Longisa.	In the short term; develop a programme to provide internet services to key public places (Municipality, County and central government offices, Schools, hospitals, key business centres, hotels and residential units etc.)	1. Improvement and strengthening of existing internet and data transfer centres.	Short term (1 - 2 years)	Municipality, County Government and Services providers (Orange, Airtel, Safaricom and YU etc), Communication Commision of Kenya, and Ministry of Information and Communication	30
		In the medium term; develop a programme to provide internet services to key public places (Municipality, County and central government offices, Schools, hospitals, key business centres, hotels and residential units etc.)	2. Facilitate and support development of internet and data transfer centres, at least 2500 units in 5 years. At least CBD -1500, Silibwet - 200 , Tenwek - 200, Kapkwen - 200, Longisa - 200 and Merigi – 200.	Medium term (2- 5 years)	Same as above	150

		In the long term; develop strategies to ensure internet and data transfer services are available and accessible to the municipality residents at an affordable rates.	3. Undertake Development and implementation of internet and data transfer services masterplan to cover the period upto 2030.	Long term (5- 20 years)	Same as above	500
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Issue 14: Fixed Wire Telephone

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIMEFRAME	ACTORS	COST (KES x 1 MILLION)
The main challenge faced by the service provider is the geographical spread of the town and its setlight centres; Bomet CBD, Tenwek, Silibwet, Kapkwen, Longisa and Merigi. This is compounded by the town not being planned. Reliability of these services is frequently affected by availability of electricity.	CBD, Silibwet, Tenwek, Kapkwen, Longisa and Merigi Centres.	In the short term develop a programme to provide fixed wire telephones in key public place especially for emergency purposes.	Development and installation at least 120 units of fixed wire telephones within the municipality. Improve and strengthen all the existing telephone facilities.	Short term (1 - 2 years)	Municipality, County Government and Services providers (Orange, Airtel, Safaricom and YU etc)	20
		In the medium term develop a strategic plan to link the fixed wire telephones to the internet services providers and the wireless providers.	Development and installation at least 120 units of fixed wire telephones within the municipality. At least CBD -60, Silibwet - 10, Tenwek - 10, Kapkwen - 10, Longisa - 20 and Merigi – 10.	Medium term (2- 5 years)	Municipality, County Government and Services providers (Orange, Airtel, Safaricom and YU etc), Communication Commision of Kenya, and Ministry of Information	150

					and Communication	
		o In the long term develop a strategic plan to link the fixed wire telephones to the internet services providers and the wireless providers.	o Undertake Development and implementation of a masterplan for fixed wire telephones with a completion target year of 2030.	Long term (5- 20 years)	Same as above	200

Issue 15: Postal Services

CHALLENGE /POTENTIAL	AREA	STRATEGY	ACTION	TIME	ACTOR	COST (KES) x 1 MILLION
The key challenges are; The main challenge faced by the service provider is the geographical spread of the town and its setlight centres; Bomet CBD,Tenwek, Silibwet, Kapkwen, Longisa, and Merigi. This is compounded by the town not being planned.	CBD, Silibwet, Tenwek, Kapkwen and Longisa.	In the short term develop postal facilities and provide postal and parcel services within; CBD, Silibwet, Tenwek, Kapkwen and Longisa.	1. Improvement and strengthening of existing postal facilities and services at CBD, Silibwet, Tenwek, Kapkwen, Longisa and Merigi..	Short term (1 - 2 years)	Municipality, County Government and Services providers (Orange, Airtel, Safaricom and YU etc), Ministry of Information and Communication and Ministry of Transport and communication .	150

This service is facing great competition from newly developed services such as letters and parcel delivery companies, email, internet, money transfer services.						
		In the short term develop postal facilities and provide postal and parcel services within; CBD, Silibwet, Tenwek, Kapkwen and Longisa.	2. Develop and operationalize bulk postal facilities and services at CBD, Silibwet, Tenwek, Kapkwen, Longisa and Merigi..	Medium term (2- 5 years)	Same as above	350
		o In the long term transform postal and parcel services to home delivery services for this town.	3. Develop and Incorporate parcel services to longterm development of the postal services. Target to be home delivery of parcels. 4. Undertake Development and implementation of a masterplan for a transformed postal and parcel services.	Long term (5- 20 years)	Same as above	650

COMPREHENSIVE SETTLEMENT UPGRADING STRATEGY

Issue 1: Housing and Informal Settlements

CHALLENGE	AREA	STRATEGY	PROGRAM/ACTION	TIME FRAME	ACTORS
The major challenge includes inadequate housing, under investment in low and middle income housing, inadequate rental housing, emergence of “slum type housing” in freehold areas, lack of adherence to zoning plans and weak capacities for development control and enforcement	Township	- Measures to include re-planning of different parts of the town, - Extend planning guidelines, norms and services to the free hold areas; - In consultation with National and County governments, develop appropriate incentives to encourage private sector participation in housing delivery that meet the requirement of “adequate housing” - Support the formation of housing cooperatives and groups	1) Create collaborative and a networking framework to encourage increased housing stakeholders participation particularly government participation and spending in local housing through existing institutional frameworks such as Civil Servants Housing Scheme and National Housing Corporation (NHC) and any other new institutional arrangement that may emerge from the Devolved Governance. 2) Inculcating Slum Prevention Strategy with particular focus on free hold areas 3) Develop public education programmes: on various themes and aspects of building/construction; Education on rational use of land;	Short term	MCB GOK Cooperatives. Community
				Medium term	
				Long term	

		▪ .	Awareness/Education on innovative techniques of building decent and affordable construction; regular education on the content and implication of the various bills and policy in land sector, new building and planning Bills and Regulations; observance of road reserves and set backs among others. 4) Install physical and social infrastructure in slums		
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Issue 2: Land Use and Housing

CHALLENGE	AREA	STRATEGY	PROGRAM/ACTION	TIME FRAME	ACTORS
Associated drawbacks include the high cost of land, excessive sub-division, encroachment on road reserves and way leaves	Bomet	community education on appropriate space standards, disadvantages of excessive subdivisions and proper use of land	1) Surveying and titling of plots particularly in freehold	Short term	GoK
		Involvement of community in setting aside and safe guarding land for roads and services Received	2) Enhance property rights and functioning of legal system to protect the poor	Long term	NGO/CBO
		Densification and decongestion: making urban density affordable and livable		Long term	MCB

Issue 3: Building Materials

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Weaknesses observed encompass the high cost of building materials, inadequate building materials such as sand, poor infrastructure	Bomet	Assess the suitability and quality of the sand from various local sources.	1) Introduce an appropriate low-cost building materials initiative and utilize the existing housing technology centre	short term	GoK MCB
		Introduce more sustainable quarrying techniques to ensure environmental safety and increased output of the product in a sustainable manner.			
		Guidelines on production and use of bricks and other alternative materials should be introduced, promoted and		Short-Medium term	
		aggressively disseminated throughout the planning areas.		Medium term	
		Interventions should focus on injecting new improved and energy efficient brick making techniques to ensure uniformity should be encouraged.			
		Introduce innovations in the building material sub-sector.			

Issue 4: Planning Related Constraints Affecting Housing

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
The obvious shortcomings include the inadequate planning capacities, poor implementation of development control and zoning regulations, limited enforcement and monitoring of building/construction works, chaotic building layouts in free hold areas	Bomet	Develop an engagement partnership framework that will encourage other stakeholders to participate in a structured and predictable manner in the planning and building activities including approval and enforcement processes.	1) Formation of a broad based "Bomet Stakeholders Planning Sub Committee"- to raise the profile of Planning and Building in the area. 2) Public education on planning on various aspects of building/construction 3) Education on rational use of land and community based self regulatory framework.	Short term	GoK
		employ technical staff with sound planning and building competencies (planners , architects, engineers)		Short-Medium term	MCB
		Ensure enforcement of development standards and regulations with emphasis on self regulations.		Long term	

Issue 5: Public Health infrastructure

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Challenges include the congestion, lack of water, inadequate personnel, inadequate drugs, lack of maternity facilities and non existent rehabilitation centers	All wards	Deployment of more medical personnel and deploy more committed staff to the existing facilities	1) Providing adequate accessible health facilities and	Short term	GoK
					MCB
					NGO/CBO
					Community
		Improving preventive health measures			
		Provide water to the hospitals/health centers		Short term	
		Establish a comprehensive health facility including maternity wards			
		Increase coverage of health facilities in rural areas			
		Setting up of rehabilitation centers for drug abusers and associated vices		Medium term	

Issue 6: Poor State of Service Provision

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Compounding the problems in Bomet is the fact that sewer, water and electricity are grossly inadequate within the Municipality. Developments without regard to riparian reserve are also a major problem.	Bomet	Proper siting of pit latrines and introducing improved ventilated pit latrines. This can be done in partnership with relevant public and none- state organisations.		Immediate to short term	MCB GoK
		Strengthening of exhauster services can also be pursued as an immediate measure where residents construct concrete lined latrines which are regularly exhaustible.		Immediate to short term	
		High density settlements around the riparian area should be discouraged through proper zoning and enforcement		Immediate to short term	
		Encourage rain water harvesting		Immediate to short term	
		Provide an elaborate sewer system Extending services to the freehold area		Medium-long term	
		Develop and promote appropriate technologies for service provision.		long term	

Issue 7: Community Facilities

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Challenges identified include the inadequate recreational/open spaces and those that are there are poorly maintained	Township	fencing and beautification of the existing open spaces Municipality should avail personnel such as trainers at some of these amenities	1)Buying of land for recreational facilities	Short term	MCB NGO/CBO Community
			Encouraging public private partnership in provision of facilities	Short term	

Issue 8: Safety and Security

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Problems associated with the frequent occurrence of crime include, inadequate role of police, risk factors such as unemployment and poverty, breakdown of family, and planning and land use that is not sensitive to safety.	Township and other wards	Mainstreaming safety and security in settlement Upgrading	Construction and equipping police facilities	Short term	GoK MCB NGO/CBO Community
		Addressing issues related to urban development that have a direct impact on enhancement of urban safety and security in Bomet.	Installation of functioning street lights	Short term	
		MCB to encourage and support appropriate local institutions that promote urban safety and security.	Starting social –economic programmes that target youths empowerment Mapping and develop short measures that address all identified hotspots	Medium term	

Issue 9: Disaster Management

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Of concern are Bomet's Inadequate capacities to deal with disasters, lack of emergency response ambulance.	Bomet	Equip council with technical staff, facilities and equipment to respond to disasters	Train staff on basic disaster management techniques	Short term	MCB
		Training community members on disaster risk management	Train the resident community on disaster response	Medium term	GoK NGO/CBO Community
		Enhancing community resilience to disaster through awareness creation, exposure to best practices and training.	Employ technical staff	Long term	

ENVIRONMENTAL CHALLENGES AND PROPOSED STRATEGIES IN BOMET MUNICIPALITY

Issue 1: Poor Solid Waste Management

Plastic papers litter	CBD, Commercial & high density areas	Reduce plastic menace	Adopt the 7 point Govt. plastic mgt. proposal (box1)	Medium to long term	NEMA, MCB, Businesses, Residents, CBOs		Less plastic waste in the town
Poor street sweeping	CBD, Commercial & high density areas	Enhance street cleanliness	Provide more street sweepers and technology	Long term	MCB,PPP	5	Clean streets.
Inadequate storage bins/cubicle	CBD, Commercial & high density areas	Increase primary & secondary waste storage capacity	Provide primary waste collection bins. Build more masonry waste cubicles in CBD & high density areas	Long term	MCB, Residents	5	Presence of waste bins @ household & in the streets.

Low collection coverage and frequency	CBD, Commercial & high density areas	Increase collection coverage & frequency	Buy more waste collection equipments. Embrace ppp in waste collection	Long term	MCB, Private sector	5	Less waste at the generation areas
Poor transportation methods	Town wide	Improve waste transportation method.	Adhere to EMCA waste transport requirements/regulations	Short term	MCB, Private sector	2	Transport vehicle complying with waste regulations
Lack of protective clothing for waste handlers	Municipal workers	Enhancement of waste handlers' safety.	Provide waste handlers with protective clothing & equipment	Immediate	MCB,	0.2	Protective clothing in Waste handlers
Inadequate waste handling technology	Commercial, high density residential, streets	Enhance waste handling technological capacity.	Purchase more waste handling technology e.g. .Refuse trucks, Tractors, push carts, blooms	Short term	MCB, Private sector	15	Adequate waste handling technology.
Minimal waste recovery/recycling.	Town wide	Promote waste recovery/recycling	Give incentives. Promote public awareness.	Long term	MCB, NGOs, CBOs, Residents, NEMA	5	More waste recovered/recycled
Mixing of municipal waste with hazardous waste(mainly medical waste)	From private medical institutions	Avoid mixing of hazardous waste with municipal waste.	Separate hazardous waste at the source. Handle hazardous waste according to Emca (waste regulations) requirements.	Immediate	Private hospitals	1.	Less hazardous waste with municipal waste
Poor disposal techniques	Illegal dumpsite	Dispose off waste in an environmentally acceptable manner.	Open the new official dumpsite. Fence the site & plant green buffer. Establish small dumpsite in all service centres. Cover waste after dumping.	Immediate	MCB	3	Fenced & greened site. Proper waste disposal at the site.

Issue 2: Poor Waste Water Management

Disposal on land & in water bodies	Town wide	Dispose waste water in the sewerage system	Install sewer in the CBD & high density areas.	Long term	MCB		Sewer installation in the specified areas.
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Lack of sewer	Town wide	Dispose waste water in the sewerage system	Install sewer in the CBD & high density areas.	Long term	MCB		Sewer installation in the specified areas.
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Issue 3: Degradation of Water Resources

Potential of underground pollution from pit latrines & leaking septic tanks	CBD & high density areas	Minimise potential of underground water pollution.	Construct sewer in the potential areas.	Medium – long term.	MCB		Increased sewer coverage in town.
	wetlands.		activities along riparian reserve. Green the riparian reserves with indigenous vegetation.		B, NGOs, CBOs, Residents	2	along water courses. Greened riparian reserve with indigenous vegetation.
Pollution from eroded soils, oils, greases, agrochemicals, urban storm, wastewater, car washing and solid waste.	At the intersection of the roads and Rivers Nyangoress &.....	Reduce pollution of surface waters.	Check soil erosion mainly along the roads. Control oils& grease spill from Jua kali. Reduce use of agrochemicals. Install sewer & storm drainage in town. Stop car wash near water bodies. Stop dumping solid waste in water bodies.	Short term	MCB,NEMA	2	Clean water resources
Encroachment & degradation of water catchment areas.		Stop further encroachment/ degradation of the catchment areas	Replace Exotic vegetation (e.g. Eucalyptus with indigenous trees. Control land subdivision, human settlements and unsustainable agricultural practices.	Short-long term	MCB,MW,ME NR,NEMA,KF S,NGOs, Communities	3	Reduced ecological alteration.

Issue 4: Loss of Vegetation Cover

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
Loss of vegetation cover from urban development densification, infrastructure development, harvesting for building material& energy, agricultural activities and livestock feeding.	Town wide	Increase vegetation cover town wide with more indigenous species. Promote efficiency in wood fuel utilization. Promote use of non-wood building materials & energy sources.	Tree planting. Establish tree nurseries (Public, Community, and private.). Promote wood energy saving measures.eg .energy saving jikos. Make bylaws to control livestock grazing/roaming in town. Embrace carbon credit schemes	Short-long term	MCB, KFS, Residents NEMA.	2	Increased vegetation cover town wide.
Replacement of indigenous species with exotic species	Town wide	Practice agroforestry. Control livestock grazing in urban beautified area		Short-long term	MCB, KFS, Residents NEMA.	2	Increased vegetation cover town wide.

Issue 5: Land Degradation

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
Soil erosion Open holes, trenches, pits, quarry sites, abandoned	Roads/paths, quarries.	Control soil erosion and bare spaces including "shambas". Control land pollution.	Use road side engineering soil erosion control techniques. Plant vegetation cover in the affected areas. Terrace the shambas & the sloppy areas.	Short-term	MCB,KURB	5	No soil erosion. No open holes.

well & pit latrine. Land pollution from used oils, greases, agrochemicals, solid & liquid waste. Dumping of materials from construction & demolition sites. Flooding			Pave dusty roads & footpaths. Provide urban storm drainage system. Backfill open holes, abandoned wells, pit latrines and quarries. Control land pollution sources. Ensure material from construction/demolition site is dumped in the council official dumpsite.				No land pollution. Absence of construction/demolition materials on the land. Well drained town
Encroachment of the hills	Tulwet ab Mosonik, Kyogong hills	Reduce hill degrading activities	Discourage high density settlements & plant cover crops or trees on the hills	Short Longterm	- Communities, KFS	2	Hills with vegetation cover

Issue 6: Flooding

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/Annum	COMPLIANCE INDICATORS
Flooding of built up & low lying areas. Lack of/blocked storm drainage system. Disease vectors breeding grounds.	CBD & high density areas	Control flooding in the affected areas.	- Provide storm drainage system in the affected areas. - Keep storm drainage free from blockage. - Drain flooded areas. - Use engineering & environmental flood control measures. - Use integrated disease vector control measures in the flooded areas. - Better management of the	Long term.	MCB, MEMR, MA		Town free from flooding.

			upstream catchment areas to avoid downstream flooding.				
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Issue 7: Air pollution

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
▪ Pollution from vehicle exhaust and smoke mainly from burning solid waste. ▪ Foul smells from rotting garbage and pit latrines. ▪ Dust from roads, footpaths & bare grounds. ▪ Indoor air pollution from use of wood/charcoal/kerosene, unkempt urinals & waterborne toilets,	CBD (market, Bus park, Roads/paths, Public places (eg. bars).	Control outdoor & Indoor air pollution.	▪ Ensure vehicles meet exhaust emission standards. ▪ Promote use of non-motorised transport ("BodaBoda"), organise it and provide cyclic lanes and parking area. ▪ Controls open burning of materials including solid waste especially in crowded area. ▪ Safely dispose-off rotting organic matter & improve hygiene standards in pit latrines/ waterborne toilets and urinals. ▪ Pave roads/footpaths. ▪ Improve vegetation cover in bare grounds. ▪ Promote use of cleaner domestic energies such as electricity, &LPG.	Long term.	MCB, NEMA, KURBA, KPLC, Premises owners.	5	Clean Indoor & outdoor air.

Issue 8: Aesthetic/Visual Pollution

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
- Visual pollution from many large & poorly sited outdoor advertising billboards and signboards. - Poorly sited illegal structures (eg. kiosks) built of rudimentary materials. - Vegetation Removal.	CBD, Satellite Markets & along major roads.	Control/contain aesthetic pollution.	Billboards & sign boards to be approved by the council. Control illegal structures and building materials. Enhance greenery and town beautification.	Immediate.	MCB		Minimal aesthetic pollution.

Issue 9: Noise Pollution

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
High noise levels from bars, discos, churches, Bus park and market.	CBD& Satellite Markets	Reduce Noise pollution by adhering to EMCA noise standards.	Ensure use of acoustic materials from the noisy buildings. Discourage use of powerful loudspeakers. Control unnecessary vehicle hooting in town.	Short term.	NEMA,MCB		Low noise levels.

Issue 10: Inadequate Public Recreational Grounds

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
- No trees. - Soil dumped there - No park seats - No public toilets & water points	Town	Rehabilitate the recreation grounds	Plant trees/ beautify the grounds and put park seats. Remove the dumped soils. Encourage sharing of existing institutional (eg schools, churches) recreation grounds with the general public. Factor provision of public recreation grounds in future town development plans. Build public toilets & water points in the recreation park.	Short term.	MCB	2	A well kept recreation grounds & more utility of the existing ones.

Issue 11: Poverty and Environment

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
- Poverty is an agent of environmental degradation in the town. - The poor suffer most blunt of environmental degradation.	Low income areas in the town & rural	Reduce environmental degradation caused by poverty and improve environmental quality in the poor neighbourhoods.	- Reduce poverty by initiating economic empowerment programs for the poor. - Involve the poor in improving their neighbourhood environments. - Channel more resources for environmental programs for the poor residents. - Improve the housing/living conditions for the poor.	Long term.	MCB, CDF, SMEs, Govt arms	10	Less poverty and better environmental quality in the poor neighborhoods.

Issue 12: Weak Institutional, legal & policy framework

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/Annum	COMPLIANCE INDICATORS
- Weak environmental management institutions. - Overlapping environmental legal framework and poor enforcement. - Lack of environmental policy.	Town wide.	Strengthen environmental legal and institutional framework/capacity. Ensure environmental considerations in all development activities.	Strengthen sectoral environmental institutions. Ensure enforcement of environmental laws & bylaws. Integrate environmental considerations in all development activities	Long term.	Govt. arms & all development actors.		Stronger environmental institutions & legal framework. Harmonised legal framework with more enforcement. More environmental considerations in development activities.

Issue 13: Low Stakeholders' involvement

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/Annum	COMPLIANCE INDICATORS
- Poor stakeholders' involvement in environmental management. - Poor participation incentives.	Town wide.	Enhance & broaden stakeholder' participation in environmental matters.	Strengthen structures for stakeholders' participation in environmental matters. Broaden incentives to attract wide participation. Broaden and strengthen public/private partnership. Enhance community participation.	Long term	MCB, NEMA.	2	More & wide stakeholders' involvement in environmental matters.

Issue 14: Low Environmental Awareness

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
• Low environmental consciousness among town residents. • Low environmental awareness promotion. • Poor residents' environmental ethics.	Town wide.	Enhance environmental consciousness among town resident.	Use electronic and print media, posters, public meetings, organized sector forums and groups.	Long term.	MCB,NEMA, Environmental Sectoral actors.	1	More environmental consciousness & ethics among town residents.

Issue 15: Environmental Management Tools

CHALLENGE /POTENTIAL	AREA	STRATEGY	PROGRAM/ACTION	TIME	ACTORS	COST (KES) x 1 Million/ Annum	COMPLIANCE INDICATORS
Low/no application of environmental management tools (eg. EIAs, EAs, SEAs) in urban projects, policies and programs.	Town wide	Ensure/promote application of environmental management tools	Create more awareness on the tools. Monitors & enforce their application where necessary.	Long term.	NEM, MCB, Environmental sectoral players.		More application of environmental management tools.

INVESTMENT AND ECONOMIC DEVELOPMENT PROGRAMME FOR BOMET

Issue 1: Non Conducive Business Environment

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
1. MCB must see a thriving private sector as the source of more revenues to finance socio economic activities in the Town 2. There is a good opportunity to utilize the Plan to institutionalize the improvement of the business environment in the Town	All Wards of the Town	Institutionalization of the proposed MCB Partnership and Development Unit as an integral part of the way in which MCB relates to the need of the private sector in MCB	Strengthen civic-private sector policy dialogue	Short Term	Business Unit in MCB
			Reorient the attitudes of civic and public officials towards serving private sector development.	Short Term	Business Organizations e.g. KNCCI Bomet Branch, Bomet Jua Kali Association
			Harmonize and coordinate business regulatory departments and agencies	Short Term	ODPM&MoLG, Ministry of Trade, MCB
			Conduct regular business climate surveys	Short Term and Medium Term	Ministry of Trade, MCB

Issue 2: Underutilization of the Tourism Potential of the Town

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
1. Need for better marketing of tourism attractions and facilities in Bomet	Township Ward	Development of a Tourism Master Plan for the County	Profiling of likely visitors	Short Term	MCB and Tourism Board
	Merigi Hills		Initiate discussions with Tourism Board on development of a Tourism Master Plan for the County	Short Term	MCB and Tourism Board
2. Acute lack of tourist class facilities	Cheboin Ward		Tourism Marketing of Bomet	Medium Term	MCB and Tourism Board
			Community organization to participate in eco-tourism		
			Fast tracking establishment of at least 2 tourist class facilities in the Town	Medium Term	MCB and Tourism Board
				Medium Term	MCB, Private Investors, KTDC

Issue 3: Expanding Facilities for Retail and Wholesale Trade

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
1. Despite establishment of new market in CBD, facilities still stretched	CBD	Improvement of retail and wholesale facilities in smaller centres as a strategy to disperse opportunities for non-farm employment	Build/upgrade retail facilities in at least 3 centres of selected Wards of MCB	Short term	Ministry of Trade, Financial Institutions
	Longisa, Itembe, Tenwek and Silibwet		Create awareness of credit and related facilities increasingly available in the Town for business growth	Short Term	MCB/private sector and GoK

Issue 4: Limited Facilities for Small and Medium Industrial Activities

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
1. Jua Kali Sheds inoperational due to lack of water and electricity	Singorwet	Promotion of a light Industrial Zone in the Town with adequate facilities	Prepare a work plan for enhancing PPP activities in the Town	Short term	MCB/private sector and GoK
2. No dedicated Industrial zone in the Town	Cheboin Mutarakwa			Medium Term	
			Formulate localized incentive systems to encourage establishment of light industrial activities in the Town based on selected value chains		MCB/private sector and GoK

Issue 5: Low Level of Value Addition in Agro Value Chains with Good Potential

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
1. Low productivity 2. Expensive farm inputs 3. Poor infrastructure like poor roads	Tea in Kapkores	Promote integrated value chain development in dairy, horticulture and aquaculture	Coordinate with private sector produce purchasers and BDS providers to inculcate value chain analysis for agribusiness	Short term	Private sector, GoK
	Potatoes in Singorwet Aquaculture along Nyongares River		Implement specific activities related to the different value chains	Medium Term	Private sector, GoK

Issue 6: Need to Increase Opportunities for Youth Business and Skills Training for Self-Employment

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
1. Agro processing opportunities open up a wide range of off farm employment opportunities within the various value chains	Longisa Emkwen	Within value chain promotion increase awareness and understanding of new economic opportunities in the Town and County.	Enhance business capacity of small businesses and unemployed youth	Short term	Private sector and GoK
				Medium Term	MCB/
			Promote credit schemes in collaboration with existing Financial Institutions in the Town	Short term	MCB/private sector and GoK
				Medium Term	
			Support the existing activities that empower entrepreneurs with business formation and expansion information services	Short term	MCB/private sector and GoK
				Medium Term	

Issue 1: MCB Lacks the Professionally Qualified Staff.

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
MCB lacks the professionally qualified staff.	Municipal Council of Bomet	Improve staff capacities	Review the terms and conditions of service for its staff so as to attract and retain qualified and experienced personnel. Expand staff complement Recruit appropriately qualified survey, finance, legal, engineering, public health, physical and environment planning staff.	Short and medium term	Bomet MC. County Govt. Officials MOLG National Govt. Donor Agencies

Issue 2: Reliance on Grants Revenue

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Grants from the National Govt. amount to about 43% of the council's total annual revenue.	Municipal Council of Bomet	Reduce / eliminate overdependence on grants and to secure relative financial autonomy	- Lobby to maintain increasing trend of grants from national govt. and from devolved public funds and donors - Diversify local revenue sources, introduce and operate more user charge facilities and services and cess on market values of outputs of main economic activities in the area	Short and medium term	Bomet MC Residents Other stakeholders

Issue 3: The council's Operations Usually Result in Revenue Deficits.

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Council unable to raise enough revenue to pay for all its operations fully.	Municipal Council of Bomet	Enhance revenue base and control expenditure	- Lobby for increased grants revenue. - Increase yields of local revenue sources especially Land rating and cess on commercial farming and mining produce. - Develop and operate user charge facilities - Promote/support major economic activities in the area, e.g. mining, tea, livestock and pyrethrum industries.	Short and medium term	Bomet MC Residents Other stakeholders Dairy farmers Tea farmers and factories

Issue 4: Site value -Vs- Developed Property Rating

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Council levies the unimproved site value (USVR) rate based on land value only and whose yields are much lower than tax based on developed property values (land plus all developments)	Municipal Council of Bomet	Increase rates revenue yields	The council should levy a tax rate based on the developed (i.e. land plus developments) value of properties	Short and medium term	MCB, MOLG

Issue 5: Location of Slaughter House

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Location of slaughter house and bus park are inappropriate	Municipal Council of Bomet	Involve stakeholders in decisions that affect them.	The council to consult with stakeholders in selecting a site for a slaughter-house and to decide whether to lease out the provision of slaughter house services.	Short and medium term	Bomet MC Livestock farmers Livestock traders

Issue 6: No Public Parking Facilities for Motor Vehicles

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
There are no sufficient parking places for buses, matatus, Bodabodas and the long distant travelling trucks which park in all the trading centres of the town	Municipal Council of Bomet	Provide public parking facilities	Develop suitable public parking facilities for motor vehicles operating in town	Short and medium term	MCB, MOLG, Residents, lorries, buses, matatu and bodaboda operators

Issue 7: User Charge Services Cost Recovery

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
User charge fees levied are generally low compared to market rates for similar services and cannot guarantee related cost recovery.	Municipal Council of Bomet	To attain financial viability for all user charge facilities and services	The council to regularly review and up-date levels of its licenses and user charge fees	Short and Medium term	MCB MOLG

Issue 8: Evasion of Payment of Council Dues is Rampant

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Evasion of payment of council taxes and other dues is common. Residents and council officials appear ignorant of the duty of the public to pay council dues..	Municipal Council of Bomet	To have informed and responsible residents	The council should impose heavy penalties for confirmed cases of evasion of payment of council dues. Civic education programs for councilors, council staff and the wider public should be mounted to enhance their awareness of their responsibility pay taxes and other council dues.	Short and medium term	Bomet MC Residents Other stakeholders

Issue 9: Capacity to Enforce Council Policies and Rules

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Enforcement officers and market attendants are too few to control markets activity transacted in the trading and market centres over the town	Municipal Council of Bomet	Effective enforcement of council's markets and other by-laws	Increase staff supervision by regular and surprise checks and introduce staff rotation to discourage dishonesty, under-charging and collusion between collectors and traders.	Short and medium term	Bomet MC Residents Other stakeholders

Issue 10: Proportion of Resources Committed to Financing Personnel Costs

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Council spends about 34% Of resources raised annually on staff costs leaving very little for services provision.	Municipal Council of Bomet	To reduce proportion of resources applied on staff and civic emoluments.	Conduct Job evaluations to rationalize employee jobs contents and to determine optimum staff positions per service/activity or cost centre. Train councilors and staff to ensure their increased and positive output	Short and medium term	Bomet MC Residents Other stakeholders

Issue 11: Low investment in Operating Assets and Equipment Limits

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
The council's capital asset base is insufficient to enable it provide infrastructure and services at the scale, variety and spread desired by residents.	Municipal Council of Bomet	Increase and sustain investment in operating assets and equipment.	Invest in revenue generating facilities: e.g. refuse collection / disposal equipment, cess pit emptying equipment, rental housing, Markets, Slaughter houses, Bus parks, etc. Increase and sustain investment in operating assets and equipment for production of goods and services to residents, e.g. roads, street lighting, sewerage systems	Short and medium term	Bomet MC Residents Other stakeholders

Issue 12: Adoption of Integrated Digital Information Communication Technology (ICT)

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
The council's MIS is partly manual and partly computer based. It uses single purpose LAIFOMS modules for preparation of budgets, revenue enhancement plans; payroll administration and financial reporting.	Municipal Council of Bomet	Install an integrated digital Management Information System	The council to ensure implementation of all accounting modules of the Local Authority Integrated Financial Operational and Management System (LAIFOMS). Set up and regularly up-date registers of land parcels town (details: reg. numbers, sizes, location, use, and details of owners) and registers of businesses operating in the Town.	Short and medium term	MCB. MOLG

Issue 13: Digital linkage of Related Databases.

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
The council's property tax registers, valuation rolls and physical planning maps and registers are not digitally linked and cannot be simultaneously updated with changes arising from transfers, subdivision, registered use, and contact or owners of properties.	Municipal Council of Bomet	Digitally link property tax registers to valuation rolls and other physical planning maps and registers to assist it in assessments and invoicing of property taxes due.	Land rating registers, and valuation rolls are maintained independently and are not updated simultaneously	Short and medium term	MCB. MOLG

Issue 14: Public Private Partnership (PPPs)

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Public private partnerships for municipal services provision has not been introduced in Bomet town	Municipal Council of Bomet	Encourage private sector involvement in development of infrastructure and provision of public services and facilities	Adopt policies and strategies that encourage able and interested private sector / business operators to put up and run public facilities e.g. conservancy, markets, bus-park and slaughter house	Short and medium term	

LAND USE AND SPATIAL PLANNING

Issue 1: Inefficient Central Business District

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
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1. Clogged storm water drains	C. B.D	Clean up or un block the drains	Kazi kwa vijana initiative	Short term	B. Municipal council
2. Poor sanitation	C.B.D	Improve public health services	Provide adequate and working sanitation facilities on 'pay as you use basis'	Short and medium term	B. Municipal council - P. P. P.
3. Cattle grazing	C.B.D	Restrict this activity	Impose heavy fines on the owners of the cattle. The elder man of the town to meet the Bus owners to sort out existing misunderstanding and standoffs	Short term	B. Municipal council -Local courts - Opinion leaders - Civic leaders
4. Underutilized Bus Park	Bus Park	To improve the operations in the Bus Park and revenue enhancement to the Municipal Council To remove the congestion which is a danger to the people	Provide adequate Taxis & parking areas - Provide Boda Boda parking area Impose heavy fines for those who persists	Short term	- Provincial Administration - Bus owners - Local members of parliament - B. M.C.

6. Unnamed roads	C. B.D	Name all the roads in the C. B.D.	Full council meeting to propose and adopt street names through a council minute.	Short term	B. Municipal council
7. Uncontrolled hawking	- Out side Bus park - Along the highway - Most of the C.B.D	Plan for the strategic operations of this informal sector	- Designate certain areas for informal Trading - Convert some less busy streets into periodic open air markets. - The council to complete the market under construction. - The Municipal Council could create some parking spaces within its compound and charge a fee to those who park.	Short term	MCB - P. P. P.
8. Limited parking space for vehicles	- Out side Bus park - Along the highway	Involve the councils to provide parking space	- Provides seats (concrete) - Develop upto standard stadiums - Planting of trees to create shade	Short term	MCB

Issue 2: Linear Developments Along B3 Highway

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Conflict between local and through traffic	B3 highway	Segregate internal traffic into the C. B.D.	Build a service lane adjacent to B3	Medium term	MCB

Issue 3: Unplanned and Uncoordinated Urban Development

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
- Urban sprawl and unregulated developments	Freehold area next to C.B.D	Control the high subdivisions of Agricultural land	Development control	Short term	MCB
- Lack of Development control activity in the municipality	Freehold areas - The whole municipality	To initiate development control functions	- Establish a town planning department - Use the zoning plan to control subdivisions - Create and equip the enforcement section of the new planning dept. - Two or more Planners to be attached to the Municipal Council	Short and medium term	- Ministry of lands B. M.C - M.D. P.M & Local Government

Issue 4: The Physical Restrictions of the River Nyangores

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
This is a physical boundary restricting interactions	South of CBD and East and West of the Municipality	Make the river less inhibitive	-Open up at least four other bridges to the Eastern and Western side of the Municipality - Open upto one more bridge crossing at the South of the CBD	Medium term	MCB

Issue 5: Taming the Flood Plains

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
1. Underutilization of this land	Kapsimbiri flood plain	Improve its utilization and income generation	-Promote Aquaculture or fish farming - Plant Bamboo trees as an income source - Provide road connectivity to the C.B.D for markets - Seek technical; Assistance from fisheries development -To form and register a water use society to attract Government Aid	Short and Medium term	- MCB -P.P.P -N.G.O'S -Ministry of Natural resources

Issue 6: The Local Urban Centres in Bomet

CHALLENGE	AREA	STRATEGY	PROGRAMME/ACTION	TIME FRAME	ACTOR
Potential to use these centres to spur growth in the Municipality	Longisa Silibwet Kapkwen Merigi Kapsosio	Make these as centres of the Urban grow	- Site all flagship projects under vision 2030 at these centres - Direct new entrepreneurs to these centres - Plan for agro based industrialization of these centre	Short to Medium term	MCB Ministry of Planning & vision 2030 - P. P. P

REFERENCES

- GoK, (1991): The Factories Amendment Act 1990. Government Printers.
- GoK, (1999): The Environmental Management and Coordination Act 1999. Government Printers.
- GoK, (1999): The Sessional Paper No. 6 (1999) on Environment and Development. Government Printers.
- GoK, (2001): 1999 Population and Housing Census, Vol. 1 Government Press
- GoK, (2005): Geographic Dimensions of Well-Being in Kenya: Where Are the Poor? A Constituency Level Profile. Vol. II. Nairobi: Ministry of Planning and National Development.
- GoK (2007): Kenya Vision 2030: The popular version. The National Economic and Social Council of Kenya (NESC), Nairobi.
- GoK, (2007): Kenya Integrated Household Budget Survey – 2005/06 (Revised edition), Nairobi: Kenya National Bureau of Statistics.
- GoK, (2007): The Forest Act of 2006. Government Printers.
- GoK, (2007): The popular version: Kenya Vision 2030. The National Economic and Social Council of Kenya (NESC), Nairobi.
- GoK, (2007a): Kenya Vision 2030: A globally competitive and prosperous Kenya, Ministry of Planning and National Development and the National Economic and Social Council (NESC). Nairobi
- GoK(): The Local Government Act (cap.265). Government Printers.
- GoK(): The Merchant Shipping Act (Cap 389). Government Printers
- GoK(): The public health (Cap.242).Government Printers.
- GoK(): The Water Act (Cap 372). Government Printers.
- GoK():The Forest Act of 2006. Government Printers.
- GoK, (2009): Sessional Paper No.3 of 2009 on National land Policy. Nairobi: Government Printer.
- GoK, (2010): 2009 Population and Housing Census, Vol. 1 Government Press
- GoK, (2011a): First Medium Term Plan Update. Ministry of State for Planning, National Development, & Vision 2030 and Office of the Deputy Prime Minister and Ministry of Finance, November 2011
- GoK, (2011b): Bomet District Environment Action Plan 2009-2013. National Environmental Management Authority.
- GoK,: The Local Government Act (Cap.265). Government Printers.

- GoK,: The Merchant Shipping Act (Cap 389). Government Printers
- GoK,: The public health (Cap 242).Government Printers.
- GoK,: The Water Act (Cap 372). Government Printers.
- Hardoy, J.E. et. Al., (2001): Environmental Problems in an Urbanizing World. Earthscan Publications Ltd, London and Sterling, A.
- Kamau, E.C. (2005): Environmental law and self-management by industries in Kenya. Journal of Environmental Law (17)2:229-244
- Manek, M. (2001): The implementation of Biodiversity-Related Conventions: A Kenyan Case Study. UNEP-BPSP project May 30
- NEMA, (2005): State of Environment Report Bomet District 2004; Land use and Environment. Nairobi
- Ogolla B. and J.B Ojwang (1996): Kenya Environmental Law. Kenya Law International, London
- Okidi C.O.et. al., (2008): Environmental Governance in Kenya: Implementing the Framework Law. East African Educational Publishers Ltd.Nairobi. Partpro, (2011): Report on the Focused Group Discussion for Bomet Municipal Council, November, 2011, mimeo.
- The Tea Research Foundation of Kenya, (2010): Proposal on Promotion of Technologies for Management of Tea Quality and FoodSafety Standards in Small Holder Tea Production in Eastern Africa. Project Proposal Submittedtothe FAO Common FundFor Commodities.
- UNEP, (2000): The Urban Environment: Facts and Figures. In Industry and Environment Journal Vol. 23 No.1-2.
- UNEP, (2005): Selection, Design and Implementation of Economic Instruments in the Solid Waste Management Sector in Kenya: The case of plastic bags. UNEP.
- UNIDO, (2011) Kandeh K. Yumkella, Director-General of UNIDO/Patrick M. Kormawa/Torben M. Roepstorff/Anthony M. Hawkins, Eds., Agribusiness for Africa's Prosperity, An UNIDO Publication, Vienna: UNIDO, 2011.
- Sott Cambel and Susan Finstein (Ed): Readings in Planning Theory. Blackwell Publishers (1999)
- Ed. Ptsy Healey, Abdul Khakee, Alain Motte and Barrie Needham: Making strategic Spatial Plans, Innovation in Europe (1997)
- Peter Hall: Cities of Tomorrow, Blackwell Publishers (2000)
- Sun Academia UFO 2: Human settlements – Formulations and (re) Calibrations
- Ashesh Kumar Maitra : Urban Environment in crises. New Age International Publishers (2000)

Republic of Kenya (NEMA): Bomet District Environ Action Plan (2005 – 2010)

Petre Newman & Andy Thornley: Urban Plannning in Europe (1996)

Nile Basin Initiative: Design of Expansion of Bomet Municipal water supply and a new disposal and Treatment Plant, Bomet, Kenya, June 2008.

Sida: The Symbio City Approach; conceptual framework for support to sustainable urban development in low and middle income countries.

Joseph Leitman: Sustaining cities: 'Environmental Planning and Management in urban design' McGraw Hill (1999)

Dar essalaam City Commission: Strategic Urban development Planning; Framework for stakeholders Edition, (1999)

Edward Kaiser, David R. Godschalk

And F stuort Chapin: Urban Land use, Planning (1995), Chicago: University of Illinois Prezo.

Republic of Kenya: The Town Planning Handbook (1997)

Republic of Kenya: The Physical Planning Act (Cap 286) 1996

Republic of Kenya: Vision 2030. Government Printers 2008

Syagga, P and Albert K. Mwenda (2010) Political Economy and Governance Issues Surrounding Policy Interventions In The Land Sector In Kenya, Final Report, March, 2010.

ANNEXE

ANNEXE I: POPULATION PRO JECTIONS

Ward Sub-location	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Township	27,562	28,574	29,630	30,733	31,885	33,089	34,347	35,661	37,035	38,471	39,973	41,544	43,187	44,906	46,705	48,587	50,558	52,621	54,780	57,042	59,411	61,892
Chepngaina	9,844	10,394	10,974	11,587	12,234	12,917	13,638	14,399	15,203	16,052	16,948	17,895	18,894	19,949	21,062	22,238	23,480	24,791	26,175	27,636	29,180	30,809
Kapsimbiri	2,707	2,762	2,819	2,877	2,936	2,996	3,057	3,120	3,183	3,249	3,315	3,383	3,452	3,523	3,595	3,669	3,744	3,820	3,899	3,978	4,060	4,143
Merigi	4,491	4,555	4,620	4,686	4,753	4,821	4,890	4,959	5,030	5,102	5,175	5,249	5,324	5,400	5,477	5,555	5,634	5,715	5,796	5,879	5,963	6,048
Chepkolon	4,258	4,354	4,452	4,552	4,654	4,759	4,866	4,976	5,087	5,202	5,319	5,439	5,561	5,686	5,814	5,945	6,079	6,215	6,355	6,498	6,644	6,794
Motigo	6,262	6,509	6,765	7,032	7,309	7,597	7,896	8,207	8,531	8,867	9,216	9,579	9,957	10,349	10,757	11,181	11,621	12,079	12,555	13,050	13,564	14,099
Singorwet	12,451	12,822	13,203	13,596	14,001	14,418	14,847	15,289	15,745	16,214	16,697	17,194	17,707	18,235	18,778	19,338	19,915	20,508	21,120	21,750	22,399	23,067
Aisak	4,012	4,139	4,269	4,404	4,543	4,686	4,834	4,986	5,143	5,306	5,473	5,646	5,824	6,007	6,197	6,392	6,594	6,802	7,016	7,238	7,466	7,702
Kabungut	3,024	3,119	3,218	3,319	3,424	3,532	3,643	3,758	3,877	3,999	4,125	4,255	4,390	4,528	4,671	4,818	4,970	5,127	5,289	5,455	5,627	5,805
Singorwet	5,415	5,564	5,716	5,873	6,034	6,200	6,370	6,545	6,724	6,909	7,099	7,293	7,494	7,699	7,910	8,127	8,351	8,580	8,815	9,057	9,306	9,561
Mutarakwa	12,462	13,011	13,584	14,182	14,806	15,458	16,139	16,849	17,591	18,366	19,175	20,019	20,901	21,821	22,782	23,785	24,832	25,926	27,068	28,260	29,504	30,804
Leldaet	7,188	7,500	7,826	8,166	8,521	8,892	9,278	9,681	10,102	10,541	10,999	11,477	11,976	12,497	13,040	13,606	14,198	14,815	15,459	16,130	16,831	17,563
Tarakwa	5,274	5,510	5,757	6,015	6,285	6,566	6,861	7,168	7,489	7,825	8,175	8,542	8,924	9,324	9,742	10,179	10,635	11,111	11,609	12,129	12,673	13,241
Itembe	11,541	12,050	12,581	13,135	13,714	14,319	14,950	15,609	16,297	17,016	17,766	18,549	19,367	20,221	21,112	22,043	23,015	24,030	25,090	26,196	27,351	28,558
Itembe	5,627	5,868	6,120	6,382	6,655	6,941	7,238	7,548	7,872	8,209	8,561	8,928	9,310	9,709	10,125	10,559	11,012	11,483	11,976	12,489	13,024	13,582
Kabisoge	5,914	6,182	6,461	6,753	7,059	7,378	7,712	8,061	8,425	8,807	9,205	9,621	10,057	10,512	10,987	11,484	12,004	12,547	13,114	13,707	14,327	14,975
Emkwen	15,853	16,173	16,500	16,834	17,174	17,521	17,876	18,237	18,606	18,982	19,365	19,757	20,156	20,564	20,979	21,404	21,836	22,278	22,728	23,187	23,656	24,134
Kapsomotwa	7,145	7,291	7,441	7,593	7,748	7,907	8,069	8,234	8,403	8,575	8,750	8,929	9,112	9,299	9,489	9,683	9,881	10,084	10,290	10,501	10,716	10,935
Silibwet	8,708	8,882	9,060	9,241	9,426	9,614	9,807	10,003	10,203	10,407	10,615	10,828	11,044	11,265	11,491	11,720	11,955	12,194	12,438	12,687	12,940	13,199
Tuluapmosonik	16,841	17,365	17,906	18,464	19,039	19,633	20,246	20,878	21,529	22,202	22,896	23,612	24,350	25,112	25,898	26,709	27,546	28,409	29,300	30,219	31,168	32,146
Kapkesosio	2,466	2,539	2,615	2,693	2,773	2,855	2,940	3,028	3,118	3,211	3,306	3,405	3,506	3,611	3,718	3,829	3,943	4,060	4,181	4,305	4,433	4,565
Kyongong	5,734	5,929	6,132	6,341	6,557	6,780	7,012	7,251	7,498	7,754	8,018	8,291	8,574	8,866	9,169	9,481	9,804	10,139	10,484	10,842	11,211	11,594
Giatab silibwet	5,631	5,780	5,932	6,089	6,250	6,415	6,585	6,759	6,937	7,120	7,308	7,502	7,700	7,903	8,112	8,326	8,546	8,772	9,004	9,241	9,486	9,736
Kimenderit	3,010	3,117	3,227	3,341	3,460	3,582	3,709	3,840	3,976	4,117	4,263	4,414	4,570	4,732	4,900	5,073	5,253	5,439	5,631	5,831	6,037	6,251
Cheboin	13,450	13,920	14,407	14,912	15,434	15,976	16,536	17,117	17,718	18,341	18,987	19,655	20,348	21,065	21,808	22,578	23,376	24,202	25,059	25,946	26,865	27,818
Cheboin	5,242	5,401	5,566	5,735	5,909	6,089	6,274	6,464	6,661	6,863	7,072	7,287	7,508	7,737	7,972	8,214	8,464	8,721	8,986	9,259	9,541	9,831
Emitiot	4,052	4,223	4,401	4,587	4,781	4,983	5,193	5,413	5,641	5,879	6,128	6,386	6,656	6,937	7,230	7,535	7,854	8,185	8,531	8,891	9,267	9,658
Samituk	4,156	4,296	4,440	4,590	4,744	4,904	5,069	5,240	5,416	5,599	5,787	5,982	6,183	6,391	6,606	6,829	7,059	7,296	7,542	7,796	8,058	8,329
Total	110,160	113,915	117,811	121,856	126,055	130,414	134,940	139,640	144,521	149,592	154,858	160,330	166,015	171,923	178,063	184,445	191,078	197,975	205,145	212,601	220,355	228,419

ANNEXE II: KEY ACTORS IN BOMET TOWN

The local authorities in Kenya are additionally governed by a number of other statutes which require the approval of the relevant ministries²⁰, listed in table: A.1 below ministry/agency functions.

In terms of urban development, there are two (2) institutions: one is the Ministry of Lands and the other is the Ministry of Local Government. These institutions are guided by two key statutes: the Physical Planning Act (Cap 286) and the Local Government Act (Cap 265). There are other laws that govern physical planning and are found mostly related to land. Some of these legislations include:

- 1) Physical Planners Registration Act, 1996
- 2) Environmental Management and Co-ordination Act, 1999
- 3) Public Health Act (Cap 242)
- 4) Agriculture Act (Cap 318), Rev.1986
- 5) Land Control Act (Cap 302)
- 6) Land Acquisition Act (Cap 295), 1968
- 7) Registered Lands Act (Cap 300)
- 8) Survey Act (Cap 299)
- 9) The Building By-Laws (Grade I &II), 1968
- 10) Housing Act (Cap 117)
- 11) Water Act, 2002

²⁰ Concept Paper for the Preparation of a National Urban Development Policy (NUDP) 2008

Table A.1: Functions of Ministries/ Agencies²¹

MINISTRY/ AGENCY	ROLE/ FUNCTION/ REMARK
Ministry of Local Government	Formulation of local Authorities Policy Oversight, Management and Development Support to Cities, Municipalities, Town and County Councils, among others
Ministry of Lands and Settlement	Plans and allocates land in LAs to various users, administers land legislation, oversees land surveys, advises LAs on valuation, rating and taxation, and takes the lead in the formulation of land policy
Ministry of Housing	Housing Policy Oversees the upgrading of slums and improvement of informal settlements
Ministry of Health	Health policy; Provides medical personnel and supplies to LA clinics, administers the Public Health Act
Ministry of Education	Education policy; Provides student bursaries and teaching materials under the free primary/secondary education program to schools in LAs, and the Teachers' Service Commission (TSC) provides teachers in LA schools,
Ministry of Finance	Oversees the allocation and utilization of special funds for development of LAs areas of jurisdiction e.g. LATF and CDF
Ministry of Public Works	Public Works Policy; Public Works Planning Development and Maintenance of Public Buildings; Kenya Building Research Center Registration of Civil, Building and Electromechanical Contractors Registration of Architects and Quantity Surveyors
Ministry of State for Planning, National Development and Vision 2030	National Development Planning Monitoring and Evaluation of Economic Trends and Policy Co-ordination of Constituency Development Fund(CDF)
Office of the Prime Minister	Oversees the implementation of public service reforms in ministries, departments and LAs e.g. results based management, performance contracts and related monitoring

²¹ Ibid

MINISTRY/ AGENCY	ROLE/ FUNCTION/ REMARK
Ministry of Roads	National Roads Development Policy Development, Standardization and Maintenance of Roads Materials testing and advice on usage Standardization of Vehicles Plant and Equipment Registration of Roads Contractors Registration of Engineers
Ministry of Regional Development Authorities	Regional Authorities Development Policy. Oversight, management and development support for Regional Development Authorities. Capacity building and support for Regional Development Authorities
Kenya Roads Board (KRB)	Appoints LAs to be Road Agencies and allocates the road maintenance funds and oversees road development
Water Services Board (WSB)	Oversees the provision of water/ sanitation services by licensed service providers
National Housing Corporation (NHC)	Promotes housing estates development in collaboration with banks and mortgage finance institution
Kenya Power and Lighting Company (KPLC)	Oversees the distribution and installation of electricity to dwellings and business premises in LAs