

Kira Municipal Council

KIRA MUNICIPAL PHSICAL DEVELOPMENT PLAN 2019 - 2040

Draft Final Report





October, 2018

Table of Contents

Contents

T ' , C C'	
List of figures	
List of Tables	
List of Maps	
List of plates	
Part I	
1.0 Introduction and Background	
1.1 Introduction	
1.2 Background	
1.3 Appointment of Consultants	
1.4 Objective of the Assignment	
1.4.1 Specific Objectives	
1.5 Scope of work	
1.6 Planning Horizon	
1.7 Methodology	
1.8.1 Location	
1.8.2 Administrative Units	
1.9 Urbanization trends and the evolution of planning paradigms in Uganda	
1.10 Social Demographic characteristics of urban population	
1.11 Historical developments and urbanization of Kira Municipality	9
1.11.1 History of Development	
1.11.2 Urbanization of Kira Municipality	10
1.12 Challenges of urbanization	10
1.13 Trends of physical development in Kira Municipality between 1995 and 2018	311
Part II	13
2.0 Policy, Legal and Institutional Framework	13
2.1 Policy Framework	13
2.2 Physical/ Urban Planning Policy	
2.3 Physical/ Urban Planning Legal and Institutional Framework	16
2.4 Regulations	
2.5 Strategies and Action Plans	21
2.6 Physical Planning Institutional framework	
2.7 Administrative set up of Kira Municipal Council as of 2018	
2.8 Institutional structure and physical planning function at the Municipality	
Part III	
3.0. Sector Reports, Analysis Proposals and Recommendations	
3.1. Report on the Physical Environment and Natural Systems	
3.1.1 Physical Characteristics of Kira municipality	
3.1.1.1 Topography	
3.1.1.2 Geology	
3.1.1.3 Minerals	
3.1.1.4 Hydrology	
3.1.1.5 Soils	
3.1.1.6 Climate	
3.1.1.7 Vegetation	30

3.1.1.9	Wetlands	30
3.1.1.10	Drainage	31
3.1.2 N	atural Resources and Environment	31
3.1.2.1	Wetlands	31
3.1.2.2	Solid waste management	32
3.1.2.3	Forestry	33
3.1.3 S	Sector objectives	33
3.1.4 S	Sector Strategies	34
3.1.4.1	Forest and woodland restoration	34
3.1.4.2	Strict enforcement of the environmental byelaws	34
3.1.4.3	Wetlands Restoration and Management	35
3.1.4.4	Solid Waste recycling and Re-use	36
3.1.5 R	isks	37
3.2 R	eport on Institutional Structure and Governance	38
3.2.1 Plai	nning Institutional Context:	38
3.2.2 In	astitutional Context at National Level	38
3.2.3 In	nstitutional Context at Local Government Level	39
3.2.4 Adı	ministrative set-up of Kira municipality as at 2018	39
	a Municipality Governance System and Democracy	
	acture of the District Natural Resources Department and the Municipal Works	
	struction Department	41
3.2.7 St	tructure and Responsibilities of the Physical Planning Section	41
	a Municipal Council Human Resource	
	itutional Infrastructure, Tools and Equipment	
3.2.10 Ca	apacity of Staff and Elected Civic Leaders	44
3.2.11 Or	rdinance and By-Laws	45
	stitutional, Governance and Leadership Sector Key Challenges and Gaps for Kira	
Municipa	ılity	46
3.2.13	Revenue Performance	48
3.2.13 De	evelopment Objective	50
	oposed strategies/ recommendations/ proposals for improving and strengthening	
	utional, governance, leadership and human capital of Kira municipality	
3.2.15	Proposals for Revenue Enhancement	52
	sks	
3.3. Repo	ort on Human and Socio-economic Development	54
-	opulation Distribution, Structure, Trends and Densities	
3.3.1.2	Population Distribution	
3.3.1.3	Population Density	
3.3.1.4	Objective:	57
3.3.1.5	Strategies/ Recommendations: -	
3.3.1.6	Risks:	
3.3.2	Population Future Growth Scenarios	
3.3.3	Poverty Levels in the Municipality	
3.3.3.1	Objective:-	
3.3.3.2	Strategies:-	
3.3.3.4	Risks:-	
3.3.4	Social Services	
3.3.4.1	Education Sector	

3.3.4.2	\boldsymbol{J}	
3.3.4.4		
	Health Facilities	
3.3.5.1	3	
3.3.6		
3.3.6.1	Gender Issues	
3.3.6.2	•	
3.3.6.3	J	
3.3.6.4		
3.3.6.5		
3.3.7	Other Social Services	
3.3.7.1	Community Centres	
3.3.7.2		
3.3.7.3	1	
3.3.7.4	- · J	
3.3.7.5	ϵ	
3.3.7.6		
3.3.8	Sports and Recreation Facilities Water and Sanitation	
3.3.8.1	Objectives:	
3.3.8.2	8	
3.3.8.3		
3.4	Report on Land Management and Administration	
3.4.1	Land Tenure and Values	
3.4.2	Objective	
3.4.3	Strategies/Recommendations	
3.4.4	Risks	
3.5	Report on Local Economic development	
3.5.1	Key Findings and Implications	
3.5.2	Objective	
3.5.3	Proposals to enhance local economic growth	
3.5.4	Risks	
3.6	Report on Tourism Potential and Development	
3.6.1	Tourism marketing and promotion	
3.6.2	Accommodation facilities in the municipality	
3.6.3	Tourist attractions and activities	
3.6.4	Human resource capacity and tourism management	
3.6.5	Transport and Infrastructure development	
3.6.6	Development Goal and Objectives:	
3.6.7	Risks	
3.7	Report on Local Economic Development	
3.7.1	Key Findings and Their Implications	
3.7.2	Proposals to enhance economic growth	
3.7.3	Risks	
	port on Settlement and Housing Development	
	Settlement patterns	
3.8.1.1	Structure and Pattern	
3.8.1.2		
3.8.1.3	Challenges for Settlement Structure and Pattern in Kira	101

3.8.2 H	Housing Development1	04
3.8.3	Objectives1	.07
3.8.4 S	Strategies1	07
3.8.5 F	Risks1	.08
3.9 F	Report on Municipal Infrastructure and Utilities1	.08
	frastructure1	
3.9.3. M	unicipality Transportation Network1	08
	ad transport1	
3.9.4.2	Municipality Road Network	10
3.9.4.1 F	Road Network Characteristics	10
3.9.4.3	Existing Transport Demand	13
3.9.4.3 F	Future Road traffic growth1	
3.9.4.5	Road Safety1	
3.9.4.6	Key findings/issues of the Road Transport	
3.9.4.7	Objectives	
3.9.4.8	Proposed Road Network	
	Proposed Road Transport Management System	
3.9.4.11	Risks	
	Public Transport infrastructure	
3.9.4.13	Objectives	
3.9.4.14	Proposed integrated public transport infrastructure	
3.9.5.1	Objective	
3.9.5.2	Strategy	
	Sanitation infrastructure	
3.9.6.1	Household and Public Sanitation 1	
3.9.6.2		
3.9.6.3	Natural Catchment areas and drainage System	
3.9.6.4	Sewerage systems	
3.9.6.5		
	Public Sanitation Facilities	
3.9.6.6	Fecal sludge collection Forecasts by NWSC	
3.9.6.8	Sewage Production forecast	
3.9.6.10	Objectives	
3.9.6.11	Risks1	
	Energy Infrastructure	
	Power infrastructure	
3.9.7.2	Distribution	
	nformation and Communications Technology infrastructure	
3.9.8.1	Existing strategic investment plans/Options	
3.9.8.3	Mobile Broadband Infrastructure	
3.9.8.4	Future Pressures and Trends.	
3.10. Re	port on Land use and Settlement Patterns1	.36
3.10.1	General land use pattern	.36
3.10.2	Analysis of Implementation of the 2009 – 2018 Kira Plan	
		46
	Kira Municipal Development Trends, Scenarios and Spatial Development Model 46	
	Objective:	46
	S.	46

4.3	Planning Hierarchy of Kira Municipality Planning Area	147
4.1.	Conceptual Structure of Kira Municipality Planning Area	148
4.4	Spatial Analysis of existing situation in Kira Municipality Planning Area	148
4.5. K	ira Municipality Conceptual Spatial Development Model	
	The "Independent Concentric Town" Model:	
4.5.2	Benefits of Independent Concentric Towns Model	
4.6	Key issues considered when selecting the preferred conceptual model	155
	patial Suitability Analysis	
	roposed Conceptual Structure Scheme	
	ira Municipality Physical Vision and Policy	
4.10	Conclusion	
4.10		
4.11.1		
	•	
	Diserial Description of Diserial Description	
5.0	Physical Development Plan Proposals	
	roduction	
	ne planning vision and objectives	
5.2.2	Proposed draft strategic objectives for the PDP	
5.2.1	Planning Objectives	
5.2.2	General Objectives	
5.2.3	Sector Objectives	
5.2.3.1	J	
5.2.3.3	B Environmental Objectives	167
5.2.3.4	Social Objectives	167
5.2.3.5	Urban Development Objectives	167
5.3:	Description of the Proposed Physical Development Plan (2019-2040)	168
5.3.1	Introduction	168
5.3.2	Suitability analysis	168
5.3. 2.	1 Criteria for land suitability analysis	168
5.3.3	Principles of selected physical plan proposal	
	I	
6.0	Reports On Land Use Proposals	
	esidential Land Use	
6.1.1	High density	
6.1.2	Medium density	
6.1.4	Building Standards for Residential Development	
6.2	Commercial Land use	
	dustrial development	
	gricultural use	
_	vic use	
	stitutional use	
	vironmental	
6.8	Recreation facilities	
6.9	Social Services	
6.9.1	Education Facilities	
6.9.2	Health facilities	
6.10	Tourism	
6.11 C	Other services	177

6.11.1	Market	.177
6.11.2	Community centres	.177
6.11.3	Cemetery	.177
6.11.4	Transportation terminals	.177
6.12	Transport and Infrastructure	.178
6.12.1	Traffic & Transport management	.178
6.12.2	The Transport System	
6.12.3.	Road Network	.178
6.12.4	Parking	.183
6.12.5	Loading and Offloading	.183
6.12.6	Traffic Signs and Road Markings	.183
6.12.7	Street Lighting	.183
6.12.8	Public Transport	.183
6.12.19	Pedestrians and Non-Motorized Vehicles and Facilities	.184
6.13	Utility services	.184
Part VI	Π	.185
7.0	Written provisions	.185
7.1	Planning Heirarachy	.185
7.2	Municipal Physical Development Plan (MPDP)	.185
7.3	Division Physical Development Plan (DPDP)	.185
7.4	Precinct/Neighbourhood Physical Development Plans (PPDP)	.185
7.5	Site Development Plan (SDP)	.187
Part VI	III	.190
8.0	Strategic Interventions And Recommendations	.190
8.1	Approach	.190
8.2	General recommendation	.195
8.2.1	Institutional development	.195
8.2.2	Physical Development	.196
8.2.3	Marketing and advertisement	
8.2.4	Capacity Building, Training and Skills Development	.198
8.2.5	Resource mobilization	.198
Part IX	r L	.199
9.0	Development Control	.199
9.1	Introduction	.199
9.2	Building requirements	.199
9.3	Infrastructure requirements	.200
9.4	Planning requirements	.201
Part X		.202
10.0	Plan Implementation	
10.1	Tasks and Responsibilities	.202

List of figures

Figure 2.1: Administrative Setup of Kira Municipal Council 2018	24
Figure 3.1. Municipal Physical Development Plan Sectors	25
Figure 3.2: KMC Rainfall totals 1990-2016	29
Figure 3.3: Temperature variation in KMC 2006-2017	301
Figure 3.4: Total Local Revenue from 2013/14 to 2017/18	50
Figure 3.5: Population Distribution by sex and ward 2002 to 2014	507
Figure 3.6: Percentage distribution of population by division 200 - 2014	508
Figure 3.7: Types of land tenure systems	78
Figure 3.8: Household Income	79
Figure 3.9: Roadreserve widths	1103
Figure 3.10: Crossection of arterial road	1180
Figure 3.11: Crossection of a subarterial road	1191
Figure 3.12: Crossection of arterial road	1202
Figure 3.13: Planning Hierarchy	1482
Figure 6.1 land use distribution by percentage	175
Figure 6.2: Typical primary road cross section	181
Figure 6.3: Typical Cross Section of a Secondary Road	181
Figure 6.4: Typical Cross Sections of Access Road	182

List of Tables

Table 1.1: Urbanization in Uganda 1969 to 2014	7
Table 1.2: Percentage change in the built up area for Kira between 1995 -2018	
Table 3.1: Revenue Performance for the Years 2013/14 to 2017/18	
Table 3.2: Performance of the Revenue Budget, Capital Expenditure and Percentage of	
Capital Expenditure to Budget 2013/14 to 2017/18	50
Table 3.3: Population Distribution, Increase and Average Annual Growth Rate Wards –	
2002 -2014	
Table 3.4: Population Projections for KMC Based on Case Scenarios 2018-2040	59
Table 3.5: Projected Population Kira Municipality by Division	59
Table 3.6: Standards, Availability and Demand for Education Facilities For 2018	
Table 3.7: Education Services Projections – Kira Municipality	63
Table 3.8: National Health Facility Standards and Kira Municipality Demand for 2018.	
Table 3.11: Future demand for Play Grounds.	72
Table 3.13: Existing Road Network Defined Hierarchy	.113
Table 3.14: Design Classification of National roads within the Municipality	.113
Table 3.16: Analysis of Future demand on road network	.115
Table 3.17: Proposed Road Network defined by hierarchy	117
Table 3.18: Proposed arterials	118
Table 3.19: Proposed Sub-arterial Road	
Table 3.20: Proposed Collectors	119
Table 3.21: Proposed Intersection improvements	120
Table 3.24: Dry zone reduction interventions	125
Table 3.25: Water Storage	125
Table 3.26: Power transmission lines	125
Table 3.27: Pumped and Gravity distribution lines.	125
Table 3.28: Water demand forecast	126
Table 3.29: Water Storage	126
Table 3.30: Power transmission lines.	.127
Table 3.31: Pumped and Gravity distribution lines.	.127
Table 3.32: Drainage system	
Table 3.33: Domestic sanitation systems	
Table 3.34: fecal sludge production and collection	
Table 3.36: Solid waste generation	
Table 3.37: Earmarked funds for solid waste management FY 2018-19	
Table 3.38: Solid waste generation forecast	
Table 3.39: Long Term Sanitation strategy	
Table 3.40: Medium Term Sanitation strategy	
Table 3.41: Solid waste management strategy	
Table 3.42: Existing power infrastructure in Kira MC	
Table 3.43: Mobile broadband infrastructure	
Table 3.44: Comparative analysis of change in land use over time (2009 and 2018)	
Table 3.45: Analysis of Existing Land Use and Levels of Compliance to the Structure Pl	
2009-2018	
Table 3.46: Land Use Categorisation.	
Table 6.2: Proposed Building line standards	
Table 6.3: Plot coverage	173

Table 6.4: Proposed Standards for Social Services	176
Table 8.1: Strategic interventions	190
Table 10.1: Tasks and Responsibilities (Work Plan)	202
Table 10.2: Indicative Costs for proposed Project Implementation	204
Table 10.3: Specific indicative costs for road construction	205
Table 10.4: Schedule for plan implementation	205

List of Maps

Map 1.1: Location of Kira Municipality in a Regional Context	4
Map 1.2 Administrative set up of Kira Municipality 2018	5
Map 1.3: Comparative Analysis of growth trends 1995 – 2018	12
Map 3.1: Slope analysis of the Municipality	26
Map 3.2: Types of soil in Kira Municipal Council	28
Map 3.3: Drainage patterns of the municipality	
Map 3.4: Population Density by location (2014) – Kira Municipality	57
Map 3.5: Comparison of Population Density and Primary Schools Distribution	61
Map 3.7: Infrastructural proposals in the GKMA Framework	.109
Map 3.8: Existing Roadnetwork3.9.4.2 Existing Road Network Defined by Hierarchy	
Map 3.9: Major Drainage Basins in Kira	.128
Map 3.11: Comparative analysis of change in land use over time (2009 and 2018)	.137
Map 3.12: Comparative analysis of the implementation of the 2009 Structure Plan	.140
Map 3.13: Comparative analysis of the Decline of Agricultural Land Use in Kira Town	
between 2009 and 2018	
Map 3.14: Potentials and Constraints	.144
Map 4.1 Kira Municipality in a regional context	.151
Map 4.2 Independent Concentric Model	
Map 4.3: Jinja Road Urban Centres	.156
Map 4.4 Naalya – Seeta Road Urban Centres	
Map 4.5: Bukasa Road Urban Centres	
Map 4.6: Najera, Kira, Kijabijjo, Bulindo, Nakwero, and Kiwologoma urban Corridor	
Map 4.7: Connected Centres in Kira by Linear-circular roads	
Map 4.8: Buffer and wedges in Kira	
Map 6.1: Kira Physical Development Plan	
Map 6.2: Proposed roadnetwork and infrastructure	.180

List of plates

Plate 3.1 Possible direction signage	88
Plate 3.2: An example of an interpretive sign: a tourism map that can be placed at the	entrance
of the national park.	88
Plate 3.7: Roads without side drains	111
Plate 3.8: Kyaliwajala 4 arm intersection	116
Plate 3.11: Proposed Jinja Expressway Interchange	120
Plate 3.12: Mortocycle and bycle as some of the means for private transportation	121
Plate 3.14: Onstreet parking of taxis affects trade order	122
Plate 3.14: Status of the existing rail infrastructure	122
Plate 3.15: Open dumping of solid waste	130
Plate 3.16: Existing Power Substation	134

List of acronyms

CBD Central Business District
DLB District Land Board
BLB Buganda Land Board

DWD Directorate of Water Development
EIA Environmental Impact Assessment
EMS Environmental Management Strategy

KMC Kira Municipal Council GPS Global Positioning System

GIS Geographic Information Systems

HC Health Centre LC Local Council

MoLH&UD Ministry of Lands, Housing and Urban Development

MoW&T Ministry of Water and Transport
MoLG Ministry of Local government

MUK Makerere University

NEMA National Environment Management Authority

NGOs Non-Governmental Organizations

NDP National Development Plan

NWCS National Water and Sewage Corporation

PPP Public Private Partnership

PPDP Precinct Physical Development Plans

PPC Physical Planning Committee

RCMRD Regional Centre for Mapping Resources for Development

SDP Site Development Plan

SPSS Scientific Package for Social Scientists

TOR Terms of Reference

UBOS Uganda Bureau of Statistics

UNRA Uganda National Roads Authority

KMC Kira Municipal Council KTC Kasangati Town Council

Executive summary

This report is a result of a study of Kira Municipality which will result into the preparation of the Municipal physical development plan. This study was conducted by GIPEA AFRICA LTD which was contracted in March 2018 to prepare the physical development plan.

Kira is one of the most highly urbanised municipalities in Uganda. It had its first Structure plan prepared in 2008 which was due to review. The municipality has got a combination of both urbanised areas like those close to Kampala City and along the highways like Kireka, Naalya, Kamuli, Najjera and Kamuli. The biggest challenge the municipality faces is the unplanned, uncoordinated, un-gazetted and uncontrolled physical developments taking place especially in the upcoming peri-urban areas of the municipality which is due to increasing influx of people from Kampala, the Capital City of Uganda. This study report forms the basis for the preparation of the physical development plan, which will be the guiding instrument for orderly development in the municipality for the next 20 years.

The Kira Municipality planning area lies in the central region of Uganda bordering Kampala in the west, Mukono District in the East and North, Kasangati Town Council North East, Lake Victoria in the South. It lies along the Latitude 32.640557 and Longitude 0.397239 and it covers a total area of 98.83km². Kira Municipality is divided into two administrative levels namely; Divisions and Wards.

A socio-economic survey was undertaken as a first step in the physical planning process. Standard methods of socio-economic survey using structured questionnaires, key informant interviews, direct field observations and a reconnaissance survey were also under taken. A total of 2,475 households were randomly sampled using a Global Positioning System (GPS) to represent the entire municipality. Remote Sensing techniques and GIS were also utilised in spatial data capture, analysis and presentation techniques. A satellite Image (Geo-eye 50 cm resolution of July 2014) was used for land use mapping of the planning area followed by 'ground verification' to ensure accurate representation of land use and developments of the area. Participatory methods were also used in analysis of the existing situation in Kira Municipality. 3 FDGs targeting farmers groups, market venders, hotel owners, youth and women, tax operators among others. 4 consultative meetings were held between the Consultant and the Kira Municipality Council Officials (both administrative staff and elected representatives) and other key stakeholders from central government and private sector to discuss the problems and future potential of the municipality. Also school going children of both primary and secondary schools were also interviewed to give their perspective about the future of Kira. The collected data was analysed with use of statistical package for social scientist (SPSS), content analysis for qualitative and narrative data. For spatial data, GIS was utilised to perform standard spatial analyses. Software such as Arc map 10.1, Arc view 3.2a, AutoCAD 16, were used to generate a number of thematic map of the planning area.

Kira got its municipality status in 2015. It was elevated from a Town Council status which originally was forming one of the Sub Counties of Mpigi District then. It is situated in Central Uganda and has a unique location because it located along the major transportation corridor. It is therefore used as a dormitory for people who work in Kampala but resided in the municipality. The Municipality of Kira is experiencing a rapid growth of 10.44% per annum (National Census, 2014). Such a rapid rate of growth has overwhelmed the municipality authorities. They cannot keep pace with the ever growing demand for housing, employment, services and utilities. The challenges of growth, development and servicing on Kampala, have triggered a sprawl of growth centres in the Municipality. The municipality's demographic growth has historically been based on the combination of natural growth and in-migration. However, the 2014 Population and Housing Census indicates that the natural growth has fallen due to declining fertility rates but in-migration has superseded natural growth.

There are several policy and legal instruments guiding the preparation of the Physical Development Plan, its implementation and development in Kira Municipality. The most fundamental legal basis of land management and

land issues is the 1995 constitution of Uganda, which stipulates that Land in Uganda belongs to the people of Uganda and be shall vested in them in accordance with the land tenure systems provided for in the Constitution in Article 237 Clause (1). The Local Government Act empowers a Municipality Council to prepare and/or to cause preparation of planning schemes that would guide development in that council. The Physical Planning Act 2010 (Part 3, Section 25 Sub section 1) empowers Municipality Physical Planning committees to cause the preparation of municipality physical development plans. Therefore the preparation of this physical development plan is based on the provision of the Local Government Act and the Physical Planning Act. The Local Government Act notwithstanding and such planning scheme would become law only after being endorsed by the National Physical Planning Board mandated by the Physical Planning Act 2010. Similarly the development plan is to be based on The Public health Act while the plan is envisaged to be the instrument for guiding development in the Municipality council. These legal and policy instruments form a basis for the policy recommendations of the study and the physical development plan.

The administrative structure of Kira Municipality is made up of two arms comprised of the political leadership and the technical management. The political arm is comprised of the Executive headed by the mayor and the policy body is the Municipal Council. The Council has several committees including Health, Finance and Planning, Production, Works and Social Services. The second arm is the management arm comprises of the technical staff headed by the Town Clerk. There are five key departments. They include; Treasury, Engineering, Community Development, Education, Health and Production and the Department of Administration. Kira Municipality is divided into two administrative categories namely; Divisions and wards.

According to population census of 2014, Kira Municipality has a total population of 317,157 with a total number household 82,520 It is also estimated that 88.5 male per 100 female, with a growth rate of (10.44%). The population is on the increase due to high population growth rate. There was a shift in settlement from the south to the north. There was high population density of between 414-3872 per skm, the dependency ration showed that the working age group was higher than the dependent age group. Scchool age going age group was very big. The inhabitants of Kira Municipality like many other municipalities in Uganda are heterogeneous, a mixed up of different tribes although majorities are Baganda, natives of the area. The common language spoken in the municipality is Luganda.

Findings showed that the municipality landscape belongs to Buganda surface classification. The municipality is divided into two main topographic zones, the Lake Victoria Zone and the High Land Zone (Central and Northern Hills). It is also endowed with adequate surface and sub-surface water reserves with numerous stream, rivers and wetlands. Its climate is warm and wet with relatively high humidity. The soils are of high productivity and are mainly laterite, sandy and clays. Spatial analysis showed that the built up environment of the municipality is rapidly increasing following major road transportation networks.

In terms of social services it was indicated that there was an irregularity in the hierarchy of services especially in health and education services, there was lack of adequate supervision of services especially those offered by the private sector, there was absence of skilling institutions in the municipality and the public institutions offering services are operating in squalid infrastructure.

The study also looked at land management where it was noted that most of the land is privately owned (92%) but majority of residents were Kibanja owners (48.2%) which indicated lack of security of tenure but explain poor quality of housing in Namugongo and Bweyogerere Divisions. The land values are very high ranging from 300m – 1 billion per acre. In terms of housing the biggest percentage of houses are permanent but in an unplanned environment. Most houses were built on plot sizes between 200 and 450 sqm which explains the compact development especially in the southern part of the municipality. The economy of the municipality majorly depends on

salary/wage (60.2%) and majority work outside their area of residence. There was high levels of unemployment especially for the youth who have resorted to drug abuse.

In terms of infrastructure and utilities, findings indicated that that only 24.2 km were paved out of 261 kms. The none paved roads are none motorable during the rainy season, the condition was generally poor (No drains, no shoulders and had poor surfaces). 80% lack adequate road width. The municipality also faces limited finances to fund the road sector i.e. annual they receive 1.2 billion for this purpose which inadequate. Kira being a tourism destination there is great demand for road services but this required integrated planning. There was absence of public parking road safety and traffic management systems. In terms of water supply majority (41%) are connected to the national grid, however 49% use public stand pipes. Access to safe water coverage was 88% which is above the national at 68%. There was lack of conventional sewage treatment plans apart from private lagoons in Naalya and Namboole. A lot of open damping of solid waste was common due to lack of collection and disposal facilities. In terms of energy, most people were using charcoal for cooking (89.1%) and lighting they were using electricity (92.7%). The distribution of HEP was good apart from the northern parts of the Municipality.

Emerging issues and conclusions

The population of Kira is structured (Younging) in similar way as the population of Uganda and other developing countries. The population is highest between 14 and 64 years of age. The implication of this distribution is high demand for services, housing and employment. This also correlates with the survey findings in which a significant proportion of the population was employed in jobs that would otherwise be categorized as disguised employment. Given that a significant number of the people in Kira are youth, it is important that strategies for employment creation are designed to cope up with the population growth rate. The analysis of the survey carried out in Kira indicated that a sizeable proportion of the residents don't have stable incomes since majority are self-employed. Youth are engaged in petty trade and their small businesses have small capital. The situation is further exacerbated by lack of access to finance because of the exorbitant bank interest rate which is at 25%. The predominating economy is the salary/wage earns by workers, informal sector supplemented by subsistence agriculture and limited commercial farming. The socio-economic study results indicated high levels of unemployment and poverty.

Housing was analysed in terms of quality and stock available for the population. The quality of housing in the municipality is generally good in terms of space available for residence. The only exception is in the informal settlements (slums) found in Kireka, Kasokoso, Kireku and Kamuli among others where temporary construction materials are used and the housing units are cramped together. The number of rooms for housing is the basis for this analysis. This is because housing nature is predominantly permanent as indicated by the socio economic survey. Therefore the problem is mainly in the single roomed housing units found in slums, which encourage horizontal rather than vertical development. Given the ever increasing population, in the future this type of horizontal expansion poses a threat to space availability for infrastructure service delivery for roads, water, telecommunication, sewage, rail link and drainage.

Compared to other municipalities in Uganda, Kira Municipality is well off in terms of numbers and distribution of social services. The challenge was visible in terms of hierarchy, quality of service delivery and in some instances accessibility of these services. Other services such as community and cultural centres are so inadequate yet the ones in abundance like institutions (educational, health, religious) require proper management and rehabilitation of the physical infrastructure.

From the survey, it was imminent that infrastructure like roads, drainage, power, telecommunication, sewage and water supply network need improvement and rehabilitation in places where they already exist and a "Marshall Plan" is urgently needed where they don't exist. Roads were in had condition with a lot of pot holes, dust, galley erosion and had issues of poor connectivity and traffic jams in some areas. It also has all the major arterial roads

and a railway that links her to the neighbouring local governments and beyond. Therefore, there is an urgent need to carry out a physical development plan so that rehabilitation, improvement and expansion of these key infrastructural services are enhanced to develop the municipality and improve on the wellbeing of the people. This will assist the municipality to match with the rest of the country into a middle income country by 2040. Electricity is well distributed in the southern and central parts of the municipality. The main compliant on electricity from the household survey was of connectivity due to affordability issues.

Human excreta and solid waste management are key components in an urbanising environment and where human activities take place. Unfortunately in Kira Municipality there is no proper solid waste management plan. In areas where there is a semblance of dumping sites, they are poorly managed. About 95% of the generated waste in the municipality is individually managed and this has caused a lot of environmental and sanitation challenges. Garbage is sometimes privately collected and taken to gazetted sites, dumped along the road side, thrown in the back yard to decompose, scatter in the gardens as manure and plastics are openly burnt. This pollutes the air. For human excreta Kira has no recognised sewage management system. Likewise to address the threat on people's health due to improper human waste management, proper network for management of these wastes need to be created and extended to those areas where it is lacking. A sewage management plan is also necessary and it's time to identify potential sites for sewage pounds to serve the unserved areas but rapidly urbanising.

Conclusion

In conclusion, Kira Municipality exhibits fast growth process due to various factors but it also has inherent social, economic, environmental and urban management problems that are common in many urbanized municipalities of Uganda. Leveraging its capital base, natural resource base, cultural resources and heterogeneous population, Kira has the potential to transform into a vibrant city given its strategic location in region coupled with the dynamic population and available natural resources. This implies that with such a strategy, related sectors of housing, social services, infrastructure, capacity development, education and awareness would have to be pursued for realization of proper urban development in Kira municipality.

Part I

1.0 Introduction and Background

1.1 Introduction

This chapter gives an overview of the background to the assignment, the objectives and scope of work and the planning horizon for the plan. It also highlights the methodology used by the consultant to develop the plan and the structural composition of the municipality. It further examines the urbanization trends generally in Uganda, the social demographic characteristics of urban population and the historical background of Kira Municipality which creates the need to plan this municipality.

1.2 Background

The Government of Uganda has a goal to support Lower Urban Governments in the promotion and development of sustainable, healthy and liveable urban settlements that will underscore national commitment to physical planning and a broad-based development strategy for Kira Municipality. The government has also made physical planning sector one of the national priorities with an aim of addressing the urbanization challenges in the country. In line with such national policies and guidelines, Kira Municipality decided to make the preparation of a Municipal Physical Development Plan as one of her priorities. This project is therefore, funded and supervised by the Government of Uganda through Kira Municipal Council. The Ministry of Lands, Housing and Urban Development (MoLH&UD) as a central, is a key stakeholder involved in supervision, providing policy direction, monitoring and approval of the plan, while GIPEA AFRICA Limited is the Consulting firm which undertook the assignment.

1.3 Appointment of Consultants

After passing through the bidding stages, Gipea Africa Ltd was invited for negotiations prior to the signing of the contract. The contract details services to prepare a Physical Development Plan (framework for physical development) in a participatory process and develop strategic interventions to transform Kira Municipality to its desired status.

1.4 Objective of the Assignment

The overall objective of this Consultancy is; to prepare through a participatory process, the Kira Municipal Physical Development Plan to guide the orderly physical and sustainable development of the Municipality.

1.4.1 Specific Objectives

The specific objectives of this assignment are to;

- Develop a Physical Development Plan for Kira Municipality that will guide developments in the municipality for the next 20 years.
- Develop an investment plan that will support the Municipal Council in outsourcing for financial support to implement proposed development projects in the Physical Development Plan.
- Develop a Communication Strategy that will guide the Municipal Council in sensitizing the community about the importance of planning in Kira Municipal Council so that they can participate in the planning and implementation of the plan.

1.5 Scope of work

The assignment, as defined in the TOR, includes the following tasks:

- Prepare an inception report covering methodology, tools for information gathering, literature review and work plan plus any other relevant details.
- Facilitate consultative workshop(s) and FDGs with all stakeholders, including the respective local government officials, residents, landowners, institutions involved in plan preparation, surveying and construction, security organs, NGOs, etc. for input, support and sensitization.
- Undertake fieldwork also to assemble the necessary data on socio- economic and physical environment aspects in the municipality, including the topographic surveys.
- Prepare the necessary base maps. These were informed by accurate up-to-date spatial information obtained through verifiable appropriate methods such as topographic surveys, use of high resolution satellite images and/or aerial photographs at appropriate scale.
- Prepare Planning Area, Urban Physical Development Plan at appropriate scales (including the respective reports) in accordance with the National Land Use Policy, the Physical Planning Act 2010 and other related laws.
- Develop a costed implementation Plan to be used as a tool and basis for all major, planning and development activities i.e. budget preparation and service delivery implementation to ensure that the Municipality's resources are allocated in accordance with the Municipality's vision. The implementation strategy should also look at the ongoing initiatives within the Municipal Council
- Focus the Urban Physical Development Plan on the following themes; Housing, Transportation and Communication, Public utilities, urban infrastructure-drainage, sanitation, the environment, Social facilities, Civic Activities, Recreation, Local Economic Development, Places of Worship among others. The proposals in respect of the above will take into account the Municipality's comparative advantage, land tenure, and the vulnerable members of society particularly the youth.
- Present the plans to Kira Municipal Council for consideration and deposit.
- Present the plans to the National Physical Planning Board for consideration and approval.

1.6 Planning Horizon

The ToR did not specify the planning horizon of the assignment. As it was indicated in the inception report, the Consultant took this to mean that the people of Kira would determine the planning horizon. Therefore during the consultative workshops held in Kira the participants indicated that the planning horizon shall be 22 years. This will fit very well the planning horizon for the Kira PDP with that of the National Vision 2040.

In the Inception phase it became apparent that Kira is growing at a rapid pace, at one time it was reported to be growing at 9%. While this rate was very high resulting from the high number of people seeking for land for construction mainly residential houses from all over Uganda, the rate of growth is likely to remain high because people who came to the municipality are settling permanently.

1.7 Methodology

Various methods were employed to carry out the study and prepare the Physical Development Plan. The study of the existing situation was undertaken through a socio-economic survey that was conducted in the Municipality with a sample frame of 4,114 (5.2%) households representative of the entire population in the three Divisions of Kira, Kira, Bweyogerere and Namugongo. With the help of enumerators and interpreters a comprehensive questionnaire to capture socio-economic data, welfare and views on spatial development was administered. This encouraged interactions between the Consultant and the heads of households who are the direct beneficiaries of the plan. Also FDGs were conducted in the each of the Divisions and they were

targeting women, youth and Boda Boda groups, Lorry and Taxi operators, farmers, market venders, hotel associations. Also schools were a targeted focusing on the young peoples desired and aspirations through drawing what they want their municipality to be 22 years from now since they are the future generation.

During the survey, there was also mapping exercise to capture features especially social services and physical infrastructure such as health centres, markets, parking spaces, and wastes disposal points, schools, community centres, water sources among others using a hand held Global Positioning System (GPS). The attributes were then entered into a booking sheet by the field officers, which were later entered in a GIS environment for analysis and mapping purposes. Software like Arc Map 10.1, Arc view 3.2a, AutoCAD 16, were used to generate a number of thematic map for the planning area.

Remote sensing techniques combined with use of digital topographic maps for the area and Geographic Information System was used to prepare the base maps and land use map for the planning area. The Land use map of Wakiso District 2016 and high resolution (50cm) satellite images for 2016 supported with ground thruthing techniques were used in generating a detailed land use map for Kira Municipality 2018.

Participatory methods were also used in analysis of the existing situation in the Municipality. Five consultative community meetings at division and municipal levels were held between the Consultant, Kira Municipal officials and different stakeholders. The Stakeholders were given a chance to answer the guiding questions on identified key thematic areas, participate in making development proposals for their areas and to discuss the problems and future development potential of the Municipality. They also participated in the development of the PDP Vision for the Municipality.

There was review of literature where documentation and secondary data materials from previous sources were examined to inform the planning process. The Kira Municipal Five Year Development Plans (2015/16-2019/20) was one of those reviewed. Previous reports on planning interventions like Kira Town Council Structure Plan 2008-2018 were also reviewed. During fieldwork, photographs showing the existing situation were taken alongside observations during the transect walks by the Consultant to provide evidence and support spatial analysis.

During data analysis SPSS (21) package was used to summarize socio-economic data, content analysis techniques were also used to analyse qualitative and narrative data. For spatial data, GIS was utilized to perform standard spatial analyses from which maps were derived to guide the plan preparation. The final outputs were presented through computer assisted cartographic outputs with the use of Arc Map 10.12 and Adobe Illustrator.

1.8.1 Location

Kira Municipality is a local government in Wakiso District, Central Uganda which serves as both the commercial and dormitory centre for people working in Kampala Capital City. The Municipality is located along the major roads running from Kampala to Jinja in the East and Kalagi road in the North. It is approximately 5.3km by road, East of Kampala the Capital City of Uganda (Map 1.1). It stands at latitude 0.397239 and longitude 32.640557 North of Equator. The total area coverage for Kira Municipal Council is 98.83km², which represents about 3.3% of the total Wakiso District Land coverage. It has a population of 317,000 (National Population Census figures of 2014) and 447,471people (as projected in the Kira DDP 2017).

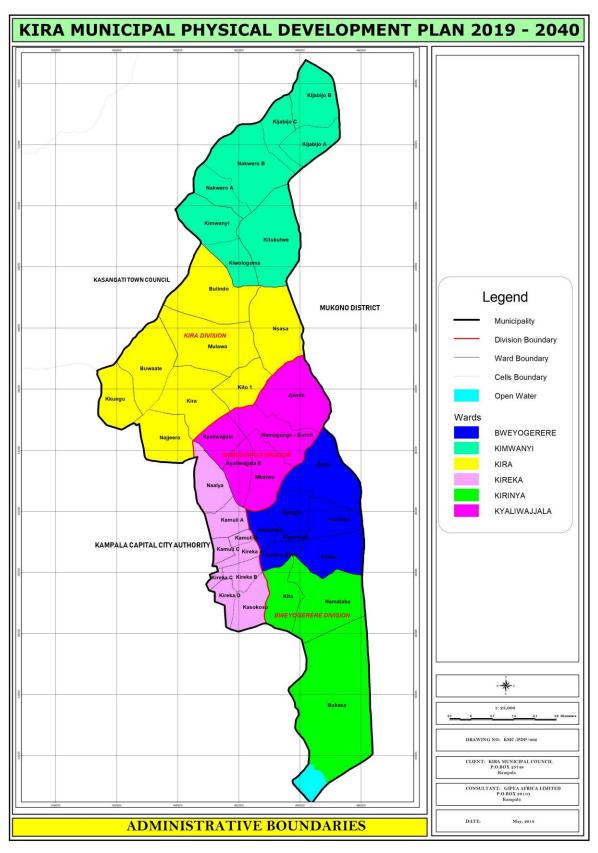
1.8.2 Administrative Units

The Municipality is made up three divisions namely; Kira, Bweyogerere and Namugongo (Map 1.2). The Municipality also consists 6 Wards and 39 Villages.

THE ASSESSED TO THE ASSESSED T

Map 1.1: Location of Kira Municipality in a Regional Context

Map 1.2 Administrative set up of Kira Municipality 2018



1.9 Urbanization trends and the evolution of planning paradigms in Uganda

Urbanization in Uganda is relatively young compared to her East African counterpart such as Kenya and Tanzania. The roots of urbanization in Uganda can be traced back since the 1890s when the European footprint in the country started to be felt. With the building of the Kenya-Uganda railway, economic and administrative centres were established.

Persistent rural poverty that causes people to migrate to urban areas with the hope of improving their livelihood partly explains the urban population growth rate for some districts. For example, the decline in the urbanization rate of the Eastern region is partly due to out-migration from these towns to other towns in search for employment.

The remarkable economic growth and political stability over the last decade have led to the expansion of existing urban centers, in particular Kampala, and the growing of hundreds of small trading centers in the countryside, particularly along highways and major road junctions like in case of Kira town. Policies for the economic transformation of Uganda, which have been mainly pursued from and around the urban areas for example industrialization, are partly responsible for urban expansion. For instance, Tristar and Mukwano Group of Companies were put up in Kampala and not elsewhere yet they provide employment to many who may not necessarily have high levels of education and can be found in the rural communities.

Political/civil insecurity is another factor that has led to the increased urbanization rate in the Northern region. Insecurity has displaced a number of people, resulting into a large influx of the population relocating to urban areas for protection. This causal factor explains why Kira and Lira Municipalities were among the largest urban areas in Uganda in 2002. Population dynamics manifested in urban population growth and internal migration (especially rural to urban), are by far the most significant causes of urban expansion (Dhihendra Kumar, World resource, Shauib Lwasa 2002).

This spatial pattern has continued to date. The urban centres created 'pressure zones' as occasioned by demographic shifts from rural areas to urban centres thus creating pressure on the existing facilities and infrastructure. It is therefore imperative to point out that the railway line accelerated urban growth, more so of the urban centres in the Eastern and Northern parts of the country such as Tororo, soroti, and Lira. Later, the colonial government set up administrative centres in various parts of the country to stabilize most settlements, which laid foundation for the earlier growth of urban centres. In later years, urbanization in the country has been influenced by long distance truck drivers who often use them as stopovers during their journey to get the necessary provisions such as food and accommodation.

Uganda's rapid urbanization is happening in the face of widespread poverty, shrinking present economies and resources for local authorities. The level of urbanization in the year 2000 was rated at 14.2%, with an annual urban growth rate of 5.2 %; it was projected to reach 20.7% by the year 2015. In 1969, the city of Kampala had urbanisation rate of 100%, Jinja 25.6% and Kira 8.1% were above the national average of 6.6% while five towns had urbanization rate above the national average of 7.4% by the year 1980. In 1991 six towns had urbanization rate of 11.3% above the national average. In 2002 seven towns including Kampala, Mukono, Busia, Jinja, Kira, Kitgum, and Nebbi had rates of 12.2% which was above the national urbanization level. The proportion of urban dwellers had increased overtime from 6.6% in 1969 to 12.2% in 2002. The urban growth, registered growth rate of 8.2% between the years 1959 and 1969; 3.9% between the

years 1969 and 1980; 6.3% between the years 1980 to 1991 and 3.7% between the years 1991 and 2000 (Table 1.1).

Between 1991 and 2002 Mukono showed the highest growth rate of 15.9%, while Soroti Municipality showed the lowest rate of 0.1%. The highest growth rates were registered in Kitgum 10.3%, Lira10.1%, Kira 9.3% and Kasese 9.0%. This is partly attributed to insecurity which was forcing the rural population to move to towns, which were considered then relatively more secure. The remarkable economic growth over the last decade as well as political stability have led to expansion of the urban centres and the sprouting up of hundreds of small trading centres in the countryside particularly along highways and major road junctions.

Kampala Capital City has remained the primate urban centre throughout the period 1991 - 2014. However, the proportion of Kampala city to the total urban population has declined steadily from 41 percent in 1991 to 25 percent in 2014, showing that the smaller urban areas are growing faster. Between 2002 and 2014 Wakiso Town Council showed the highest growth rate (11.9 percent), followed by Hoima Municipality (10.7), Mukono Municipality (10.4) Masindi Municipality (8.9 percent), Mbarara Municipality (8.6 percent) and Kasese Municipality (5.3 percent). All these except Wakiso Town Council had boundary changes between 2002 and 2014. The other urban centres had growth rates lower than 5 percent per annum, which is deemed normal for an urban centre. For Kira since it was newly created, the growth rate could not be projected.

Table 1.1: Urbanization in Uganda 1969 to 2014

Index	1969	1980	1991	2002	2014
Number of towns	N/A	41	67	75	259
Urban population	634,952	938,287	1,889,287	2,921,981	7,425,864
Proportion urban(percentage)	6.6	7.4	11.3	12.2	20.7%,
Urban growth rate(percentage)	8.17	3.93	6.35	3.73	5.2%.

Source: UBOS, 2014

Even with the growth of smaller urban centres in the country, the major issue that is easily discernible Table 1.1 is urban primacy. Uganda has only one city, Kampala with a total night population of about 1,200,000, followed by Kira the second largest town with 117, 432 by the year 2002. What is clear is that the major urban areas in the country fall within what could be described as the "urban corridor," a result of the then established colonial infrastructure development especially the construction of the Kenya-Uganda Railway.

From 1950s up to early 1980s, the focus on development in Uganda was based on rural areas due to the presumption among the social policy architects, urban managers and researchers that urban areas were better off in terms of social and economic infrastructure than rural areas. The ideology was to promote balanced growth.

The British colonial government regulated the planning and administration of almost all of the urban areas in Uganda under the Urban Authorities Act 1958, which was later amended to Urban Authorities Act, 1964. During this era, the British virtually ignored the pre-existence of well-established and sophisticated human settlements and local governance or urban administrative systems, which had in many cases been in existence long before their arrival (MLWE, 2002).

Most of the planning policies and outline schemes created segregation in income levels and racial groups, with much focus on the upper and middle income groups as opposed to the low income groups. The implication of this colonial and post-colonial framework was that the emerging urban

authorities were empowered to initiate urban plans, coordinate and facilitate construction of public utility services as well as conserve and develop the resources in the areas of their jurisdiction. This left them with full responsibility of urban development control and service delivery alongside population increase and facilitating investment in the infrastructure development. However, urban authorities have not been able to respond to the above challenges of urbanization, consequently leading to unprecedented pressure on infrastructure like water supply, residential facilities and sanitation services.

It is because of this that most urban centres in Uganda have developed without proper urban planning and development control mechanisms. Consequently, the informal settlements which have emerged are not recognized by urban authorities due to their non-conformity with development regulations. Because they are incapacitated, urban authorities have also tended to ignore these settlements when it comes to the provision of the necessary social and physical infrastructure services such as water refuse collection, electricity and sewage disposal.

Between the 1970s and the 1980s, the political turmoil led to the total collapse of the whole of Uganda's economy. Subsequently the industrial sector collapsed, major property owners in the country were expelled which led to the decline in institutional capacity of the urban authorities. By the year 1979 the economy was in total doldrums with income per capita of 120 US\$ as compared to the income per capita of over 450US\$ in the 1970 (MFED, 1987). However, the population growth in the urban centre's remained on course and the single most important characteristic that can describe this period in Uganda's urban history is the urbanization of poverty.

1.10 Social Demographic characteristics of urban population

Age character in urban population is higher than that of the rural population implying that urban population is older than the rural population with 18.3 years and 14.2 years respectively. This is due to migration of relatively older rural population to urban centers in search of employment leaving behind the very young and the old. Since the urban population has increased, the number of households and average household size in the urban areas has also increased over the last three surveys of the UNHS (1999/00, 2002/03, and 2005/06). This implies that although some of the people who move to the urban areas make their own households, some live with others, hence the increase in household size. On the contrary, housing indicators in Uganda are generally better for the urban areas compared to the rural. For instance, the percentage of overcrowded dwellings (i.e. with more than 2 persons per room) is lower in the urban (49%) compared to the rural (56%) (UBOS 2006). About one in three urban households is headed by a female. The proportion of female-headed households was higher in urban areas (28 percent) than in rural areas (22 percent) as of the 2002 census. The UNHS 2005/6 revealed that female-headed households at national level have reduced from 36 percent to 29 percent since 2002.

It is believed that urbanization has a bearing on the level of educational attainment. The UNHS 2005/06 shows that the proportion of people without any formal education was higher in the rural areas (23%) compared to the urban areas (9%). Similarly, a higher proportion of urban residents (10%) are more likely to complete post-secondary education than their rural counterparts. Generally, literacy rates are higher in the urban areas compared to rural areas. The proportion of the urban population who report illness increased from 28% to 33% (2002 to 2006). However the rate was lower for the rural population. More urban dwellers use clinics and hospitals than health centers probably because these facilities are more available in the urban areas than in the rural areas. This gives an indication of the health status and health seeking behavior of the urban

population. This explains why urban centers are associated with high expenditures than in the rural areas.

1.11 Historical developments and urbanization of Kira Municipality

1.11.1 History of Development

Kira was one of the old sub counties in Buganda, which has developed largely out of the influence of Buganda's administration. Some historical sites including Namugongo shrine reflect the administrative machinery of the Buganda Kingdom and its interactions with the colonial rulers in the late 19th century to the early 20th century. It became a popular place during the reign of King Mwanga II whom during the period of 1898 at Namugongo and other sites executed followers of the then new religions fronted by the colonialists.

During this time the site of Namugongo in Kira was used as an execution site (Ettambiro) for wrong doers in the Buganda Kingdom. Because of this role, Kira generally attracted less development over time and thus it remained largely rural despite the major highway that passes through it to the eastern border of the country and its proximity to Kampala. The other parts of Kira to the north and south also remained rural in nature with sparse developments and reliance on agriculture and farming while the central part developed mainly due to the influence of the Jinja Highway.

Similarly the sub county headquarters didn't attract development because people usually did not make preference to locate near where the then executor by the name of Mukajanga lived and/or even live near an administrative center. With this historical background, Kira remained largely a rural area, which was developing slowly and sluggishly despite being bisected by the Jinja highway and being adjacent to Kampala the capital that was developing very fast. Like other places in Uganda. It further suffered from the period of civil war that prevailed in the country and deterred development in mainly areas of Kimwanyi and Kira Wards in many ways. Only a few areas of Kireka and Bweyogerere showed signs of urbanizing growing out of small trading centres along the major highway to the east of the country.

Over time small business establishments especially industrious activities established along the major highway of Jinja but concentrating in Kireka and Bweyogerere despite the existence of Kira trading centre at which the sub county headquarters was located. Thus the trading centres of Kireka and Bweyogerere grew and developed faster than the trading centres of Kira and Kyaliwajjala. The activities, which established along the major highway include furniture and metal fabrication and are still evident in Kireka and Bweyogerere. It was not until the 1980's that Kira started experiencing the pressures of Kampala's development. During this period, individuals settling in Kampala started searching for farming and residential locations outside a conceived ten-mile radius from Kampala city centre.

Additionally the 1972 Structure Plan of Kampala also had a major influence on acceleration of developments in Kira since it was during that time that proposals to have industrial areas outside Kampala city to areas including Kira were mooted. With the growing business and improving public transportation system in Kampala, serious settlement started appearing in Kira with high to middle income households looking for better, bigger, aesthetically appealing and environmentally friendly locations. Being situated near Kampala with a very attractive tenure (Private Milo), Kira became the victim of suburbanization from Kampala.

1.11.2 Urbanization of Kira Municipality

The fast urbanization of Kira that started around 1980's (although there is no specific date for the start of the process) was a response from the fast urbanization of Kampala city. It was also attributed to the development control procedures in Kampala city, which were conceived as prohibitive to many potential developers. Developers rushed to Kira, which was considered being at the periphery of the conceived 16-km radius of Kampala's growth. In this area, development control seemed not as strict as in Kampala and thus non- prohibitive for development of housing, consequently, many developers rushed to this area.

But it should be noted that development in Kira is differentiated by location; the middle southern parts including Kira, Kyaliwajjala, Kireka and Bweyogerere showed signs of fast growth earlier than Kirinya and Kimwanyi. This is attributed to the major high way to the east of the country, which attracted settlements and business establishments. Alsothe presence of Namugongo martyrs shrines has attracted lucrative businesses in the area of Kyaliwajjala. The Kampala- Gayaza-Kayunga road did not attract as much development partly because it was not a modern road and probably did not lead to an outlet from the country. This explains the less urbanization in the northern parishes of Kimyanyi. But there has been a recent indication of a fast growth in the northern parts of KMC which is driven partly by the expansion of institutions especially educational institutions that have mushroomed in the area. It is also driven by the land market operations, which have been characterized by speculation due to some development projects such as Namboole Stadium, tarmacking Gayaza-Kalagi, seta, Namugongo Naalya roads and the Northern by-pass.

1.12 Challenges of urbanization

The increased rate of urbanization without proper planning has made it difficult and posed a challenge for government to ensure provision of adequate infrastructure and social amenities especially for many low income urban dwellers. The level and quality of services does not proportionately match the demand in many urban areas in the country (Shaiub Lwasa, MWLE 2002).

One of the most important challenges for urban development in developing countries such as Uganda is transportation planning. The challenge is how to plan for the increasing importation of second-hand vehicles in the country, which in essence has created high levels of traffic congestion like in the case of Kira, parking difficulties, difficulties for pedestrians and massive air pollution (Shaiub Lwasa, MWLE 2002). The immediate and obvious effect to the economy is the loss of labour hours as most people report to work late.

Urbanization breeds a number of complex social problems that arise from a shortage of living space and a high cost of living leading to the breakup of the joint family system. Thus destroying the values, culture and principles of a society but also leads to crimes, violence and prostitution. This consequently increases pressure on the security of the area.

The incomplete separation of powers at all levels of government creates bureaucratic delays in the approval, implementation and re-development of projects in urban areas. A large part of the urban socio-economic life takes place within disaggregated constituent elements namely, civil society organizations, non-governmental organizations, community-based organizations, tribal groups, private sector, civil society and informal sector. Conflicts of interest between politicians and bureaucrats in urban authorities also make the efficient running of urban affairs difficult.

Land ownership in the urban areas is a viable lucrative business with unrestricted sale opportunities. Land has been turned into a commodity, leading to the conversion of environmentally sensitive land to development projects with serious social and health consequences (Shaiub Lwasa, MWLE 2002). This has made environmental conditions very appalling. Accessibility to environmental services now ranges from total inadequacy to non-existence in most urban areas including Kira. Inadequate planning or lack of it in some urban areas and the resultant development in inappropriate areas such as open spaces, swamps, and steep slopes is causing serious health problems, such as water pollution and disease out breaks.

1.13 Trends of physical development in Kira Municipality between 1995 and 2018

The built up area for Kira Municipality has been rapidly increasing following arterial transportation networks, between 1995 and 2017 (Map 1.3). In 1995, developments were minimal and were commonly found along Jinja Road in the areas of Bweyogerere, Kireka and parts of Kireka - Namugongo Road along the areas of Kyaliwajala covering an area of about 349.8 hectares.

In 2000, the analysis of the satellite images shows that more developments emerged in the already established built-up zones along Jinja Road in the areas of Kira and Kito and Kasokoso and along Naalya –Kyaliwajjala road in the areas of Naalya. By then it was covering approximately 495.4 hectares, noting a 29.4% increase in the built up environment.

In the period between 2000 and 2005, there was development explosion of 81.1% increase in the built-up environment covering approximately 2,618.2 hectares. This is evidenced by the concentration and widening of the built-up environment especially in Kira, Namugongo, Jjanda, Kamuli, Najjera, Kireku, Kazinga, Ntebetebe and Butto. This could be explained by the creation of Kira Town Council in the year 2003, establishment of the industrial park in Namanve but very importantly the high costs of land in Kampala city forcing people to start looking for relatively cheap land in the suburbs of Kampala. It also indicated that developments started to fill the land between these major roads cases in point were along Jinja and Naalya roads.

In 2010, there was visible spatial extension of the built up area in new areas like Mulawa, Nsasa, Kito, Kitukutwe, Bulindo, Buwate, Kigungu, Mbalwa and Bukasa as significant pockets of development coming up far away from the arterial roads. There was also isolated developments infilling land between all major roads radiating from Kampala. This was attribulted to the improved infrastructure like tarmacking roads in the area. The built-up area in 2010 was approximately 3,070.0 hectares.

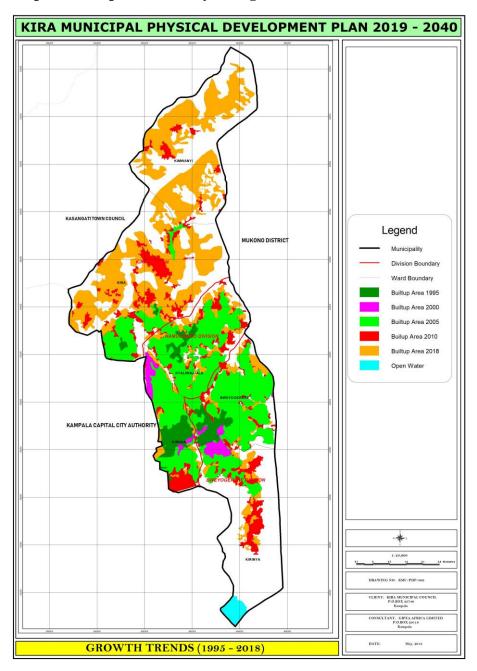
To date (2018) the trend of development has quadrupled that of 2010 covering an area of 5,300.2 hectares. See the percentage change in the built up from 1995 to 2018 in table 1.2. The high spike in the built-up environment could be partly explained by the pressure from Kampala City and the fact that Bweyogerere and Namugongo Divisions are more serviced than the rest of the Municipality. It is also true that the new developments in the other Divisions of Kira could be explained by the extension of Real Estate Housing Developments like Canan sites that create access to serviced land thereby attracting more people into these areas.

Note that the development trend for 2018 contains therein the low density residential and institutional areas which still have a lot of un-built land. It is also important to note that the biggest percentage of the development is concentrated within Bweyogerere and Namugongo Divisions which are densely built.

Table 1.2: Percentage change in the built up area for Kira between 1995 -2018

Year	Coverage (Ha)	Percentage change
1995	349.8	-
2000	495.4	29.4
2005	2,618.2	81.1
2010	3,070.0	14.7
2018	5300.2	42.1

Map 1.3: Comparative Analysis of growth trends 1995 – 2018



Part II

2.0 Policy, Legal and Institutional Framework

2.1 Policy Framework

The policy framework that guides physical planning in Uganda is embedded in a number of various legislation and policies. National, Municipality, Urban and Local Physical Development plans (PDPs) are prepared within a solid umbrella policy context including the Vision 2040, the Second National Development Plan 2015/16 – 2019/20 and Key Government Policies. Direction provided by all of these policies guides the preparation of PDPs as the first supporting physical planning framework within an area of jurisdiction. Preparation of PDPs is also done with the knowledge that it must integrate into the broader National and Regional Physical and Economic Development Plans.

a) The Uganda's Vision 2040

The Vision 2040 is Uganda's key development framework. The preparation of National, Municipality, Urban and Local PDPs is guided by the objective of the Vision 2040 that aims to ensure "A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years" The physical planning process for the transformation of Kira Municipality is being carried out through a thorough analysis of the local, regional and national situation to guarantee careful planning and commitment of the Municipality's resources.

b) The Second National Development Plan (NDP II) - 2015/16 – 2019/20

The NDP II provides the Governments' strategy to pursue urbanisation as a broad strategy to guarantee transformation of the economy "from a peasant to a modern and prosperous country." This is in recognition, that the sector will also promote optimal and organized land use for urban development; improve urban infrastructure services and utilities; create an inclusive policy and regulatory framework for urban development; develop environmentally resilient urban entities; and increase availability of and access to land for urban expansion and investment.

Kira Municipality is in no doubt a key integral part of the Greater Kampala Metropolis which plays a key role in the national economic development. Much of the area coverage of the Municipality is urbanised. The above provisions are in recognition of the important role that urban areas play in national development as engines of economic growth and centres of investment, employment, education, knowledge and technology transfer and ready markets for industrial and agricultural products among others.

2.2 Physical/ Urban Planning Policy

There are basically about seven policies that directly relates to physical planning activities in Uganda which are operational. They include; the National Housing Policy and the National Urban Policy, the National Population Policy, the National Land Policy, the National Land Use Policy, the National Environment Management Policy, the National Policy for the Conservation and Management of Wetland Resources.

a) The National Housing Policy, 2016

This recently passed National Housing Policy replaces the National Shelter Strategy (NSS) which was adopted in 1992 as a policy framework to guide housing development in the country. On May, 4th, 2016 Cabinet approved the Uganda National Housing Policy that seeks to promote the progressive realization of adequate housing for all citizens of Uganda. The National Housing policy adopts a vision of "Adequate housing for all" while as the policy goal is "to provide a framework that promotes adequate housing for all". Among other

stipulated aims of the policy, it seeks to "increase access to adequate and affordable housing for all income groups" The process of developing the Kira Municipality PDP will deliberately provide a spatial framework that will enable the provision and access to decent and affordable housing to the urban dwellers within Kira Municipality. The policy advocates for regular property inspections by competent authorities from both the urban and local governments including Kira Municipal Council for compliance with the existing building standards and regulations which is an element of development control based on the PDPs of a given local governments.

b) The National Urban Policy, 2017

This is a comprehensive National Urban Policy that was formulated as a national framework to guide urban development and the urbanization process in Uganda. The National Urban Policy is intended to promote a sustainable, spatially integrated and orderly development of urban areas such as Kira Municipality were such urban areas are well planned and with adequate services and infrastructure. This policy seeks to guide as well as to effectively manage the prevalent effects associated with unplanned urbanization as well as enhancing the role of the urban sector in economic development and socio- economic transformation of the urban areas in particular and the country at large.

The Urban Policy further deals with issues associated to urban governance, environmental quality of urban life, effective urban planning and management to curtail excessive urban sprawl, accessibility to adequate and affordable urban housing, efficient urban infrastructure and service delivery and promotion of urban economic development among others which calls for deliberate integration in the Kira Physical planning processes.

Policy Objective number one (1) of the Urban Policy is oriented towards the attainment of "organized *urban development in the country*" mainly through the ensuring of planned, balanced and sustainable urban areas as well as to improve urban planning systems. These key objectives of the National Urban Policy are enabled through the physical planning processes of both the urban and rural areas.

c) The National Population Policy, 1995

The National Population Policy (NPP) is well aligned and in harmony with the NDP II and Vision 2040. The policy does define critical issues that must be tackled to ensure a population that enhances the country's development goals and objectives in the entire country in both urban and rural areas including Kira Municipality. The National Population Policy observes that urbanization influences the development process of the affected urban areas and the country at large. The currently experienced urban population growth rate in Kira Municipal Council in particular beside the country at large does over- stretch the existing infrastructure, services and other amenities thus affecting the general welfare and standards of living of the urban population for health, education, social welfare, and employment among others and Kira Municipality has not been exceptional to the urban population increase/ urbanization associated effects. The increasing population in most of the urban areas in particular Kira Municipality calls for proper physical planning processes that can effectively curtail as well as address the implications that would emerge from population booming and increase on the urban sector.

d) The Uganda National Land Policy

The policy focus is on the key factor of development, land, which continues to be a critical factor as it is the most essential pillar of human existence and national development. Land use planning

and regulation is one of the tools identified in the policy as a key to the management of land under any tenure to enable the local governments, communities and individuals determine, advance, the direction and rate of progression of land sector activities of the area.

The Policy under strategy 30 advocates for Governments appropriate holding and management of natural resources. The policy calls for an open policy on information to the public and seek consent of communities and local governments concerning prospecting and mining of these resources. The Kira Municipality physical planning process takes into account of the above requirements.

e) The National Environment Management Policy, 1994

The National Environment Management Policy 1994's overall policy goal is sustainable social and economic development which maintains or enhances environmental quality and resource productivity on a long term basis to meet the needs of the present without compromising the ability of the future generations to meet their own needs. It also advocates for integration of environmental concerns in all development oriented policies, planning and activities at national, Municipality and local levels, with participation of the people.

f) The National Land Use Policy, 2006

A Land Policy is a systematic framework for addressing the role of land in national development, land ownership, distribution, utilization, alienability, management and control. A National Land Use Policy, on the other hand, is an integral element of the National Land Policy. The aim of a National Land Use Policy is to provide general guidance on optimal and sustainable utilization of land, and is based on the analysis of soil types, topographic features, and agro-ecological considerations, as well as social and demographic factors. Importantly, the Land Use Policy must address the various use categories and the conflicts that arise from competing demands for which the Kira PDP intends to address.

g) The National Policy for the Conservation and Management of Wetland Resources, 1995

The policy aims at curtailing the rampant loss of wetland resources and ensuring that benefits from wetlands are sustainable and equitably distributed to all people of Uganda. It calls for sustainable use of wetlands. The Kira Municipality PDP process identifies and puts into perspective the key policy goals and objectives to provide a framework for implementing the policy at the urban level and ensure that wetland related issues are adequately incorporated into the Municipal PDP.

(h) Tourism Policy Framework

In executing its mandate, the ministry is guided and regulated by a number of policies, laws, regulations and guidelines. Notable of these are; Constitution of the Republic of Uganda (1995), Tourism policy (2014), Tourism Act (2008), Uganda Wildlife Act (2000), Historical Monuments Act (1967) as well as the Universities and other Tertiary Institutions Act (2001). All these policies and Acts mandate the Ministry of Tourism, Wildlife and Antiquities (MTWA) in conjunction with the sector Agencies to set policy, oversee, monitor and coordinate the tourism sector development.

Specifically the Government's roles are to: (i) formulate medium to long-term tourism policy, plan for tourism development, and regulate tourism activities through legislation, licensing and classification; (ii) monitor performance on quality, safety and targets; (iii) facilitate tourism development by providing the infrastructure, economic, regulatory, fiscal and political

environment that encourages investment and orderly growth; and (iv) ensure adequate funding for the marketing of Uganda as an attractive tourist destination.

The tourism sector is guided and supervised by at least seven Government institutions that work closely with a number of private sector institutions spread across the country. The mainstream government institutions in charge of tourism are: Ministry of Tourism, Wildlife and Antiquities, Uganda Tourism Board (UTB), and Uganda Wildlife Authority (UWA. Other government institutions that support tourism are the Uganda Investment Authority (UIA) – for investment promotion, Ministry of Education and Sports (MOES) – for tourism-related training, Ministry of Works and Civil Aviation Authority - for Airline development and regulation, Ministry of Health, Ministry of Works and UNRA - for Tourism Roads.

At the local government level, all district governments are mandated to offer front-end service delivery in all sectors including tourism, however the sector continues to lack effective representation within the local government structures.

The Tourism Development is guided by the National Tourism Policy 2014 whose objective is to ensure the delivery of a step-change in the development and functioning of the tourism industry, in order to realize Uganda's great but unexploited potential as a major tourist destination. The Policy emphasizes that by 2024, Uganda should offer a broad and enticing range of tourism products and activities, based on its wealth of natural assets and its rich cultural heritage. The tourism sector should have evolved into a major and sustainable source of revenue and employment across the country, thereby making a substantial contribution towards overall social and economic development. In order to reinforce the aspirations of the tourism policy, the tourism development master plan (2014-2024) identifies the following as 10-year development objectives for tourism in Uganda:

- i. To develop and diversify the tourism products and services
- ii. To develop tourism infrastructure and facilities
- iii. To promote and market the destination in national, regional and international markets iv. To develop human resource and institutional capacity for the tourism sector
 - v. To enhance regulation, coordination and management of the tourism sector
 - vi. To promote community involvement and enterprise development in the tourism economy vii. Promote safety and security of tourists and tourism assets
 - viii. Promote local, regional and global partnerships for tourism development
 - ix. Promoting conservation of natural and cultural heritage resources

2.3 Physical/ Urban Planning Legal and Institutional Framework

In Uganda, the legal and institutional framework for physical planning is enshrined in a number of laws and regulations. The Ugandan institutional framework is the totality of public and quasipublic agencies involved in comprehending, formulating and implementing physical development plans. Physical planning is a legal activity in Uganda, whether planning is at the lowest level or the highest level of government; there is no planning activity that is carried outside this legal and institutional framework. As such, there are several policy and legal instruments, which guided the preparation of the Kira Municipality Physical Development Plan and form a basis for its implementation and development.

These policy and legal instruments are reviewed, for purposes of formulating a basis for policy recommendations of the study and the plan and includes the following: - The Constitution of the Republic of Uganda, The Local Government Act, The Physical Planning Act, The Land Act, The Public Health Act, The National Environment Act, The Wildlife Act, The Forest Act and The Petroleum Supply Act, 2003 and the Petroleum Exploration and Production Act among others.

a) The Constitution of the Republic of Uganda

The Constitution of Uganda, which was promulgated in 1995 is the supreme law of Uganda and forms the apex of the legal framework. Article 190 provides for the Municipality councils to prepare comprehensive and integrated plans. The Government as determined by Parliament by law, holds in trust for the people and protects, natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any land to be reserved for ecological and tourist purposes for the common good of all citizens, which can best be done by producing PDPs. This legal framework is useful for further highlighting the roles of the Local Governments at all levels in land management and conservation of environmentally sensitive areas.

The National Constitution also underscores the importance physical planning as a way of harmonizing the diverse needs for human settlement, production and conservation, by adopting best practice in land utilization for purposes of growth in the agricultural, industrial, and technological sectors, taking into account population trends, without losing control over the structuring of land tenure systems. The most fundamental article empowering physical planning in the 1995 Constitution of Uganda is Article 237 (7) whereby Parliament is mandated to make laws that enable urban authorities to enforce and implement planning; and Article 242, Local Governments are empowered to plan and regulate the use of land under the decentralized system of governance.

In line with the provisions of the Constitution, parliament has put in place the necessary legal framework to provide guidance for carrying out planning and ensuring compliance and regulation of land use in Uganda.

b) The Local Government Act (CAP 243)

This Act provides for the system of local governments based on the Municipality. Under the Municipalities there are lower local governments and administrative units. The Act provides different functions at the different levels of Local Governments. The Act gives Municipalities' autonomy but not independency to prepare their own Physical Development Plans within the National Planning Framework. Section 36 part (3) and part (2) in the second schedule No.5 (vi and xi), gives functions and services for which Municipality councils are responsible for such as Municipality project identification, Municipality development planning and physical planning. Part IV of the local Government Act sections 30 (2), 31 - 36 (2) also provides the functions and services that the Municipality is mandated to perform as specified under Part 2 of the Second Schedule. The Act defines the planning authority in the Municipality as the Municipality Council and how it shall carry out planning in relation to guidelines of the National Planning Authority.

c) The Physical Planning Act, 2010

The Physical Planning Act on the other hand is one of the many laws that have emphasized the Legality of Physical Planning in Uganda. It's a principle statutory instrument governing physical planning in Uganda. The planning process followed to prepare PDPs is greatly provided for under this Act.

Under Part I Section 3 of the Act, declares the entire country a planning area. This means that, by the provisions of this Act, Kira Municipality is a planning area. For any declared planning area, an outline scheme and/or a Physical Development Plan are by this law required to be formulated. However, this system looked at the local governments in this case Kira Municipal Council as agents of the Central Government which is mandated to prepare the plan and submit it to the National Physical Planning Board for approval. The Physical Planning Act 2010, 6 (1) (i), Section 25 – 29 stipulates the content, preparation and approval process of the Municipality PDPs. The consultation processes during the situation analysis process have been aligned to the legal requirements as stipulated in the Act.

d) The Land Act (CAP 227)

The Land Act was enacted in order to implement the constitutional provisions on land ownership and management. Articles 237 (8) and (9) guarantee security of occupancy of lawful and bona fide occupants of 'Mailo' land and other registered land and oblige parliament to enact a law regulating the relationship between them and registered owners of the land they occupy. The implication of this Act in relation to the physical plan is such that once the zoning is done and the plan becomes law, the owners have to conform to the approved plans no matter their land rights held. It is thus the responsibility of the Municipality Land Board to enforce this.

Part III Section 46 of the same Act, emphasizes that use of land must comply with the Physical Planning Act and any other relevant laws concerning planned land use. The Act also provides for the protection of fragile ecosystems such as natural lakes, rivers, ground water, natural ponds, natural springs, wetlands and other land reserved for ecological and touristic purposes for the common good of the citizens of Uganda.

e) The Public Health Act (CAP 296)

The Public Health Act CAP 296 specifies the rules and regulations regarding public health issues. These public health issues are in respect to infectious diseases, vector control, buildings of various types and uses as well as drainage and sanitation. The Act specifies details of the building standards under Section 269-13 which apply in Municipalities broadly and Municipality in particular and planning areas generally. All developers are, by this law, required to erect buildings in accordance to the requirements of the building rules.

It is important to note that the building rules and standards under Section 269-13 were repealed by Section 55 (1) and (2) of Building Control Act, 2013 which in effect takes precedence over any other Act or instrument in existence relating to building operations, before coming into force of this Act. The Act therefore takes precedent over the buildings rules in the Public Health Act Cap 296 as far as rules regulating building construction and power to require removal or alteration of work not conforming to the rules.

f) The National Environment Act (CAP 153)

According to this Act, Part VII Sections 34 to 55 outlines all the relevant environmental management mandates of NEMA in collaboration with the Government and Local Governments. The Act stipulates the mandate of the National Environment Management Authority (NEMA) as "the principal Agency in Uganda responsible for the management of the environment by coordinating, monitoring, regulating, and supervising all activities in the field of environment". More specifically sections 49 and 46 concern land use planning and forest resource management, in particular section 7 (b) under Part III specifies that NEMA;

Therefore the physical plan of Kira Municipality Local Government/Council must relate to this Act by incorporating environmental concerns in the planning area. Kira Municipal Council PDP is therefore prepared with environmental concerns taken into account as specified by the Act.

g) The Wildlife Act, 1996

This Act provides for sustainable management of wildlife and consolidates all efforts to conserve wildlife in the country by establishing a monitoring and supervisory body- Uganda Wildlife Authority. This Act is important in the preparation of the Municipality Physical Development Plan as the Municipality is part of the Central Region, which is rich in wildlife and conservation areas.

h) The Forest Act, 1999

This Act provides for the protection, management and proper utilization of forest resources. Section 3 of the Act empowers the minister by statutory order to declare any area to be a central forest reserve or a local forest reserve or to have an adequate forest estate after instituting such inquiries, as he or she may deem fit. Section 9(2) empowers the local authority with the approval of the minister to make rules for protection, management and utilization of any forest reserve within its area of jurisdiction. The act is critical to the Municipality PDP process given that such fragile environments are under extreme pressure in Kira Municipality due to the population explosion and the fragile land tenure system in the country that puts pressure on such lands.

i) The Petroleum Supply Act, 2003 and the Petroleum Exploration and Production Act, Chapter 150

The Municipality could be part of the areas to be trans-versed with the planned oil and gas infrastructure. The Petroleum Supply Act provides for the supervision, monitoring, the importation, exportation, transportation, processing, supply, storage, distribution and marketing of petroleum products. The Act mandates the Minister in charge of the petroleum sector to provide the licensing and control of activities and installations, for the safety and protection of public health and the environment in petroleum supply operations and installations.

Of critical importance are the oil pipeline details, land requirements and planning requirements within Kira Municipality. There are plans for a multi - product pipeline to be constructed from the refinery at Kabale in Buseruka sub-county — Hoima Municipality to a distribution terminal to be located at Buloba, in Wakiso. There are on-going studies on the routing for the proposed Hoima-Kampala pipeline of approximately 201 km long and 30m wide corridor. The project will affect six Municipalities, Wakiso inclusive.

2.4 Regulations

i. The Physical Planning Regulations

The Physical Planning Regulations give full effect to the Physical Planning Act 2010. Without them, the Act would not be fully implementable.

ii. The National Physical Planning Standards and Guidelines 2011

The National Standards and Guidelines are intended to guide both the formulation of PDPs and their implementation, with the basic aim of ensuring that spatial developments take place in an orderly, coordinated and efficient manner. They provide clear verifiable minimum standards for development activities. They also provide guidelines on zoning, sub-division, housing design and standards. The situation analysis of the trends and challenges of physical development in Kira Municipality has been carried with guidance and reference to the National Physical Planning Standards and Guidelines.

iii. The National Environment (Audit) Regulations 2009:

These Regulations prohibit the carrying out of environment audits without due certification and registration, except if the person is an environmental inspector. The Regulations also provide for the preparation of environmental audit reports; require owners or operators of facilities whose activities are likely to have a significant impact on the environment to establish environmental management systems; provide for enforcement environmental audits; and encourage voluntary environmental audits and compliance agreements to aid facility compliance to environmental requirements. The guidelines will provide input in the Municipality PDP process and formulation of enforcement of compliance frameworks.

iv. The National Environment (Minimum Standards for Management of Soil Quality) Regulations:

These Regulations have been reviewed to provide guidance regarding the minimum soil quality standards to maintain, restore and enhance the inherent productivity of the soil in the long term; to establish minimum standards for the management of the quality of soil for specified agricultural practices; to establish criteria and procedures for the measurement and determination of soil quality; and to issue measures and guidelines for soil management.

v. The National Environment (Minimum Standards for Discharge of Effluents into Water or Land) Regulations:

These Regulations prohibit discharge of effluent or waste on land or into the aquatic environment contrary to established standards and without a waste discharge permit. They also provide for sampling of effluent and waste water analysis. The Municipality and the entire metropolitan area are at crossroads with regard to effluent or waste management. The local urban and local government entities within the Municipality do not have in place effluent and waste management strategies yet the influx and footprint of industrial activities is clearly very significant. Engagement with administrators of the entities indicates challenges in solid waste management processes right from collection up to disposal.

vi. The National Environment (wetlands, River banks and Lakeshores Management) Regulations:

These Regulations have been reviewed to provide guidance regarding regulations for the protection of wetlands; their conservation and wise use; inventorying of wetlands; and wetland use permits for regulated activities, protection zones for riverbanks and lakeshores. The protection zone with regard to wetlands, riverbanks, lakeshores and forests is defined in the regulations. The consultants' analysis was to verify compliance enforcement processes and challenges, institutional linkages and support processes and the requirements that will constitute a critical input in the formulation of frameworks for compliance during enforcement of the PDP.

vii. The National Environment (Noise Standards and Control) Regulations:

These Regulations have been reviewed to provide guidance into regulations for maintenance of a healthy environment for all people in Kira Municipality, the tranquillity of their surroundings and their psychological well-being by regulating noise levels; and generally to elevate the standards of living of the people by prescribing acceptable noise levels for different facilities and activities. The review was carried out to extract provisions and input in the frameworks for compliance during enforcement of the PDP.

viii. The National Environment Impact Assessment Regulations, 1998:

These Regulations have been reviewed to provide guidance into regulations and processes for environmental impact assessment (EIA) process, including project briefs and environmental impact studies. The Regulation provide for EIA review processes, including invitation of general public comments and public hearings and rejection or cancellation of an EIA certificate.

ix. The National Environment Waste Management Regulation, 1998:

These Regulations have been reviewed to provide guidance into regulations for management of all categories of hazardous and non-hazardous waste. They cover movement of hazardous waste into and out of Uganda, its storage and disposal. The Regulations also provide for conditional licensing of transportation of waste from one Municipality to another. The Regulations prohibit the disposal of untreated waste into the environment. The review of the regulations was carried out to extract provisions and input in the frameworks for compliance during enforcement of the PDP.

x. The National Environment Hilly and Mountainous Areas Regulations:

These Regulations have been reviewed to provide guidance into regulations for sustainable utilization and conservation of resources and the mountainous and hilly area. The Municipality Councils are permitted to make bye laws for the protection of mountainous and hilly areas which are at risk of environmental degradation.

xi. Ordinances and Bylaws

Local Governments have got the prerogative to formulate and implement ordinances and by-laws for the purpose of better service provision. Such instruments may include further clarification of processes in land use regulation and enforcement compliance. Review was carried out where available to extract provisions and input in the frameworks for compliance during enforcement of the PDP.

2.5 Strategies and Action Plans

a) Uganda's National Environmental Action Plan (NEAP)

The Uganda National Environment Action Plan (NEAP) seeks to promote and implement sound environmental policy. The NEAP represents the culmination of a series of initiative's and activities coordinated by the National Environment Management Authority (NEMA). It is the Master Plan for the management of the environment in Uganda and contains a National Environment Policy, Framework, Environmental legislation and Environment Strategy. The NEAP consists of Sectoral Plans for the Medium and Long Term intended to lead to sustainable development in this country. The plan has been essential in ensuring compliance for the planning of the towns and now the Municipality environmental aspects.

b) Kira Municipality Environment Action Plan (MEAP)

The Municipality MEAP is the basis for integrating environmental concerns in formulation and implementation of Municipality Development Plans and programs so as ensure environmental mainstreaming in the Municipality, Urban and local planning and physical development process. The MEAP therefore recognizes the critical role of relevant line Ministries, departments and agencies as well as civil society organizations, communities, development partners and other stakeholders in coordinating their actions for the preservation, conservation and sustainable use of the environment and natural resources hence the need for harmonizing the management of environment and natural resources in Kira Municipality during the PDP preparation process.

c) The Greater Kampala Metropolitan Physical Development Framework (2013)

The planning area of Kira Municipality Local Government falls within the Greater Kampala Metropolitan area. The Greater Kampala Metropolitan Physical Development Framework (2013) identifies the development challenge of the continued unplanned and disorganized growth and sprawl. The Greater Kampala Metropolitan Physical Development Framework suggests remedies to address such challenge which affects Kira Municipality.

2.6 Physical Planning Institutional framework

The Government has over the years equally put in place a hierarchy of planning institutions and bodies for policy alignment, planning, implementation and monitoring of the Physical Development Planning process at national, regional and local levels. These institutions are enshrined in Acts of Parliament, policies, guidelines and standards guiding the planning and implementation of plans at all government levels in Uganda.

a) The Directorate of Physical Planning and Urban Development

At National level, the Physical Planning and Urban Development Directorate in the Ministry of Land, Housing and Urban Development (MoLHUD) is responsible for carrying out National landuse plans and preparation of policies with contributions from other related ministries and departments. The bodies, their structure, powers and responsibilities, are defined in the Physical Planning Act. Currently the Minister of Lands, Housing and Urban Development approves recommended plans by the National Physical Planning Board. Any amendments and variations in PDPs cannot be permitted without approval from the Ministry NPPB.

b) National Physical Planning Board- NPPB

Section 4-6 of the Physical Planning Act establishes and defines the composition and fuctions of the National Physical Planning Board (NPPB). Section 6 (1) a-n; defines the functions of the board in overseeing and coordinating the execution of the physical planning mandate at the national, regional, Municipality, urban and local levels. The Act also defines a hierarchy of Physical Development Plans, the institutions and bodies required to prepare, approve and amend these plans and the overbearing role of the board.

The mandate, processes and the institutions that relate with the board in the planning, approval, amendments of PDPs are a critical component for the Kira Municipality physical planning process.

c) Municipality Physical Planning Committee

The Physical Planning Act 2010 under Section 9 provides for the composition of the Municipality Physical Planning Committee (MPPC) while Section 10 and 25 (1) stipulates the functions of the committee and defines the key actors in the process. The mandate processes and institutions that relate with the MPPC in the planning, approval, and amendments of the Municipality PDP will definitely relate to critical component of the development control in the Municipality.

2.6 Administrative set up of Kira Municipal Council as of 2018

Kira Municipality is located in the Wakiso District in the Central Region of Uganda, Kira Municipality is the country's second-largest town by population in the country. It is administered by the Kira Municipal Council, which is an urban local government. Kira Municipal Council was elevated to a Municipality status in mid-2016. The newly upgraded Kira Municipality is bordered by Kasangati Town Council to the north, Mukono Municipality to the east, Lake Victoria to the

south and Kampala City to the west. Kira Municipality is approximately 14 kilometres (8.7 miles) east of the central business district of Kampala, which is Uganda's capital and largest city.

At the Municipality level, the administrative hierarchy is similar to that of the District Council. There is a Municipality Council, which is also served by an Executive Committee and a number of Sector Committees (although the number of these Sector Committees varies from each administrative unit).

The political head of Kira Municipal Council is the Mayor. The Council which is composed of 18 elected councillors at municipal level on the other hand is the supreme policy-making organ of the Municipality which functions under committees namely; finance, planning, works, social and community services among others. The technical head is the Town Clerk and under him there are departments namely; treasury, works, community development, education, health, administration and production. Which supports him in the day today running of the Municipality (Figure 2.1).

Kira Town is one of the dormitory towns for Kampala. It is an urban lower local government and a mandated planning entity. Kira Municipality is divided in to three divisions of Bweyogerere, Kira and Namugongo. It is further divided into six (6) Wards which are lower administrative units which include; Bweyogerere, Kimwanyi, Kira, Kireka, Kirinnya and Kyaliwajjala and 40 cells/villages. It should be noted that parishes and cells are administrative units with no planning mandate while the Divisions are Lower Local Governments with planning mandate. The Municipality and Divisions are self-accounting and corporate bodies as per the Local Government Act.

2.7 Institutional structure and physical planning function at the Municipality

The national and local physical planning institutional structures and processes directly impact on the planning, management and implementation of the PDP. Implementation of the PDP requires development of the detailed plans and mechanisms for actual implementation of the recommended components of the PDP. This will obviously fall on the Municipality and the newly created urban authorities in the Municipality with the involvement of a complete cross-section of other government ministries and agencies, the private sector and affected communities in the town.

With decentralization policy, local authorities are mandated to prepare structure and detailed plans in their areas of jurisdiction. However, approval of these plans is a sole responsibility of the line Ministry with technical advice from the National Physical Planning Board. The role of the Department and the Board however remains in preparation of national and regional plans.

Officially the designated urban areas in Kira Municipality include six (6) parishes/ townships that include; Bweyogerere, Kimwanyi, Kira, Kireka, Kirinnya and Kyaliwajjala. The planning and management within the Municipality relies on the integrated coordination and collaboration of these local governments under the guidance of the national government. This PDP will provide a tool to strengthen that cooperation. Municipality level local government officials are employees of the national government and provide local representation. The Kira Municipality PDP is the first of series of Municipality Physical Development Plans and the concept of Municipality Coordination of the lower councils is worth considering as an implementation and monitoring coordination body at the Municipality level.

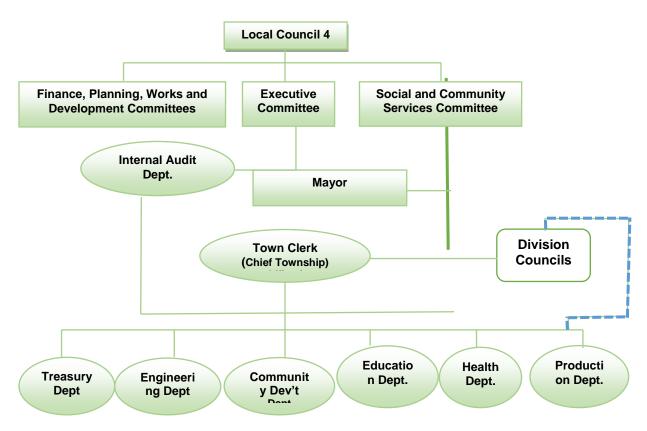


Figure 2.1: Administrative Setup of Kira Municipal Council 2018

Part III

3.0. Sector Reports, Analysis Proposals and Recommendations

The Kira MC PDP comprises a number of sectors, which impacts or relates to one another and it is presented here with an aim to bring out their integration. This Chapter presents the specifc sector key findings and their implications to development and the strategies for transforming Kira Municipality to the desired future development scenario through a carefully thought through Physical Development Plan (PDP). The key sectors include; Environment and Natural Systems; Human Development and Socio-economic changes; Human Settlements; Local Economic Development; Tourism; Infrastructure and utility development and institutional and Good Governance. This chapter analyzed the sectors giving its implications in relation to physical development of Kira Municipality. The strategies focus on the physical planning and development aspects of each sector as summarized in figure 3.1.

Figure 3.1. Municipal Physical Development Plan Sectors



The Kira Municipality Situation Analysis Report (June 2018) presents detailed information and analysis of each sector and can be referred to for further information. The Sectors are consolidated into the overall Kira Municipal Physical Development Plan in Chapter five of this report. Each Sector is structured under the following areas:

- a. An Overview of key findings pointing out development challenges and implication to physical development of Kira
- b. Objective to address the development challenges
- c. Interventions/proposal, recommendations and strategies to address the challenges and
- d. Risks that may affect the implementation of these strategies/recommendations of this plan.

3.1. Report on the Physical Environment and Natural Systems

3.1.1 Physical Characteristics of Kira municipality

3.1.1.1 Topography

The landscape of Kira Municipal council (KMC) belongs to Buganda surface classification. It lies between the ranges of 900 to 1,340 meters above sea level. The average height of hills in Kira is 1200 meters above sea level. The Municipality is characterized by isolated flat-topped hills with gentle slopes, often merging abruptly into long and gentle pediments, which are usually dissected by relatively U-shaped valleys (Map 3.1). The hilltops are mainly covered with lateritic soils whose permeability is very low. The Municipality is mainly hilly compared to other areas in Wakiso, comprised of the high land zone (central and northern hills).

Map 3.1: Slope analysis of the Municipality

3.1.1.2 Geology

The geology of Kira falls under the Buganda-Toro system with Argillites (phylites and schist's) with basal quartzite's and amphibolites, which occur locally. There are also some sections of undifferentiated gneisses including elements of partly granitite and metamorphosed formations. the With undulating terrain of flat-topped hills the valleys comprise regimes of natural drainage channels that drain in two basins of Lake Victoria and Lake Kyoga. These form administrative also boundaries. The relief of the area has an influence on the current land uses and in places such as Bweyogerere and Kireka, topography is one of the major factors determining land use. Though with the increased urbanization land use activities seem not discriminate topography.

The municipality is underlain by both old and recent rock systems, which include Precambrian, Cainozoic and Laterites. All the three major rocks divisions i.e.

sedimentary, igneous and metamorphic are represented. The Cainozoic rocks extend southwards and river valleys of the municipality. They include mainly swamps deposits, alluvium and lacustrine deposits. The lateritic rocks are widespread on hilltops in the central and northern parts of the Municipality. It is well developed below the summit levels where it forms protective pavements on many slopes.

3.1.1.3 Minerals

The municipality has a few known deposits such as kaolin, sand, murram and clay. Mineral prospecting is yet to be done in order to discover what lies beneath the Precambrian rocks.

The recent report on the survey done by the Ministry of Lands, Water and Environment is yet to be released.

3.1.1.4 Hydrology

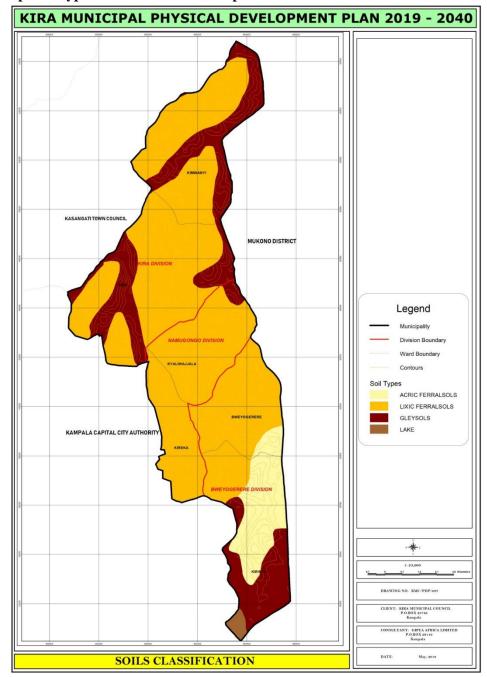
KMC is generally endowed with adequate surface and sub-surface water reserves with numerous streams, rivers (Lwajali and Nakalere) and wetlands both permanent and seasonal. Minor valleys have distinct seasonal swamps and rivers, which contain water especially during the wet season. The water table along these swamps is quite high. They are suitable for sinking shallow wells. Sub surface water reserves occur in fissures and aquifers of the rocks. This is indicated by the number of boreholes, spring wells, tube wells and shallow wells, which have been drilled to harvest water for domestic supply.

3.1.1.5 Soils

Broadly the municipality has two major soil types as Lexic Ferrasols (spread all over the sub county) and Gleysols (found mainly in the wetlands of the municipality), as illustrated in Map 3.2 below. The soils are generally of high productivity and are further sub divided into mainly clay soils, red gravely loams with occasional murram and yellowish sands with quartz gravel.

More specifically the soils are mainly sandy clay loams of ferrarite soils with dominant colour red which represent almost the final stage in tropical weathering. They are deep with little differentiation into clearly defined horizons and possess a fine granular structure, often moulded into larger, weakly coherent clods that are very friable and porous. There is little or no reserve for minerals and the clay minerals are all of 1:1 lattice type (kaolitic) associated with important quantities of iron oxides, and occasionally hydrated oxides of aluminum. Generally the more heavily textured soils are also the most fertile. The valleys have clay soils although some areas in Kirinya and Kimwanyi have sandy clay soils. With this type of soils, the primary vegetation is short grass on the hilltops and forests in the valleys giving way to papyrus in the swamps. These have greatly been tampered with and degraded. Thus the area has rich productive loamy soils whose structure and texture allows for water retention sufficient enough to favour proper plant growth.

The soils in the wetlands include grey sands whose parent material is alluvium and hill wash, black and grey clays from river alluvium and peat sands and clay formed from papyrus residue and river alluvium. KMC soils are generally of high productivity.



Map 3.2: Types of soil in Kira Municipal Council

3.1.1.6 Climate

The climate of KMC is predominantly influenced by its equatorial positioning and pressure systems of the continent and the Indian Ocean. However, topography strongly influences the magnitude of the elements of the climate and to a lesser extent their seasonal distribution. The East African weather where KMC lies is governed by the movement of the sun between the tropics of Cancer and Capricorn across the Equator. With the sun overhead the land warm and a low pressure band develops across the region known as the Inter Tropical Convergence Zone (ITCZ). The North East and South East trade winds meet at the ITCZ and generally raise the air to form clouds. Places near the equator experience two clearly distinct rainy seasons coinciding with the ITCZ. For KMC this occurs during the months of March-June and July- October. This has significant negative implications on the drainage system and the entire physical infrastructure

of the municipality. Climate in the municipality is warm and wet with relatively high humidity. These conditions favour rapid plant growth and also encourage disease out breaks. Proximity to Lake Victoria has a bearing on production activities.

a) Rainfall

Rainfall in the Municipality is bi-modal. There are two wet seasons running from April to May and October to November (figure 3.2). The dry months are January and June to July and December. The mean annual rainfall is between 200 to 2500 mm. Lake Victoria, a mass of warm water of approximately 63,000 square km at an attitude of 1,134 metre above sea level is a major orographic factor influencing rainfall in KMC. It causes a major distortion on the general pressure pattern, leading to the so-called Lake Victoria trough. The amount and reliability of rainfall within the Municipality presents good access to water and this can be tapped in the residential areas with storage facilities for domestic purposes. It also helps to recharge the many water reservoirs in many parts of the Municipality

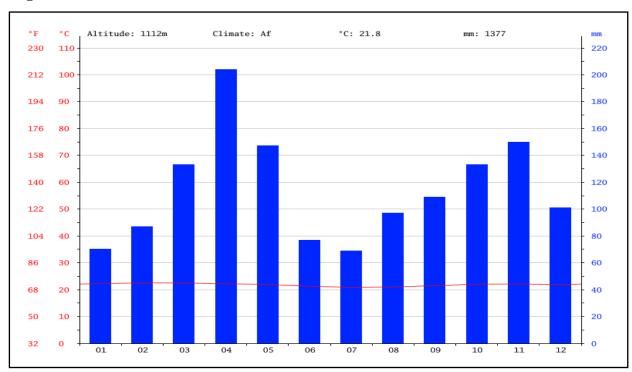


Figure 3.2: KMC Rainfall totals 1990-2016

(Source: Entebbe Met department)

b) Temperature

The minimum surface air temperature of the Municipality is 55.0 degrees F while the maximum is 82 degrees F. There is little variation in temperature throughout the year. There are two temperature peaks, one from the months of January to May and the other from July to September (figure 3.3).

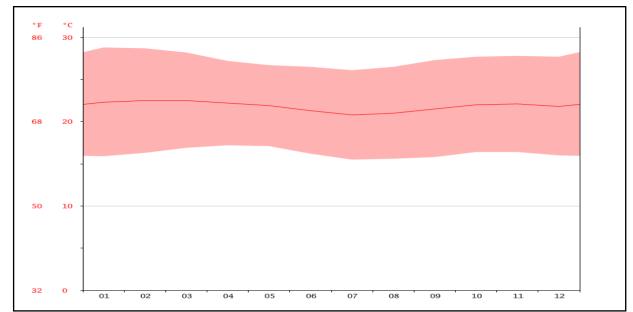


Figure 3.3: Temperature variation in KMC 2006-2017

(Source: Entebbe Met department)

3.1.1.7 Vegetation

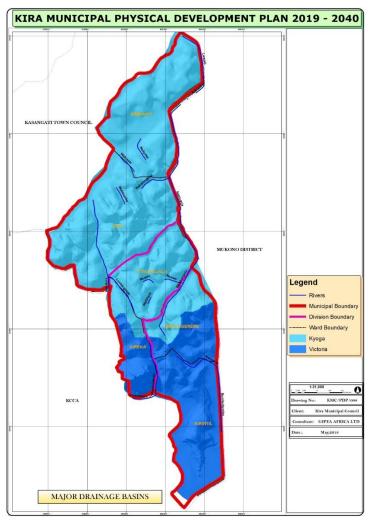
The consultant noted that the natural vegetation has disappeared especially in the more built up parishes of Kireka, Bukasa, Mbalwa and Nalya. Therefore, vegetation cover of KMC is very varied. It ranges from medium altitude evergreen forest, through medium altitude moist semi-deciduous forests, savannas, and swamps. All the natural forests have experienced illegal forest activities such as charcoal burning, encroachment, pit swaying and firewood cutting. The pressure on the forests is due to the ever increasing population density in the area, abject poverty and the place being very near to the main market outlet (Kampala). The Forest mosaic is found in medium altitude. The most important and abundant element of this mosaic is a savannah like community, which consists of a mixture of forest remnant and incoming savannah trees with a grass layer dominated by Pennisetum purpereum (elephant grass). In addition, (70%) of vegetation of Wakiso Sub County is savannah woodland.

3.1.1.9 Wetlands

The swamps are shallow, seasonally or permanently Water logged. They normally support hydrophilic vegetation. Most of the permanent wetlands are found in parts of Bukasa, kiwologoma, Nakwero and Bukasa in the South and North easten parts of the municipality. The plant community in most of the permanent wetland is Papyrus and Miscanthus. Wetlands have been reclaimed and put under intensive cultivation, excavation, industrial use and construction which all pose serious environmental concerns.

3.1.1.10 Drainage

The storm water flows to two basins of Lake Victoria and Lake Kyoga basin. A number of streams including Kinawataka, Kawoya and Namanve drian in Lake Victoria while Nakalere, Nangobe drain into Lake Kyoga through river Rwajjali. The main drainage channels are still natural with a few that are stone pitched. However the drainage channels are experiencing pressure from development of the swamps through which they flow. The drainage of storm water is likely to worsen as developments increase in particularly Kira in places Kasokoso in Kireka, Kireku Bweyogerere but some swamps are already experiencing intermittent floods after a rain storm as the case of Kinawataka, Ntebetebe and Namanve in areas where developments have The natural drainage is occurred. characterized by a number of rivers with a dendritic pattern (Map 3.3), originating from tectonic movements and erosion that occurred many years ago.



Map 3.3: Drainage patterns of the municipality

3.1.2 Natural Resources and Environment 3.1.2.1 Wetlands

Wetland cover in the current Kira Municipality, comprise of only about 9457.3ha of estuarine swamps and about 41.7 Kilometers of riverine swamps. Among the riverine wetlands include, i) R. Lwajali, ii) R. Nakalere, iii) R. Nakyelongosa, iv) R. Namanve, v) R. Kinawataka, vi) R. Nsawo vii) R. lukingiridde, viii) R. Nakiyanja and ix) R. Wabikere among others. On average, about 67% of the wetlands cover in the Municipality is degraded. The degradation was mainly due to population influx in the area. Accordingly, demand for housing and agricultural land has increased. Although there are several environmentally unacceptable activities in wetlands of the municipality, agriculture and housing pose the biggest threat.

Wetlands within kira Municipality play a significant role on sustaining various ecosystems socio-economic viability of human and wildlife communities living within the area. From an ecological point of view wetlands regulate surface water quality, restock water table, control floods, stabilize lake shoreline and river banks from erosion, moderate local climate, participate in nutrient recycling, (e.g. nitrogen fixation, carbon sequestration), soil formation and are a refugia of endangered wildlife such as *Satunga speki* (MWE, 2015; Matagi, 1998). From a socio-economic point of view, wetlands support the livelihoods of communities that live in their neighbourhoods.

For example, they provide food (crops and fish), supply water for domestic and livestock consumption, a source of materials for handicraft, clay for making bricks and pots, sand for construction, medicinal plants (MWE, 2015; Kakuru *et al* 2013; Turyahabwe *et al* 2013; Wasswa *et al* 2013).

With the expansion of human settlement and industries, wetlands have been destroyed or altered through pollution, changes in local drainage, conversion to farm land or other uses including human settlement. It has been estimated that over 7% of Uganda's original wetland area has been converted for other uses (Amaniga Ruhanga et al., 2009). This has resulted in effects on wetlands hydrological role, plus the effects on plants and animal species for which wetlands are critical habitats for various life cycle activities (feeding, nesting, breeding and rearing). Loss of wetlands eventually results in overall decline in plant and animal biodiversity and ecosystem stability. Because many rare or endangered species inhabit wetlands, the loss of wetlands potentially results also in species extinctions or extirpation. Part of the problem is a prevalent public attitude that wetlands have little or no function or long-term benefits. Wetland flora is vital to the structure and functioning of floodplain and fringing wetland ecosystems, which are principle food-web systems for the fish resource. Sensitive areas that have been impacted are the kinawataka area, namanve and in wetlands in Bukasa area on the shores of Lake Victoria. The different wetland classes need to be ranked for relative sensitivity to disturbance based on hydrological function and ecological response (i.e., water regime and vegetation cover density) and resilience after disturbance (2010 Environmental Sensitivity Atlas).

Loosing wetlands within the municipal therefore, is a recipe for environmental disasters. Flooding will be difficult to control and the quality and quantity of aquatic life will be affected due to siltation of rivers. The quality of surface and underground water will deteriorate and water borne diseases will escalate. This means that acquiring drinking and safe water for domestic and industrial purposes will be expensive and the quality of life of both human and wildlife will be affected. More deaths due to water borne diseases such as cholera, typhoid, and dysentery will increase or government expenditure on procurement of the relevant medicine will increase.

The Total Economic Value of intact wetlands exceeds that of converted ones (Balmford et al. 2002). The economic value of wetlands in Kira Municipality would be higher if they were left intact. However, since they are being converted, their value is significantly lowered, a situation that has over time created long term 'national capital debts, possibly being addressed at a considerably higher cost through expenditure on wetland restoration programs.

3.1.2.2 Solid waste management

Waste water in the Municipality was openly disposed along public roads and in some areas; garbage is dumped in drainage channels. In some cases, waste water was disposed in open drainage channels and there were no sufficiently common places for solid waste disposal. Moreover, in other areas drainage for storm water was lacking. There is also inadequate sanitary facilities e.g. public toilets, cesspool emptier or and where they exist they are in poor conditions.

There are industries in gazzeted residential areas. The noise and dust from places of worship or recreation centers is nuisance in residential areas and a health hazard for the people and animals within the Municipality. The air and water within these areas was potentially polluted by industrial waste gases and chemical refuse. There are place where scramble for water between animals and people was observed or water pipes situated near toilets.

Poor management of solid and liquid waste can develop into several environmental hazards. For example, the value of land within the area depreciates because the air and water generally get polluted. Consequently health problems such as cholera and malaria may escalate (Ojok et al, 2012; Komakech, 2014 and Kinobe et al, 2015).

3.1.2.3 Forestry

None of the currently existing natural forests in the Municipality are protected. Natural forests within the Municipality exist as groups of broad leaved trees and/ shrubs mainly on private land. Only about 44 ha of land are categorized as a Central Forest Reserve (CFR) of which over 70% was planted with exotic species such as *Eucalyptus spp.*, and *Pinus* spp. The remainder was encroached by illegal farming cultivated and an uncertain portion was covered by bush.

On private land several pockets of tropical natural forests, woodlands and plantations exist mainly. The Municipality therefore was generally lacking in terms of natural forest cover. The common tree species in the remaining pockets of natural forests in the Municipality include *Maesopsis eminii*, *Albizia coriria*, *Milicia excelsa*. *Lovoa trichilioides*, and *Cordia millenii* among others. Unfortunately these will succumb to a high demand for timber, charcoal and firewood within the Municipality and neighboring areas. Currently a lot of natural tree cover was lost due a high demand of firewood to sustain the small scale industries.

Natural forest cover loss within Kira means increase in greenhouse gases such as carbon-dioxide and methane from burning, fermentation and decomposition of organic substance, or fumes from motor vehicle exhaust and industries. The breathing air quality will deteriorate, ambient temperatures will rise and the micro climate change will be inevitable. Both human and wildlife will be affected as erotic rains will be more frequent and panic among the agricultural sector will escalate food insecurity.

Forest loss should be addressed through afforestation. During this process, the choice of tree species to use in the various areas was critical. For example originally tropical high forest areas should be restored using keystone species such as *Ficus* natalesis, *F. mucusor*, *F. sur* among others like *Maesopsis eminii*, *Warburgia ugandesis*, *Albizia spp.*, *Prunus africana*, *Alstonia boonei*, *Canarium schweinfurthii*, *Markhamia lutea*, *Baikiaea insignis Sapium ellipticum and Celtis* spp. The Figs establish quickly providing food for birds, monkeys and other wild fauna. This process is very vital for seed dispersal and rejuvenation of a natural forest. Luckily these species are easily propagated and available in various nurseries located in the Municipality and its environs.

3.1.3 Sector objectives

The overall intent of the environmental and natural resources management Strategy is to:

- 1. Demarcate and protect designated areas from human footprints
- 2. Provide logical strategies for sustainable use of municipal natural resources
- 3. Manage impacts of environment degradation and natural resource extraction
- 4. Promote Open/Surface water and the catchment areas that offer recharge for these water bodies with minimum interference from human activities and must be sustainably managed.
- 5. To Protect and conserve wetland through promotion of activities that are not detrimental to their survival.

3.1.4 Sector Strategies

3.1.4.1 Forest and woodland restoration

The woodlands and grasslands on the other hand could be restored or sustained by regulating unnecessary bush-burning especially during the dry season as a strategy for stimulating germination of fresh grasses for grazing and charcoal burning. Extensively degraded woodland areas could be rehabilitated using species restricted to rangelands. The species include CombretummolleR.Br. ex G.Don, C. collinum(Engl. & Diels) Okafor, Albiziagrandibataeta, A. giberema, A. gumifera(J.F. Gmel.), Acacia hokii, A. kirkii, A. totilis, A. seyal, Entadaabyssinica, Spathodeacampanulata, Erythrinaabyssinica among others.

Alternatively degraded Savanna woodlands on hill tops can be rehabilitated planting exotic species such *Eucalyptus* and *Pinus* species. These can provide alternative sources of timber, firewood and poles which are among the secondary reasons for rangeland degration. Moreover the existence of the first growing Eucalyptus clones is now an opportunity that the environmental department could exploit. The relevant departments (e.g. physical planning and environment) could tap into various national interventions such as Farm Income Enhancement and Forest Conservation Projects implemented by the Ministry of Water and Environment (MWE); and Catchment Management Project also implemented by MWE.

• The Municipality should encourage tree planting on private land by promoting already popular farming practices and tree based technologies such as, using fast growing and multi-purpose fruit trees such as *Mangiferaindica* (Mangoes), *Morus alba*, *Carisaedulis,Perseaamericana* (Avocados), *Artocarpusheterphyllus* (Jarck-fruit), *Citrus* spp. (Oranges, lemons) among others. Currently there is a huge and ready market for fruits and firewood within Kira Municipality. Hence promotion of on-farm plating of first growing and multi-purpose tree species is a viable option toward vegetation restoration and sustainability within the Municipality.

3.1.4.2 Strict enforcement of the environmental byelaws

The environment and physical planning departments should work hand in hand to develop, strengthen and enforce environmental byelaws and related regulations. For example, to address degradation of wetlands on private land, the Municipality could develop byelaws to prevent abusive use of these fragile eco-systems. The environmental byelaws should promote activities with minimum environmental impact such as tree planting and discourage degrading practices such as sand mining, (Plate 3.38). On private land, excavated areas should be by law refilled with soil while on gazzeted public land sand and clay mining should be discouraged.

- Increase efforts that support land use planning, control soil erosion, ill-considered land use conversion and encourage optimal utilization of land resources bearing in mind the provision in i) The 1995 National Policy for Conservation and Management of Wetland Resources, ii) Uganda Forestry Policy of (2001), iii) Forestry and Tree Planting Act (2003) iv) The National Land Use Policy of (2007), the Land Act (2007) and other relevant policy reforms.
- Support biodiversity inventories and long term monitoring along with regular environmental and sustainable development auditing in collaboration with relevant authorities such as National Environment Management Authority (NEMA), National Forestry Authority (NFA), Uganda Wildlife Authority, Uganda National Roads Authority (UNRA), and Kampala Capital City Authority (KCCA) among other.

• Conduct environmental management sensitization campaigns in collaboration with relevant stakeholders to support awareness creation, advocacy, capacity building and applied research on environmental and related sustainable development issues

3.1.4.3 Wetlands Restoration and Management

According to Balmford*et al.* (2002), the total economic value of intact wetlands far exceeds that of converted wetlands. In kira Municipality, the value would certainly be higher if the wetlands are left intact. However, since they are being converted, their value is significantly lowered, a situation that will over time be very expensive to restore. In the face of this, immediate conservation and sustainable utilization of these natural resources is critical (Wasswa*et al* 2013). The environmental and physical planning department of the Municipality could undertake the following practices in order to strengthen and sustain the productivity of wetlands in Kira Municipality.

- > Sensitize the general public about the roles of wetland towards environmental amelioration, their economic value and invisible or intangible contributions to people's livelihoods in the new proposed Municipality.
- ➤ The department of environment and physical planning should work together to ensure that the relevant policies and byelaws are developed in order to effectively implement the national environmental protection plans and programs. For example during approval of development plans in wetland areas, the environmental department should be consulted and a full environmental audit conducted before the development is approved. There should also be a mechanism in place to ensure implementation of recommendation of an environmental audit report.
- → Strengthen the Production Department and specifically the environmental protection unit through funding community sensitization programs and enforcement of environmental law.
- Surveying and demarcation of all public wetlands in the municipality will facilitate and enabling environment for the law enforcement.
- → Eviction of all illegal development in wetlands on both public and private land should be implemented. The 1995 Environment Statute, the 1995 National Policy for Conservation, and Management of Wetland Resources, The National Land use Policy 2007, National Forestry and Tree Planting Act 2003, could be useful legislation on guiding the eviction process.
- → Strengthening stakeholder collaborations and partnership wetlands (NEMA, Uganda Land Commission, District Land Boards, and Buganda Kingdom).
- All wetlands within the Municipality should be clearly surveyed and demarcated and their environmental status assessed. In addition, all un planned and unapproved developments in wetlands on public land should be reverted. On private land environmental byelaws should be developed and enforced.
- > Strengthening inter-sectoral collaboration (including the National Environmental Management Authority, the Wetland Inspection Division, Uganda Land Commission, District Land Boards, Buganda Kingdom) to enforce wetland laws
- ➤ Use of economic incentives and disincentives such fines, bonds, fees, tradable permits and taxes against unsustainable wetland utilization practices

3.1.4.4 Solid Waste recycling and Re-use

Much as solid waste is a nuisance, its management solution lies within treating it as a non-pollutant. Solid waste could also be seen as a resource (Matagi, 1993). According to Amoding (2007) solid waste from Kampala markets bound up in crop waste alone had 50, 10 and 130 metric tons per year of nitrogen, phosphorous and potassium, respectively. Furthermore, Komakech et al. (2013) demonstrated that plant nutrients from organics waste delivered at the Kitezi landfill alone corresponded with 92%, 110% and 680% of the imported inorganic nitrogen, phosphorous and potassium (NPK) fertilizer respectively (FAO, 2010).

The solid waste generated within the Municipality therefore, is potentially an essential source of plant nutrients such as nitrogen, phosphorous and potassium for the farming households as observed in Kira division. Also following the estimates of Komakech et al. (2013) that the land fill site at Kitezi can annually generate energy that is equivalent to 1.6 x 10 MJ. Up to 40% of this energy could be generated from solid waste produced within kira Municipality. In addition, if 50% of the waste is converted into biogas, it would generate about 8.0 x 10 MJ of biogas.

Solid wastes therefore, are a prospective source of nutrients to crops in farming communities and energy to households in kira Municipality. While some households have already benefited from crop nutrients obtained from solid wastes, the energy bit has not been yet harnessed in the Municipality and Uganda in general.

While the above management interventions of using solid waste as a resource may be a solution for the future due to technological and investment cost challenges, the Municipality has a balanced opportunity of proper solid waste management. The solutions lay in handling the issue at a four tier level, i.e. individual, household, sub-county, and urban and district authority level. At the household level, littering should be prohibited by developing and implementing ordinances and cultural norms. This could be done through conducting sensitization programs especially in schools, at markets and worship places. Moreover, at the household level garbage sorting should be emphasized while, reuse or recycling should be promoted at community level. As a practice, waste sorting, storage, collection and disposal should be a responsibility of household heads. Therefore children and housemaids should never be delegated.

According to OAG (2010) it costs about UGX 20,000/= to collect and transport one ton of solid waste within Wakiso district. Factoring in the tonnage of all garbage collected within kira Municipality makes solid waste management by the municipal authorities expensive. To minimize or avoid the costs involved, authorities within the Municipality could privatize garbage collection. The Municipal authorities should however invest in procuring land for landfill establishment. The opportunity for this development is that the land value in some areas within the Municipal is still modest and the population density is low.

Accordingly, ordinances should be enacted and garbage collection should be left to the private sector. Residents within the Municipality could be advised to pay a reasonable fee to access the landfill site. The financial responsibility of the municipal authorities should be to buy land for landfills. A minimum of 10 ha is recommended for this Municipality.

Mass sensitization with emphasis on garbage sorting, re-use, recycling and strengthening of waste collection as a way of conserving the environment for the benefit of the present and future generation

- Privatization of solid waste management
- Constant monitoring of Private Companies to ensure compliance with basic solid waste collection and disposal

In addition, the municipality should exploit and adapt the government and local programs like;

- Under the Plan for Modernization of Agriculture (**PMA**), the Forest Department has a fund for establishing fruit tree demonstration nurseries income generation and improving livelihoods of the people
- Environment and Sustainable Agriculture Project (ESAP) working with Local Communities to raise fast growing trees for fuel wood and fruits in all parishes of Kira.
- Environmental buffers around water bodies, wetlands and forests should be done;
- Incentives and support to private tree planting by use of PMA fund should be enhanced;
- Preparation of lower urban and local physical development plans accompanied by strengthened Development Control and enforcement of compliance to plans;
- Integration of natural forestry in urban and local plans to foster their preservation and restoration;
- Reforestation of natural forests in corroboration with NFA and planting of indigenous trees should be encouraged;
- Restrict incompatible land-uses in marginal areas;
- Public access to the water bodies should be provided for sustainable activities. However the municipal council and the relevant ministry should enforce the 60 metre buffer on lakes and 20-30 metre on rivers measured from the highest water mark provided in the PDP
- The municipality should prepare urban and local development plans clearly profiling landuse activities around open waters and plan for waterfront facilities for purposes of recreation and tourism within the provisions of all relevant legal requirements;
- Potentially contaminating land-uses should not be located in areas where the potential for open water contamination is the highest.
- 'Polluter Pays' principle should be adopted at all local levels and implemented to curb pollution of water bodies;
- Help monitor wetland loss/gain, identify priorities for conservation
- Discourage the planting of eucalyptus and invasive species in the wetlands;
- Identify, earmark and demarcate environmentally sensitive areas. Rank environmental
 zones into critical and less critical zones. Critical zones should be preserved and less
 critical zones should be used sustainably.
- The municipality should encourage greening of roads and hilltops
- Those found in environmental areas deemed critical should be forcefully removed, and the wetland restored.

3.1.5 Risks

Given the current situation in Uganda, the plan identifies the following risks that may hinder the implementation of the proposed interventions. They include;

- 1 Lack of political will and weak institutional enforcement capacity is a major risk that would lead to Continued uncontrolled clearing/encroachment of the limited remaining natural forest
- 2 High population growth in the municipality is still the underlying cause of deforestation and controlling this may still be a nightmare.
- 3 Scarcity of land

- 4 The corruption scourge which has become endemic in the country could also undermine the achievement of natural resources and environmental restoration in the municipality
- 5 Un cooperative and suspicious populace is also a big risk to achievement of environmental strategies
- 6 Corruption

3.2 Report on Institutional Structure and Governance

The institutional and governance sector situation analysis of the Kira Municipality was mainly established through the carrying out of a document review analysis and document review and analysis was narrowed to the subject matter of physical planning in the context of Kira Municipality. The document review analysis focused on the legally and regulatory established national and local institutions, structures and units that have a responsibility and guide matters related to physical planning within the country at all levels. At the local level the Municipality has in place a draft Five Year Development Plan (2015/16-2019/2020) and the Wakiso District Physical Development Plan of 2017 that has adequate literature and relevant information specific to Kira Municipality. The review of these said two Municipal plans among other accessed available documents greatly informed the basis of the situation analysis report in particular the institutional, governance and leadership analysis and the development or setting of the draft institutional, governance and leadership sector goals, objectives, prevalent weaknesses and challenges, success stories associated to the sector among others as detailed below in the following sections.

3.2.1 Planning Institutional Context:

The Ugandan institutional framework for planning and enforcement of compliance for Physical Development Plans- PDPs is the totality of public and quasi-public agencies involved in conceiving, formulating and implementing physical development plans. The Physical Planning Act-PPA (2010), is the key legislation that defines the key institutions and players in the developing of PDPs and enforcement of development compliance in the country. Other relevant and related acts also provide direction on how broader state and local planning policies will be achieved or implemented.

3.2.2 Institutional Context at National Level

The Physical Planning Act (2010) stipulates the key institutions at the national level to include;

The key Ministries in charge of formulation of policy and physical planning oversight;

- o *Ministry of Lands, Housing and Urban Development- MLHUD;* MLHUD is responsible for providing policy direction, national standards and oversight/coordination of all matters concerning lands, housing and urban development. The Ministry is responsible for putting in place policies and initiating laws to ensure sustainable land management promote sustainable housing for all and foster orderly urban development in the country.
- o The Directorate of Physical Planning and Urban Development- DPP&UD in the MoLHUD; responsible for carrying out National Land-use Plans with contributions from other stakeholders. The structure, powers and responsibilities, are defined in the Act. Any amendments and variations in the Municipality PDPs will not be permitted without approval from the Ministry NPPB.

- o **National Physical Planning Board;** Section 4 6 of the Physical Planning Act establishes and defines the composition and functions of the National Physical Planning Board (NPPB). Section 6(1) a n; defines the functions of the Board in overseeing and coordinating the execution of the physical planning mandate at the national, regional, district, urban and local levels. Kira Municipal PDP was prepared in compliance and following the processes and hierarchy, with the institutions and bodies stipulated in the Physical Planning Act.
- o *Ministry of Local Government- MoLG*; is responsible for providing policy direction and oversight on governance issues and processes for all local governments. It also does ensure compliance of the local governments to the existing legal, policy and regulatory framework inclusive is the legal, policy and regulatory framework that is responsible for physical planning in the country.
- o *Ministry of Public Service*; is responsible for providing policy direction and oversight on institutional and staffing structure requirements for planning, management and enforcement of compliance. And at the local levels, it is supported and represented by the District Service Commission that is tasked with the roles, functions, responsibilities and mandate of Municipal staff recruitment and improvement of the staffing levels based on the approved structures by the Ministry of Public Service.
- O Compliance and enforcement supportive ministries and institutions; such as Ministry of Water and Environment; National Planning Authority, National Environment Management Authority; security agencies; government land sector agencies; Department of Land Use Regulation and Compliance- DLURC in the MLHUD ,Directorate of Water Development (DWD); The Ministry of Health (MoH); Environmental Health Division (EHD) in MoH; Uganda Wildlife Authority (UWA); the Municipal Enforcement Unit at the local levels and more.

3.2.3 Institutional Context at Local Government Level

The Local Government Act defines the urban local governments in a district area. The established local governments in urban setting includes; the City Council; and the City Division councils. The Local Governments Act provides the city as equivalent to a district and charged to exercise all functions and powers conferred upon a District Council within its area of jurisdiction. The Act equates the Division to a Sub-county mandated to exercise all relevant functions and powers conferred upon a sub-county. The local governments at a municipality level include; the Municipal Council and the Municipal Division Councils. At the Town level the local government is the Town Council. Other urban lower administrative units do include the wards provided for in the city, municipality and town councils.

3.2.4 Administrative set-up of Kira municipality as at 2018

The Kira Municipal Council administrative structure is made up of two broad arms i.e. the political and the technical administrative arm. The Municipal Council political arm is headed by His Worship the Mayor assisted by four (4) executive committee members. The Council nominates a Speaker, a Deputy Speaker and 2 sectoral committees. The Council is the highest policy making body in a Municipality and is chaired by the Speaker. Under the Political arm, the Municipal Council is served by 18 elected Municipal councillors serving in the three Divisions. Each of the three Kira Municipal Council Divisions namely of Kira, Bweyogerere and Namugongo has 2 directly elected male councillors and 2 female councillors.

The youth, elderly and Persons with Disabilities- PWDs are each represented by a female and male councillor, it is constituted into two committees. The Municipal Council is also supported by the statutory boards, Lower urban Local Government Councils, working committees and development partners as detailed above under the section on the established Municipal institutional arrangements.

The Kira Municipal Council Technical wing is headed by the Town Clerk, the Town Clerk is technically assisted by nine departments and two units including: Management Support Services, Finance, Council and Statutory Boards, Production and Marketing, Health and Sanitation, Education and Sports, Work and Technical Services, Natural Resources, Community Based services, Planning Unit and Internal Audit Unit. Most of the Municipal staff also doubles as Division staff since most of the positions at both Municipal and Division level have not yet been filled. In addition to the above, a number of Health Workers and teachers support in delivering services to Kira Municipal Community. The table below shows the human resource capacity for implementing the programs in the Municipality.

As regard to the existing lower urban local governments in Kira Municipality, the Municipality is composed of three Divisions as named above earlier; each Division is led by the Chairperson LC III who is assisted by an Executive Committee of four members and 2 committees. Each of the three Divisions of Kira, Bweyogerere and Namugongo has 13, 14 and 15 councillors respectively. Each Division has two Wards led by chairpersons and their executive committees. There are 40 zones led by chairpersons and their executive committees in the entire Municipality of Kira.

3.2.5 Kira Municipality Governance System and Democracy

The system of Local Government in Uganda is based on a decentralized governance system where at the local level, the district as unit is the highest next to the centre and under is lower Local Governments and Administrative Units. These are clearly spelt out in Section 3 and 45 of the Local Governments Act, CAP 243. The Local Governments in a rural setting are the District Council and the Sub-County Council; while as the Local Governments in a Municipality are the Municipal Council and the Municipal Division Councils, and the Local Government in a Town is a Town Council. Every Local Government Council at the highlighted levels is a body corporate, with perpetual succession and a common seal, and may sue or be sued in its corporate name and may subject to the provision of the Constitution enjoy or suffer anything that may be done, enjoyed or suffered by a body corporate (Sec. 6. LGA).

The setup of the local government system at various levels in the Kira Municipality was filled up and was found to be functional most especially the political wing. There exist functional Chairpersons and Executives at all the levels of urban local governments, and they are effectively making policies, plans, budgets and monitoring implementation of programmes in the entire Municipality. It was noted however that some Municipal Council both at the Municipal Headquarters and Municipal division's council they were sharing the technical staff which resulted into ineffectiveness of the technical team and delivery of poor quality service delivery. Technical staff were being shared and doubling at all levels service mainly due to the low staffing structure and levels despite not to being well facilitated and equipped with the necessary working and operational tools, equipment, facilities and materials to perform their functions, the local government leaders were found to be holding regular meetings, and providing good leadership and guidance to the technical staff.

3.2.6 Structure of the District Natural Resources Department and the Municipal Works and Construction Department

Physical Planning according to the Ministry of Public Service District Structure is a domain of the Natural Resources Department at the District level while at in the Urban local governments its entrusted with the Department of Works and Construction as a section under the Department. The current structure and staffing relating to physical planning at the District indicated serious challenges. At the Municipal level, the staffing requirements are enshrined in the structure stipulated by the Ministry of Public Service Job Descriptions and Specifications for Jobs in Local Governments. The required staff in the newly created urban local governments or Municipality in particular Kira Municipality was found to be lacking and insufficient for a Municipal status. However, the existing structure at the Municipal level is responsible for services and requirements in line with the physical planning and land management mandates. The rate of urbanization in the Municipality has been increasing and is considered high yet the staffing structure and levels has remained fixed and still low compared to what is provided. The Municipal Physical Planning section in Kira Municipality just like in any other municipalities, the section or unit has found it increasingly difficult to meet the demand for planning for physical development and Management of the process and services because of the above described scenario of having inadequate staff charged with physical planning mainly due to the fixed structure.

3.2.7 Structure and Responsibilities of the Physical Planning Section

In Kira Municipality, the physical planning section was manned by one Physical Planner housed at the Municipal Council headquarters. The Kira Municipality physical planning section/ unit was being manned by a physical planner only which was found to be lacking in terms of the required human resource to guide and oversee physical planning and orderly urban development in the entire Municipality. Thus making the staffing requirements within the Municipality for supporting physical planning, land use development inspection and enforcement of development compliance within the Municipality gravely lacking and insufficient. This is evidenced with the rampant illegal developments, slum formation and urban sprawl developments characteristic of the Municipality. The main physical Planning, management and enforcement of compliance requirements in Kira Municipality will entail both the core activities and business processes including the following;

- ✓ Prepare of Municipal and local PDPs, detailed plans and action plans in conformity with the Wakiso district PDP and Regional Physical Development Plan of the Greater Kampala Metropolitan Area- GKMA where it's in existence.
- \checkmark Supervise, guide development and enforce compliance activities to ensure, compliance to the provisions of the PDP, development permissions and given conditions and terms and o b s e r v a n c e of as well as adherence to the planning standards and guidelines among others.
- ✓ Facilitate and support the process of land surveying within the Municipality.
- ✓ Process and approve planning of land surveys.
- \checkmark Support the development of a modern urban land regularization, development and management.
- ✓ Custodian, maintain and updating of topographic and cadaster maps specific to the Municipality.

✓ Monitoring and evaluation of the level of land use compliance to the existing Municipal and local PDPs and other existing land use policy regulatory frameworks.

However the extent and significance of these issues, coupled with the range of challenges identified in the councils themselves, suggests that a multi-pronged system-wide approach was needed to raise the overall standard of statutory planning and compliance in council. This approach should be coordinated by the Department of Physical Planning and Urban Development in the MoLHUD in partnership with other key government ministries, institutions, with the District and urban local governments. The aims of this approach are to have in place the following:

- Councils with the relevant staffing structure and staff of the right caliber with the minimum standards of knowledge, skills and the competencies required to effectively manage and administer the physical planning process, the implementation of the local detailed planning schemes and achieve compliance with all legislative requirements
- ✓ Minimum state-wide standards to be met by all councils for the assessment of planning permit applications and PDP and detailed planning scheme amendments
- Rigorous quality assurance procedures within planning departments to ensure that the requirements of the planning scheme and the Act have been met and that senior officers responsible for overseeing key decisions have the requisite capabilities for effectively carrying out their quality assurance role
- ✓ Reporting arrangements to provide assurance to council, the local community and the Minister for Planning that each council has administered its planning responsibilities in accordance the Act, Regulations and the district PDP in place
- Required government support to planning institutions, urban and local authorities to ensure requirements for delivering on their physical planning mandates, orderly management and compliance to approved PDPs

The above approach was focused on putting in place some immediate strategies in response to the challenges identified in the Municipal Council;

- Skilling with minimum standards of knowledge and the competencies through training and accreditation to address the knowledge gaps of council officers and the compliance processes
- ✓ Basics training on the minimum standards required by council planning officers to adequately discharge their duties.
- ✓ Training in effective management and quality assurance through equipping staff with the minimum knowledge, skills and capabilities required to effectively discharge their quality assurance responsibilities.
- Make the State Legal and Planning Policy Framework clearer about how it should be implemented by Amending the Acts and Regulations
- Quality assurance procedures.
- Compliance assessment to track council' management of the physical planning and urban development functions.
- Advocacy and lobbying Government support on implementation of approved plans

3.2.8 Kira Municipal Council Human Resource

Human resources are considered an important aspect of any urban local government. They are critical in ensuring that the vision, mission, development goals, objectives of the local government are achieved through policy implementation. Decentralization introduced the separate personnel system for the management of staff of the Local Governments. The aim of the separate personnel system is to ensure that the staffs of the respective Local Governments are accountable to their Councils through the respective the Municipal Town Clerks for the provision of the functions and services for which they are mandated to provide.

The Urban/ Municipal Council was the employer of staff under its jurisdiction. A Council decides its mission in accordance with general legal requirements and human resources management policies required to fulfill the mission. These policies include; organization structures, establishments/numbers and grades of staff, recruitment plans, job descriptions, pay and allowances, staff training and development and all other staffing management policies and procedures. The Council should however liaise with the Ministry of Public Service in determining the above. The Ministry of Public Service in collaboration with the Ministry of Local Government have come out with approved district and Municipal staffing structure which was discussed and approved by the respective local council. The new human structure which took effect from July 2017 is very lean and provides for reduced number of staff across all the departments. The Municipal local government is supposed to follow and implement the structure according to their budget.

The implementation of the Kira Municipality long-term PDP requires and needs qualified, adequate and competent staff at all levels and departments of the urban local government, but specifically the department of Engineering, who are the ones to provide the required technical support and guidance for the physical development of the local government at the Municipal. The administrative cadres of staff are also very important at the Municipal Council levels to enforce the Physical development plan and also ensure adherence to the laws and regulations regarding physical development and orderly urban development once the plan has been approved.

During the consultations with the Municipality, the staffing levels at the Municipal Headquarters and the Municipal divisions were found to be inadequate as some of the vacancies were yet to be filled and the technical staffs at the Municipal headquarters were found to be doubling duty at the Municipal divisions. In 2015 at the Kira Municipal Council headquarter out of the required 102 technical staff according to the Municipal approved staff structure only 37 technical staff were recruited representing 36%. And at the Municipal Division level out of the required 48 staff only 6 were recruited representing 13%. However, on the Municipal staff technical staff list there was another category of 9 staff which was categorised as other staff who were regularised under Kira Municipal Council but their positions are not in the Municipal Staff Structure and some staff at the Municipal headquarters also double as Division staff which has greatly affected service delivery in the Municipal Council. Generally, Kira Municipal Council structure and staffing levels at the Municipal Headquarters is only at 40% with a staffing gap of about 60% and at the Division level the recruited technical staff is only at 15% with a gap of about 85%.

The Technical staff both at the Municipal Headquarters and division levels were however, found to be lacking most of the required working and operational tools, equipment and facilities to enable them effectively perform their duties. There was of lack of motivation to the staff

arising from the effects of low pay and lack of duty facilitating allowances.

The office of the Town Clerk (TC) as provided for under Section 65 of the Local Governments Act, CAP 243 performs similar functions to those of CAO in handling the human resource functions for the urban council in particular the Municipality. Those functions that relate to Human Resources Management, as embedded in the provisions of the law cited above, are as follows:-

- Oversee the performance of persons employed by the Government to provide services in the Municipality and monitor the implementation of projects and programs in the Municipality.
- Nominate from Council Members, Secretaries for the various committees of the Municipality for approval by the Council.
- Assign responsibilities to the Secretaries of the various committees of the Council.

3.2.9 Institutional Infrastructure, Tools and Equipment

Institutional infrastructure here refers to the physical facilities used to deliver services such as office premises, tools and equipment for the staff to effectively deliver services. The officials charge with duties and responsibilities require adequate and secure office space to perform their functions, they also need tools and equipment such as means of transport, furniture, computers, to mention but a few. The consultant, therefore conducted a survey of the available infrastructure, tools and equipment that the Municipality headquarters and at the Municipal division level have lacked the adequate facilities in terms of tools, equipment and office that could support them in effective service delivery within the Municipality.

It was found that Kira Municipality lacks institutional buildings for office space and that the Municipal Council was hiring premises for office space. The Municipal Council both at the headquarters and the division level they were found to experience a total lack of important equipment and tools suchlike computers, office furniture, cabinets and transport means among others. There is a dire need within the Municipality for important tools, equipment and office space which were noted at the Municipal headquarters and divisions levels and were found to have seriously affected service delivery due.

The Engineering and Physical Planning offices at the Municipal Headquarters was found to be lacking computers, GPS, furniture and filing cabinets to store and keep important documents. Lack of mean of transport was also reported for the following staff: Physical Planners, Environmentalist and some staff in the Engineering department. Availability of tools and equipment is very important for efficient service delivery as physical planning is a special sector which requires some specialized tools, equipment, computers and software together with ample transport means for it to function effectively. It is therefore important for the management of the Municipality to plan and procure the necessary tools and equipment, sufficient office premises plus means of transport to facilitate the implementation of the Kira Municipality long-term PDP. The following are a must have in all physical planning offices: Desk top and Laptop Computers, GPS, Software, Motorcycles, Motor vehicles and Protective wares, to mention but a few.

3.2.10 Capacity of Staff and Elected Civic Leaders

Under the political arm and structure, the Municipal Council is fully established having all the required electoral positions and political leaders as well as representation of all the special

interest groups positions filled up, ideal and appropriate as provided for legally. The political arm of the Municipal Council is fully constituted and well-known, consequently, the elected civic leaders do hold the capacities and capabilities required according to their given mandates to guide and direct service delivery efforts and interventions in Kira Municipal Council. However, urbanization being a new phenomenon, there is still a huge gap affecting the political arm that relates to their failure to appreciate orderly urban development and the need to train as well as build capacities of the elected civic leaders in matters specific to urbanization and urban development and management among others in the country with an aim of making the elected civic leaders appreciate the need for orderly and sustainable development.

On the other hand, Kira Municipal Council technical administrative in particular and well as generally, the structure and staffing levels at the Municipal Headquarters is only at 40% with a structure and staffing gap of about 60% and at the Division level the recruited staff is only at 15% with a gap of about 85%. Consequently, the prevalent Municipal Council technical/administrative structure and staffing glaring gaps of Kira Municipal council does affect the capacity and capabilities of the appointed technical staff in the delivery of public services, who also tend to be overwhelmed and worked out as they double in service delivery at the Division level. Due to the huge structure and staffing gaps that are existent at the Municipal Council Headquarters and divisions level greatly affect service delivery as well as the smooth operations and performance of Kira Municipal Council.

There is urgent need, for the management of Kira Municipality to improve the technical and administrative capacities through the prioritization of recruitment of the appointed staff t as provided for in the Municipal staffing structure to fill-up the gaps that are existent both at the Municipal Council Headquarters and Division levels with an aim of improving service delivery above all to support the successful implementation of the long-term Municipal Physical Development Plan- PDP.

3.2.11 Ordinance and By-Laws

The Local Government Act Cap 243 gives powers to local governments to make By-Laws and Ordinances to address some local governance and administration challenges. These challenges are related to land use, orderly development, sanitation, utilities services and trade order in the community. Kira Municipality has numerous ordinances and bylaws that focus on varied subject matters and they are the basis that guides the Municipal Council Operations across all the Municipal sectors. In addition to the existing and developed ordinances and bylaws, the Municipality in efforts to delivery efficient and quality service delivery to the citizens tends to customize as well as localize the provisions of most of the existing national policy, legal and regulatory frameworks. The Municipality's development expenditure plans are also developed and implemented in close consultations and alignment to the National Development Plan.

In Kira Municipality, there was no By-Laws in place to support physical planning, enforce compliance to the long- term PDP or to address the challenges of physical development that are encountered and prevalent within the Municipality. Kira Municipality just- like any other municipalities are using existing planning laws to manage physical development in their areas of jurisdictions, which laws sometimes are misinterpreted.

There is need for central government and local governments to support each other in the process of developing and enforcing these regulations. Short of that urban challenges will continue to escalate in our communities as it is the case today.

3.2.12 Institutional, Governance and Leadership Sector Key Challenges and Gaps for Kira Municipality

Kira Municipality according to the key findings of the institutional, governance and leadership sector, a number of prevalent challenges, weaknesses and sector gaps were as reflected in the details provided in the sections below:

Whereas the Municipal Council through the various consultations held with the communities, Municipal- wide stakeholders and the elected community political representatives portrayed and indicated the readiness to develop and implement the long- term PDP, the followings are some of the challenges, weaknesses and gaps that were established in the various sub-sections of the entire Municipality following the analysis of its prevalent situation that need and require effective redress:

The governance and leadership challenges:

- *Politicking*: there was politics in every programme that come to the local governments; in some cases, it poses the dangers of derailing the objectives of the programes and in some instances results into resistances and delayed execution of the plan.
- **Poor working relationship and Political disagreements:** among leaders of various political shades, and between the political and the technical wing leading to disagreement on various issues on ongoing and new Municipality programmes.
- *Poor coordination and cooperation arrangements* with the central government agencies regarding matters and development agenda of the Municipality.
- Loss of trust and confidence in the urban local authorities by the citizens and its populaces due to the poor service delivery.
- *Limited stakeholders' sensitization programs* on planning and development matters within the Municipality.
- Lack of and limited information access by the communities regarding planning and development matters within the Municipality.
- *Political interference* even from higher authorities/ orders above that do frustrate locally driven development initiatives and programs.
- *Delayed and prolonged implementation of government programs* and projects due to lengthy clearance from central government offices e.g. (NEMA).
- *Increasing Corruption* and abuse of public resources.
- Orders from above restricting and obstructing development in the Municipality.

Human resources and Municipal Staffing challenges:

- Limited and inadequate Municipal staffing levels.
- Limited staff leading to non-implementation of existing Municipal development plans and programs.
- Poor working environment and conditions in Local Governments; the district is characterized by poor road networks, absence of social amenities such as electricity and water in some areas which makes it difficult to attract staff, some lower local governments do not have adequate facilities and equipment.
- Political interference by Councils in management of staff matters; in the management of human resource functions, non-meritocratic recruitment process of staff, interference and poor handling of disciplinary cases by some Local Governments was also noted.

- Lack of opportunity for exposure; the separate personnel system that denies the staff opportunity for cross fertilization of ideas as they cannot easily be transferred, as was the case before decentralization.
- Constricted and inadequate Local Government Structures; the flat hierarchy characteristic of many local government structures affects career progression of staff thus de-motivating them. Inability to meet Human Resource Costs; structures are not fully funded and most Local Governments have wage bill structures deficits. They also find it very difficult to meet other costs associated with employees
- Training and Capacity Building Initiatives; staff in Local Governments, when given opportunity for training do not return to their Local Governments and find jobs elsewhere. Also capacity building efforts in Local Governments have been abused in that when staff develops their fullest capacities, they quit the Local Governments for "Greener pastures".

Institutional Infrastructure, Tools and Equipment Challenges:

- Lack of Office buildings/ structures: for office accommodation the Municipality currently rents its premises.
- Lack of important equipment and tools in most of the Municipal offices: tools suchlike computers, office furniture, cabinets and transport means. Common tools and equipment that are conspicuously lacking include computers and printers, motor vehicles and motorcycles, fuel, physical planning tools like drawing tables and pens and materials, office furniture and fittings, tools and equipment required in the Works department amongst others.
- The Municipal Engineering and Physical Planning offices at the Municipal Headquarters and the division offices; were found to be lacking computers, GPS, furniture and filing cabinets to store and keep important documents.
- *Inadequate working and operational tools*, equipment, office space and transportation means.

CAPACITY OF STAFF AND ELECTED CIVIC LEADERS CHALLENGES:

- **Political leaders don't appreciate orderly and sustainable development:** There is still a huge gap affecting the political arm that relates to their failure to appreciate orderly urban development and the need to train as well as build capacities of the elected civic leaders in matters specific to urbanization and urban development and management among others.
- **Very low and inadequate staffing levels:** Kira Municipal Council technical administrative in particular and well as generally, the structure and staffing levels at the Municipal Headquarters is only at 40% with a structure and staffing gap of about 60% and at the Division level the recruited staff is only at 15% with a gap of about 85%.
- High Prevalent Municipal Council technical/ administrative structure and staffing glaring gaps of Kira Municipal council: which does affect the capacity and capabilities of the appointed technical staff in the delivery of public services, who also tend to be overwhelmed and worked out as they double in service delivery at the Division level.
- *Inadequate and limited technical* and administrative capacities to effectively delivery on the given mandate.
- Low staffing levels both at the Municipal Council Headquarters and divisions.
- Existence of a huge workload due to under staffing both at the Municipal Council headquarters and division administrative bodies: thus leading to compromised work quality and ineffectiveness in service delivery.

- Weak Enforcement of the existing legal, policy and regulatory frameworks: where they have been enforced some have been misunderstood. Enforcement was found to be weak mainly due to the lack of sufficient enforcement officers and limited comprehension of the existing physical planning laws among others in particular.
- -Lack/ limited Sensitization about physical planning to the citizens/ populaces within the Municipality.
- *Uncoordinated plans/ planning processes* between Kira and central government (NEMA) among others.
- Negative Political interference i.e. Kasokoso incident.
- *Limited and insufficient government transfers* compared to population and status of the municipality.
- **Ignorance** of the law by the population and political leaders within the Municipality.
- *Ignorance of the policies, laws and guidelines* relating to development control and permissions.

Municipal Ordinance and By-Laws related Challenges:

- Absence of bylaws: within the Municipality targeting supporting the function of physical planning and enforcing compliance to land use regulatory frameworks and orderly urban development.
- Numerous illegal and unplanned developments due to the absence of restrictive bylaws: prohibiting developers from establishing illegal developments without seeking approvals of such developments from the Municipality.
- Lack of appreciation and resistance of physical planning and related standards: thus a ground to put the appropriate bylaws in place to enable the urban citizens to appreciate physical planning.
- Misinterpretation of existing physical planning and land use laws: Due to limited capacities available amongst the Municipal technical staff sometimes there has been misinterpretation of the existing legal and policy provisions that are specific to physical planning and land use regulation.
- Weak enforcement of compliance to Physical Planning laws and Standards among others.

3.2.13 Revenue Performance

Kira Municipal revenue is composed of local revenue collected from the municipality but also central government grants as indicated in table 3.1. The local revenue sources include; business license, plans fees, hotel tax, Local service tax, leasing and renting stalls and Advertising Bill Boards. The three main local revenue sources are business licenses, Property Rates and Property related collections which include collections from building plans. These three have been the main sources of local revenue consistently for the last five years. Business license grew from UGX. 455 million in 2013/14 to more than doubling to UGX. 1billion in 2017/18. On the other hand, Property Rates grew by more than five times from UGX 540 million in 2013/14 to UGX. 2.9 billion in 2017/18. Meanwhile Property related dues almost doubled from UGX. 540 million to 950 million in the same period of time. These three local revenue sources form the bigger fraction of the local revenue. The three formed about 60% of the local revenue in 2013/14, 70% in 2015/16 and almost 90% of the local revenue in 2017/18 revealing a consistent growth of their contribution to local revenue.

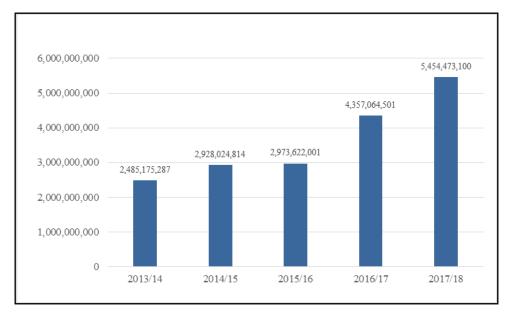
Table 3.1: Revenue Performance for the Years 2013/14 to 2017/18

Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18
Local Service Tax	380,604,500	385,930,177	458,649,440	507,783	528,000
Local Hotel Tax	30,604,500	52,551,000	47,108,480	87,000	95,000,000
Taxes on goods & services					
Business Licenses	455,023,000	555,401,000	789,000,000	811,757,000	1,050,000,000
Property Rates	540,000,000	703,340,050	893,474,574	2,569,000,000	2,900,000,000
Leasing stalls/Renting stalls	59,917,500	73,994,000	59,972,950	87,950,000	89,500,000
Hire of Plants	1,398,305	847,458	4,431,227	-	-
Park fees	262,161,514	321,437,339	143,885,354	185,308	132,000,000
passport fees/migration permit	540,000	910,000	621,338	2,000,000	4,000,000
public convenience	100,000	110,000			
Property related dues/building plans	540,000,000	607,368,801	407,878,297	670,000,000	950,000,000
advertisement/billboards	53,748,719	58,234,644	29,544,558	58,000,000	101,000,000
Animal crop related levis	1,057,627	1,016,949	677,966	1,521,000	4,025,000
Registration of business KDF	37,837,000	35,693,000	18,774,947	53,000,000	61,000,000
market fees	38,729,000	50,972,859	28,713,916	56,410	20,100
Certificates of medical fitness			12,000,000	18,750,000	37,000,000
Occupation permits	82,836,377	75,935,333	53,424,342	80,500,000	25,000,000
Miscelleneous Receipts/income	617,245	4,282,204	25,464,612	3,750,000	5,400,000
Total Local Revenue	2,485,175,287	2,928,024,814	2,973,622,001	4,357,064,501	5,454,473,100
LG Unconditional Grants-Current	668,063,123	729,669,249	983,951,852	850,916	765,291,000
Conditonal Grants	886,843,366	1,118,354,626	1,084,584,043	2,279,969,000	2,575,475,000
Development grant	209,256,149	208,433,249	179,542,129	1,332,856,000	1,038,372,000
NAADS	105,886,721				
Wage for staff				2,977,000,000	3,721,010,000
Transitional Devt grant				200,000,000	
	1,870,049,359	2,056,457,124	2,248,078,024	6,790,675,916	8,100,148,000
Grand Totals	4,355,224,646	4,984,481,938	5,221,700,025	10,336,795,174	13,554,621,100

Source: Kira Finance Dept.

Kira Municipality's total local revenue grew progressively from about 2.49bn in 2013/14 to about 5.45bn in 2017/18, a growth of about 120% in five years (figure 3.4). This could be attributed to growth of business in the municipality, but also more vigilance in revenue mobilization and collection. Kira municipal budget was UGX. 4.36 in 2013/14, but this has rapidly grown to UGX. 13.55bn in 2017/18(table 1). However, while both local revenue and total budget have grown in the period of five years from 2013/14 to 2017/18, the contribution of local revenue to total revenue budget has reduced. The contribution by local revenue was 57% in 2013/14, 59% in 2014/15, 57% in 2014/15, 42% in 2015/16 and 40% in 2016/17. This implies less capacity of the municipality to sponsor her budget which situation is not desirable. Despite the growth in local revenue and grants over the five year period, the income of the municipality is still low compared to the demand of infrastructure and services.

Figure 3.4: Total Local Revenue from 2013/14 to 2017/18



Kira municipality spent about 1.2bn in expenditure capital 2013/14(table 3.2), a figure which has grown to 2.57bn in 2017/18. Kira has been spending average of 25% of her budget on capital developments, which is commendable. However, this is far much below the demand for

infrastructure.

Table 3.2: Performance of the Revenue Budget, Capital Expenditure and Percentage of Capital Expenditure to Budget 2013/14 to 2017/18

	2013/14	2014/15	2015/16	2016/17	2017/18
Capital Expenditure	1,195,000,000	1,250,000,000	1,400,000,000	2,765,000,000	2,570,000,000
Total Budget	4,355,224,646	4,984,481,938	5,221,700,025	10,336,795,174	13,554,621,100
Percentage of Capital Expenditure to Budget	27	25	27	27	19

Source: Kira Finance Dept.

Among the challenges to Revenue mobilization and collection are:

- Inadequate revenue to finance physical and social services to create impact in the society as a result, tax apathy increases, which eventually increases collection costs.
- Inadequate manpower to collect revenue, This is due to limited wage bill
- Some revenue laws are outdated and others are not strong enough to enforce payment.
- Political pronouncement especially during Presidential and Parliament elections and other forms of political interferences.
- Inadequate budget provision to finance revenue enhancement activities and processes.

The public sector requires an appropriate, dynamic tax base and a functional, efficient collection system that the physical planning interventions can provide. On the other hand, the private sector requires appropriate, accessible, affordable financing for developers, and investors which need to be enabled by the government.

There is need for adequate resource allocation and support by the government to the municipality (given its growth rate infrastructure and services required) to finance and/or participate in the financing of the relevant infrastructure and service facilities in Kira Municipality, given its contribution in the GKMA.

3.2.13 Development Objective

To strengthen and develop the institutional mechanisms and structures to support Kira Municipality deliver efficient and quality services to its populaces.

3.2.14 Proposed strategies/ recommendations/ proposals for improving and strengthening the institutional, governance, leadership and human capital of Kira municipality

The followings are strategies recommended for improvement in the governance and human resource of the district in order to improve on service delivery:

- Capacity building, development and skills enhancement: for both the political and technical wing for effective service delivery and the general public to spur Municipal economic development.
- Put in place a strong institutional and legal (develop the necessary bylaws): arrangement and governance mechanisms for effective service delivery within and beyond the Municipality.
- Strengthen the existing institutional set ups, structures and units: to deliver efficient and quality infrastructural services and utilities to the citizens within the Municipality.
- Building a good working relationship and work –on increasing trust and confidence: of the key actors within the Municipality governing authorities for the attainment of improved engagements and meaningful involvement with the public and the Municipal citizens;
- Strongly support and strengthen all joint institutional and governance collaborative efforts: aimed at or working towards the effective management of the future urban growth of the Municipality under the Greater Kampala Metropolitan Area- GKMA.
- Capacity Building for Leaders: In particular on their roles and responsibilities so as to reduce conflicts between the technical staff and the people have elected representatives i.e. the political leaders who are the decision and policy makers.
- **Promote transparency and proper accountability** through sharing of information, respect for one another and encouragement of participation and inclusive governance to improve on feedback, consultation and teamwork.
- Enact the necessary and required by-laws to guide community, development and to address challenges pertinent to respective Kira Municipality long term PDPs among others.
- Solicitation and securing of Support from the relevant Central governments: in the area of development and approval of the local governments prepared ordinances and bylaws aimed at addressing the various planning and development challenges encountered at the Municipality level.
- Build, Nurture, cultivate and sustain a good and positive working: and coordination arrangements between the politicians and the technical officers within the Municipality for an enhanced service provision to the citizens.
- *Plan and procure all the required Municipal facilities, tools and equipment:* Municipal Council and divisions to function well and deliver services effectively it must have the required tools, equipment and transport means.
- *Adequate facilitation* to political leaders to monitor capacity building for both technical and political staff and increased sensitization of the community.
- *Proper demarcation* of administrative boundaries of newly created Municipality to reduce conflict and improve on administration and revenue collection for the Municipality.
- Fill vacant positions both at the Municipal headquarters and divisions levels. The approved staffing positions should be filled so that the Municipality operates at its full capacity both at the headquarters and most the division level.
- Training and capacity building for the technical staff. Long and short courses should be

organized to build capacity of staff in varying needs. There should be a comprehensive capacity building plan for the Municipality covering a long period, say, five years and it should give all the technical staff an opportunity to undertake relevant refresher courses aimed at improving service delivery at individual officers level.

- **Promotion of good urban governance and management:** through the adoption of the principles of good urban governance.
- Formation and Roll-Out of Municipal Development Forums in Kira Municipality: as a good practice stipulated in the National Urban Policy and is critical in bridging the gap between the citizens and the authorities and in the enhancement of citizen's engagement and involvement in matters of Municipal planning, development and management.
- *Improve and strengthen enforcement of the PDP* and land use compliance and regulatory frameworks (laws, policies and guidelines) within the Municipality.
- Design and implement special tailored capacity, Skilling and skills development programs for both the technical and political wings of the Municipality aimed at enhancing service delivery within the Municipality.
- **Promote meaningful stakeholders' engagement and involvement** in matters of PDP planning and implementation among other Municipal on-going development projects and programs.
- Supervision and monitoring of the technical staff: Performance management should be intensified to enable staff realize their set targets.
- Regular staff appraisal and promotion. This will motivate staff and lead to performance improvement.
- Agitate for full decentralization of salary and pension payment to reduce on the bureaucracy and inefficacies now being experienced.
- *Prioritize staff welfare, and motivation*. Local government should come out with schemes to promote staff welfare and motivation so as to attract and retain staff.

3.2.15 Proposals for Revenue Enhancement

- The municipality will require putting in place a revenue mobilization and collection unitwhich will among others thoroughly and exhaustively study the revenue portfolio and make concrete recommendations on improving systems local revenue mobilisation and collection, so as to boost the revenue position of the municipality. This unit will also provide tax education to the public in the Business engagement centre as proposed in the local Economic Development section.
- The Municipal administration will work GKMA authorities and other stakeholders to create and strengthen an office for Public Private Partnerships. This is in view of the fact that the municipality will not be able to provide all the infrastructures and services as it is in many of the local governments. This office will be charged with identifying services where the municipality will work with other partners to provide services and infrastructure (this will include projects which can be implemented in partnership with other GKMA local governments).
- For example, markets are one infrastructure where the local government can work in partnership with land owners and investors to provide the market infrastructure on agreement on how revenue can be shared. On the other hand trainings and creation awareness on different aspects of economic and social development can be sponsored by

the civil society organizations and the private sector in partnership with the sub county. Creating PPP can go a long way in ensuring service provision to the population.

• One source of revenue for municipal councils is through dues from own property. This means that in time Kira Municipality will have to acquire land in the municipality especially in the commercial centres which the municipality can lease or develop to get income. This plan proposes development of commercial blocks to reduce on fragmented development. The municipality can buy land and develop such land in partnerships, rent and dues from these will boost the local revenue for the municipality.

3.2.16 Identified risks that may hinder implementation of the recommended strategies and recommendations.

- i. *Limited technical human resource and existence of an inadequate and insufficient* Municipal Council Staffing structure and levels where officers are doubling both at the Municipality headquarters and division levels that makes them overworked, ineffective and delivery poor quality work;
- ii. Absence and lack of working and operational facilities, tools and equipment that hampers and deters effectiveness and efficiency in staff performance;
- iii. A weak Municipal enforcement and compliance unit due to low staffing levels which resultantly affects development control and compliance to the existing PDPs and land use regulatory compliance frameworks;
- iv. *Poor involvement and engagement of the Municipal Physical Planning Committee* in matters relating to development control and approvals by the Municipality management;
- v. *Ignorant as well as inadequate capacities* and comprehension and appreciation of politically elected leaders in matters of physical planning, development control, land use regulation and compliance and may wish to lobby and advocate for their own political development interests on the expense of the existing and approved PDP and any other land use plans.
- vi. *Poor Municipal Governance and management* i.e. governance that does not adhere and comply to the principles of good governance.
- vii. Absence of the relevant ordinances and by-laws that would support the enforcement of compliance to the provisions of the long-term PDP and any other existing land use regulatory frameworks that the Municipality should be implementing and adhering too.
- viii. **Poor coordination and working relationships** amongst the politicians and the technocrats which is detrimental to the Municipal performance and the delivery of services to the communities.
- ix. *Land tenure systems and highly required compensation rates* for land acquired for public use. Most of the Land in the Municipality is privately owned meaning that implementing of public facilities and utilities would be confronted with the challenge of having no land for development or high rates of land compensation where land is made available.
- x. *Existence of a Municipal Weak Enforcement* Unit due to the lack of enforcement officers, enforcement tools, facilities and limited capacity to comprehend physical planning matters and concerns among others.
- xi. *Inadequate Municipal funding and resources* for service delivery, the small and low resource envelope for the Municipality could hinder the successful implementation of the PDP provisions as far as service delivery is concerned.
- xii. Lack of or poor citizens engagement and involvement in matters of Municipal development coupled with a lack of trust and confidence in the authorities and a poor working relationships between the planning and governing authority of the Municipality

and the citizens could be disastrous to the successful implementation of the PDP and other Municipal development interventions.

3.3. Report on Human and Socio-economic Development

This report highlights the key focus areas relevant to physical development planning of Kira Municipality with a multiplier effect that will bring about transformation of the Municipality. It specifically examines the socio- economic status of the municipality, vis demographic trends, urbanisation, household livelihood, social services, gender and vulnerability. It further outlines sector objectives relevant to the physical planning and development aspects and the attendant strategies to achieve the set objectives. The strategies take cognisance of previous programs and studies in the region such as Vision 2040, The Second National Development Plan, the GKMA Economic Strategy, The National and Wakiso District PDPs. There was also linkage with broader development issues such as poverty reduction, health, education, housing, agriculture, environment, urbanization, gender concerns, labour and employment- all of which impact on the quality of life and by inference improve of the quality of the municipality's population.

3.3.1 Population Distribution, Structure, Trends and Densities

The population of any locality is the most important asset of that area and the overall objective of the National Population Policy (2008) is to improve the quality of life of the people of Uganda. The situation analysis of Kira Municipality presented several constraints which have serious implications on the quality of the municipality's population. These include:

The ever increasing population size due to high annual population growth rate (10.44% in 2014), so there is need to contain population explosion.

Shift in Spatial distribution of the municipal population, thus the need for provision of social service responsive to this shift.

Increasing
population density
which has not
been properly
planned for has
strained the
existing
infrastructure and
resulted into
development of
slums / informal
settlements.

Kira Municipality has entered a "demographic window of opportunity," which, if not well planned for can end up being a demographic burden. Unique population structure that requires meticulous physical planning for age and sex specific social services.

Uganda has one of the youngest and most rapidly growing population in the world; approximately half of the country's population (48.7%) was below 15 years, well above Sub-Saharan average of 43.2% and the world average of 26.8%. Uganda's annual population growth rate of 3.3% (NHPC 2014) is above Africa's average and the highest in East Africa.

Kira Municipality's population has been increasing drastically from 20,452 people in 1969 to 317,157 in 2014 (Table 3.1). The annual population growth rate between 2002 and 2014 was 10.44%, but the highest annual population growth rate that it experienced was between 1991 and 2002 (12.7%) when insurgency was at the highest in the north and north eastern parts of the country. The division with the highest annual population growth rate between 2002 and 2014 was Kira (20%), while Kira Ward registered the highest annual growth rate amongst the wards

54

¹ Demography and Economic Growth in Uganda

(27.5%), followed by Kyaliwajjala (18.5%). At the current annual growth rate of 10.44%, the municipal population is projected to increase to 471,824 in 2018, 2,092,549 in 2033 and this trend suggest that it could double to nearly 4,193,343 by 2040. Slightly above half (53%) of the municipal population in 2014 were female.

Table 3.3: Population Distribution, Increase and Average Annual Growth Rate Wards – 2002 -2014

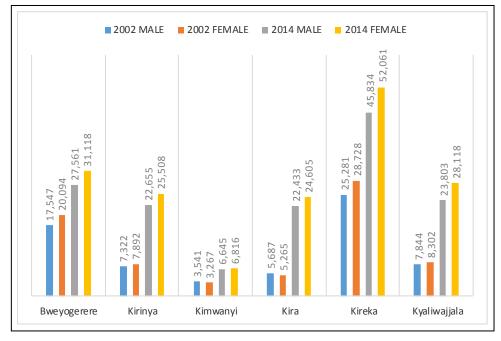
Division/ Ward	Population 2002	Population 2014	Pop. Increase 2002 -2014	Annual Pop. Increase	AnnualPopulation Growth (%)
Bweyogerere Division	52,855	106,842	53,987	4,499	8.5
Bweyogerere Ward	37,641	58,679	21,038	1,753	4.7
Kirinya Ward	15,214	48,163	32,949	2,746	18
Kira Division	17,760	60,499	42,739	3,561	20
Kimwanyi Ward	6,808	13,461	6,653	544	22
Kira Ward	10,952	47,038	36,086	3,007	27.5
Namugongo Division	70,159	149,816	79,657	6,638	9.5
Kireka Ward	54,008	97,895	43,887	3,657	5.2
Kyaliwajjala Ward	16,151	51,921	35,770	2,981	18.5
Kira Municipality	140,774	317,157	176,383	14,699	10.44

The number of households in the municipality increased by 15,298 between the period 2002 and 2014, accounting for an annual increase of 1.54%.

3.3.1.2 Population Distribution

The population of Kira Municipality was unevenly distributed with the two divisions of Namugongo (149,816) and Bweyogerere (106,842) taking the bulk of the municipal population in 2014 (Figure 3.3). Comparing percentage distribution of the municipal population among the three divisions in 2002 and 2014, Namugongo Division had the bulk of the municipality residents (49.8% in 2002 and 47.2% in 2014) followed by Bweyogerere (37.6% in 2002 and 33.7% in 2014).

Figure 3.5: Population Distribution by Sex and Ward – 2002 and 2014



analysis However, of the shift percentage distribution of the municipal population between 2002 and 2014 reveals a shift in settlement pattern and points to the fact that although Namugongo Division still holds close to half of the population of the municipality, was a reduction in

the population proportion for both Namugongo and Bweyogerere Divisions and instead Kira Division was increasingly attracting new settlers. (Figure 3. 5)

NAMUGONGO

KIRA

12.6%

19.1%

37.6%

BWEYOGERERE

0.0%

10.0%

20.0%

30.0%

40.0%

50.0%

Figure 3.6: Percentage Distribution of Population by Division – 2002 and 2014

The municipality provide must conducive environment, especially in those that areas were relatively free for development through provision of serviced land with roads, access electricity, and water and sewage network.

3.3.1.3 Population Density

Owing to high population increase against fixed land, the population density of Kira Municipality has more than doubled from 1,476 (2002) to 3,324 persons per squared kilo meter in 2014 (Map 3.4). Population densities of the respective local governments is indicative of un guided and unregulated densification settlement patterns in the municipality which has strained existing infrastructure and services and intensified development of slums and informal settlements. Divisions of Namugongo and Bweyogerere have extremely high densities and such drastic increase in population density should be followed by corresponding raise in service delivery and infrastructural development.

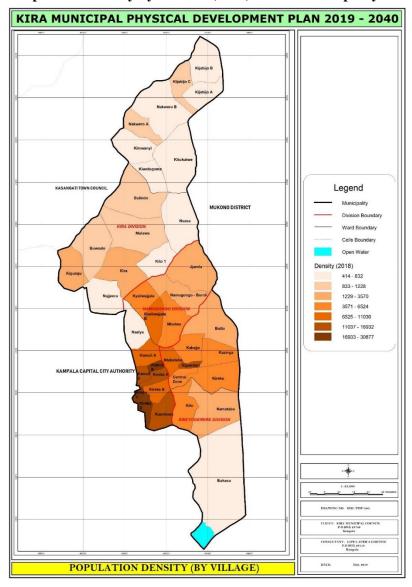
The most important demographic issue for Kira Municipality is related to the age structure rather than the overall size of the municipal population. The population structure of Kira is indicative of high fertility rate and youthful age structure consistent with the age- sex composition of many other developing communities. It has a low dependency ratio of 62 dependants to 100 persons of economically active age (14 -64), largely a result of in-migration from both the rural areas and other urban centres, Kampala inclusive. The 20- 29 age group accounts for 27.2% of Kira Municipality's population indicating both the scale and impact of in-migration of young adults into the municipality. Such a low ratio of dependency is termed as 'Demographic Window of opportunity/ windfall', meaning that the proportion of dependants was lower than the proportion of active work-force.

This provides distinctive opportunity for rapid economic development and Kira Municipality cannot afford to squander this unique opportunity with unemployment or under employment. However, according to the World Bank Report "From Regulators to Enablers", 23% of the GKMA labour force were under employed either in terms of number of hours or in wages. So the municipality has a challenge of planning for suitable work spaces, create more quality jobs and employment creation initiatives so that this demographic dividend does not end up being a demographic burden.

Map 3.4: Population Density by location (2014) – Kira Municipality

The unsustainable population growth rate of Kira Municipality arising out immigration from both the countryside and Kampala, high fertility rate (6 children per woman), coupled with high infant and under 5 mortality rate were clear indication of population growth that outstrips the growth in vital services and resources such as land, education, health, housing, utilities and employment. This would result into un- sustainable exploitation of the municipality's resources and services, thus compromising on the quality of her population. The apparent lack of solid plans to exploit the high proportion of the age working group in the municipality is likely to exacerbate the already high poverty levels, a rise in other social ills and crime rate.

The high proportion of school going age (3-24) implies high investment needed to be made in education facilities and child care. This situation could be averted only through rapid decline in fertility, regulated in-migration



and ensuring that the resulting surplus labour force is well educated, skilled, healthy and economically engaged to reap the demographic dividend. Management of the municipal population is pre-condition of social economic transformation of the society and improvement in the quality of life.

3.3.1.4 Objective:

To promote improvement in the quality of life and structure of the municipality's population for accelerated socio-economic transformation and sustainable development.

3.3.1.5 Strategies/ Recommendations: -

• Improve accessibility, availability and affordability of quality health services in the municipality, especially reproductive health services.

- Design and implement awareness programs on reproductive health rights and emphasise the role of men in reproductive health issues.
- Improve public education services and ensure that established population groups have functional and competitive skills and participate in training and functional adult literacy programs.
- Empower women through education and promote retention of the girl child in school to stifle early marriages and teenage pregnancies.
- Intervention at the national level by integration of urban and rural development programs: both the urban and rural should be accorded similar attention in infrastructure development, social services and livelihood programs.
- Ensure planned urban infrastructure with adequate employment and amenities for education, health, water and waste disposal.
- Local governments should make byelaws stipulating requirements to register all new settlers in the municipality and there must be a legal requirement making it mandatory for NIRA to share information generated on registration of death and birth with the relevant local authorities for planning purposes.
- Integrate population concerns with broader development issues in the district like poverty reduction, agriculture, health, education, environment, labour and employment.

3.3.1.6 Risks:

- Low levels of education, and lack of skills arising out high school drop-out of especially the girl child plus low literacy levels
- Some cultural and religious groups that discourage use of family planning services.
- Low level of utilisation of reproductive health services due to lack of access or ignorance.
- Lack of social safety nets at old age which results into viewing many children as security in old age.

3.3.2 Population Future Growth Scenarios

The consultant conceptualised several possible growth scenarios for Kira Municipality in order to ably assess future physical development needs and constraints which will affect the future of Kira Municipality in alignment with growth trends in the KPMA. These scenarios put into consideration three possible courses of action based on different in-migration rates and the development trends of Kira Municipality as a rapidly urbanising entity, a gate- way to the city from the eastern front and its proximity to Kampala City.

The three possible development scenarios are:

- Best case scenario with assumption that factors of population growth will be regulated to attract a mid point between worsed case and ideal senarios (8.1%).
- Worst case scenario with assumption that it will be business as usual (10.44%)
- Ideal case scenario with annual growth rate estimated at 5.8%

Targeted planning interventions undertaken can lead to organised space to promote optimal utilisation of land and other resources. Numerous structural and administrative reforms such as improved land regulation and management, quality public health and education services and easy access to credit, are also anticipated. These would result into a healthier, more educated, skilled and exposed population that can explore perceived opportunities resulting into increased productivity. This coupled with equity in quality service delivery sustainable resource utilisation and a generally well planned for and managed population, can capture the demographic dividend evident in Kira Municipality.

The municipal population projections were worked out based on the above three growth scenarios as illustrated in table 3.4 below: -

Table 3.4: Population Projections for Kira Municipality Based on Case Scenarios 2018-2040

Year of	Best Case Scenario (8.1%)			Ideal Scenario (5.8%)			Worst Case Scenario (10.44%)		
Projection	Male	Female	Total	Male	Female	Total	Male	Female	Total
2018	203,370	229,718	433,088	186,607	210,783	397,390	221,560	250,264	471,824
2023	300,203	339,097	639,300	247,375	279,424	526,799	364,018	411,178	775,196
2028	443,143	500,556	943,699	327,932	370,418	698,350	598,074	675,557	1,273,631
2033	654,142	738,892	1,393,034	434,723	491,044	925,767	982,623	1,109,926	2,092,549
2038	965,607	1,090,710	2,056,317	576,290	650,952	1,227,242	1,614,429	1,823,585	3,438,014
2040	1,128,371	1,274,561	2,402,932	645,078	728,652	1,373,730	1,969,118	2,224,225	4,193,343
2043	1,425,375	1,610,044	3,035,419	763,958	865,933	1,629,891	2,652,473	2,996,111	5,648,584

The business as usual scenario is not tenable because all indications point to the fact that the municipality is likely to undergo a population explosion. The consultant therefore opted to use the best case scenario to plan the municipality. The projections are very close to those in the Wakiso District PDP (2018) and the GKMA framework (2012). It should be noted that the planning population projection figures of the municipality for the Case Scenarios were constructed at an interval of 5 years, scaling it down to 2 years towards the end of the planning horizon in 2040 for purposes of giving the upward trends (Table 3.5).

Table 3.5: Projected Population Kira Municipality by Division

Bussiness As Usual	(10.44%)							
Ward /	Pop.	Projection	S					
Municipality	2014	2018	2023	2028	2033	2038	2040	
Bweyogerere	106,842	158,945	261,143	429,052	704,923	1,158,174	1,412,624	
Kira	60,499	90,002	147,871	242,948	399,160	655,811	799,892	
Namugongo	149,816	222,876	366,180	601,626	988,458	1,624,015	1,980,810	
Best Case Scenerio (8.1%)								
Ward /	Pop.	Projection	S					
Municipality	2014	2018	2023	2028	2033	2038	2040	
Bweyogerere	106,842	107,189	158,226	233,564	344,773	508,932	594,718	
Kira	60,499	82,613	121,949	180,014	265,26	392,249	458,367	
Namugongo	149,816	150,302	221,867	327,507	483,447	713,636	833,929	
Ideal Scenario (5.8%)							
Ward /	Pop.	Projection	ıs					
Municipality	2014	2018	2023	2028	2033	2038	2040	
Bweyogerere	106,842	133,870	177,465	235,256	311,866	413,425	462,773	
Kira	60,499	75,804	100,489	133,214	176,594	234,102	262,045	
Namugongo	149,816	187,715	248,844	329,880	437,304	579,712	648,909	

3.3.3 Poverty Levels in the Municipality

Basically, poverty is defined as the inability to access the basic requirements to enhance human survival. Thus, poverty depicts a current state of deprivation or lacking of resources and capacity to satisfy current need. Poverty is multidimensional phenomenon that can be measured using a combination of social and economic indicators, although there is a general tendency to apply a unidimensional measure of poverty and wellbeing that focuses on household income or consumption expenditure. Poverty is also exhibited in household deprivation in critical measures of wellbeing such as quality education, health, water and sanitation, access to public utilities, housing conditions and access to information. As a result of disproportionate urbanization vis-à-vis the social and infrastructural services in place, the municipal authorities have been rendered unable to cope with the basic needs of the populace to levels that guarantee acceptable quality of life and a good proportion of the population has resorted to diverse coping mechanisms for survival.

Data from the socio- economic survey revealed that the level of service delivery in both public education institutions and health facilities is inadequate and although private service providers have taken the initiative to fill the service gap, some have turned service delivery into a source of income and thus have compromised on standards, while at the same time most of the private services were expensive and the low income earners cannot afford them and are thus deprived.

Kira municipality's rapid urban grown has outpaced planning and service provision resulting, into large slums whose socio-economic landscape is reflective of a sea of pervasive poverty with few incidences of affluent. Quality of housing is proxy indicator of one's socio-economic status, alongside others like the number of meals a household takes on a daily basis. Although majority of houses in Kira Municipality were permanent (92%), owner-occupied (48.7%) and approximately 96.8% of households take more than two meals a day, a good number of the low income earners reside in dehumanizing conditions in slums and informal settlements in zones such as Kireka D, Kireka C, Kasokoso, Kamuli C, Kigandazi and Kitto, where a good number of residences are not serviced with water and electricity, shared residences, with no sanitary facilities while others use shared sanitary facilities and are prey to poor sanitary related diseases. In most of the parishes, there is a mix of the poor and relatively well-off working class living side by side in informal settlements with higher income groups in close proximity with relatively organised and better serviced neighbourhoods.

Precondition of tackling poverty in the municipality entails formulation of a mixture of national policies and some home-grown interventions emphasising: - mitigation of in-migration, appropriate and quality education, health for all, reduction in economic vulnerability, appropriate housing, responsive service delivery and pro- poor infrastructure.

The municipality is faced with a serious threat of increasing poverty levels. Poverty is the root of underdevelopment and insecurity in any community because it inhibits people's ability to harness the resources that enables them improve their living conditions and erodes human dignity. Unless conscious efforts are undertaken to tackle poverty in the municipality, sustainable development will remain only a dream.

3.3.3.1 Objective:-

Plan for physical infrastructure that would lead to improvement in household income, living

conditions and general quality of life of the people of Kabarole district through development and improved access to basic social services and sustainable use of the environment.

3.3.3.2 Strategies:-

- Deliberate establishment of social services facilities, especially education, health and water to poor neighbourhoods.
- Provision of vocational and skilling training targeting adults, especially women.
- Public Vocational training institutions targeting children of the poor.
- Encourage backyard farming in high yield and short season crops to improve on household income as well as food security at the household level.

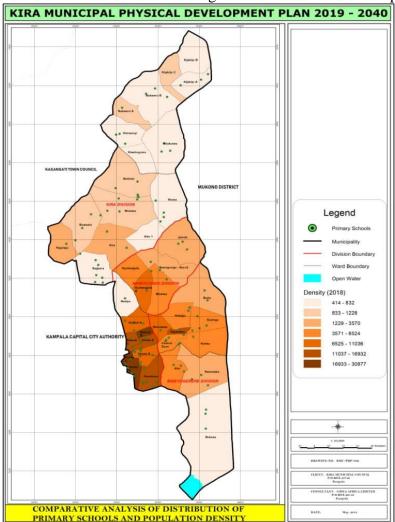
3.3.3.4 Risks:-

- Availability of land and funds required for the establishment of public social service facilities.
- Poor implementation culture of planned activities.
- The youth have a poor attitude towards work.
- Poor mind-set towards vocational training

3.3.4 Social Services

3.3.4.1 Education Sector

There has been noticeable change in the education service provision over the past twelve years.



Since inception of UPE in the country in 1997 and USE in 2007, enrolment in the municipality, like elsewhere in the country, has increased at all levels and institutions and collages have sprung up. The PTR in primary schools in Wakiso District in 2016 was 26 pupils per teacher, which was the best in the previous four years, and PCR was 36 pupils per classroom. This was above the national minimum requirement for both indicators.

The municipality had a total of 553 education institutions comprising tertiary and vocational institutions, primary, secondary schools and a number of preschool institutions (ECD), inequitably distributed.

The best provided service amongst the above categories was nursery schools since they are accessible to over 97.7% of the households and yet only 68.7% of the households utilize them.

Map 3.5: Comparison of Population Density to Primary Schools

The municipality is well endowed with primary schools and these are located within a distance of 1 km to 80.6% of households. However, 90.4% of these were privately owned and they are considered expensive. All wards had at least one public primary school, which meets the central government requirement of having primary schools per parish but many of them were in deplorable infrastructural state and services offered were, in some instances, lacking.

The distribution of primary schools in the municipality was found lacking since some densely populated areas like Kamuli C with a population density of 25,600 people per sq. Km had only 2 primary schools whereas a cell like Bukasa with a population density of 840 persons per sq. Km had over three schools.

There were 46 secondary schools in the municipality accessible to 70.9% but utilization was very low at 19.3% and most (89.1%) of these them were private. Much as vocational and tertiary institutions are vital for accelerated skilling relevant to the job market, there were only six institutions to cater for the municipality's rapidly swelling population and only one of these was public.

The general trend is that majority of the educational institutions in the municipality were privately owned and regarded as expensive, which could be plausible explanation of the low utilization of the services by the municipal residents and the belief that these services were mostly beneficial to those residing outside the municipality, thus the need to adjust this state of affairs in fulfilment of government's responsibility of provision of relevant, equitable and quality education to its citizens.

The study established the following issues as key impediments to the provision of relevant, equitable and affordable education services to the citizens of Kira Municipality:

Distribution
of education
institutions
was not
commensurat
e to
population
settlement
densities

Public education institutions were few, in poor infrastructural condition and prone to poor service delivery

No public vocational and tertiary institutions despite the prerequisite to skill the ever rising population to fit into the job market.

Majority
of private
education
institutions
were
expensive,
lack basic
provisions
for cocurricular
activities,
and on

Demotivated staff, lack of affordable staff accommodat ion and absenteeism of both teachers and pupils

Table 3.6: Standards, Availability and Demand for Education Facilities For 2018

Type of education facility	service standards	Current situation (2018)	Demand	Remarks
Secondary school	10,000	46	47	Although the municipality has a deficit of only one (1) primary school, majority (41) were private, and the owners can easily convert the status of the school any time.
Primary school	5,000	354	94	The district appears to have an oversupply of the facility but only 25 were public so 93 % were private and expensive.
Vocational schools	50,000	6	9	These were mostly private and only one was public, pause a challenge of affordability.

Based on the 2014 population projections of Kira Municipality, medium and long term education facilities' requirements were worked out as indicated in table 3.7:

Table 3.7: Education Services Projections – Kira Municipality

Projected Population			2018 433,088	2028 943,699	2038 2,056,317	2040 2,402.932
			455,000	343,033	2,030,317	2,402.332
Service	Service Standards	Existing Numbers	Demand	Requirement		
Secondary Schools	10,000 people	46	43	94	206	240
Primary Schools	5,000 people	354	87	189	411	481
Vocational /Tertiary Institutions	50,000 people	6	9	19	41	48

The growing demand for quality, accessible and affordable education services in the municipality is pointer to the need to redevelop, redistribute and develop new education facilities. There is specific need to plan for the establishment for vocational and tertiary institutions in the municipality. These are vital for accelerated skilling relevant to the job market, enhancement of the competitiveness of the municipal residents and build and strengthen the municipality's human capital.

3.3.4.2 Objectives:

- -To ensure good quality of life for the people of Kira Municipality by providing educational opportunities and competitive skills to individuals to enhance their potential for positive transformation of their society.
- -To develop educational and skilling institutions of international repute within the municipality which have the capacity to equip the population with knowledge, skills and attitude relevant to sustainable development.

3.3.4.3 Strategies:

• Establishment of a central skills development centre of excellence in Kira Municipality. This should be located in any convenient place where the municipality owns adequate land. (Nsaasa)

- Establish at least one community based ECDs in each of the municipal divisions and ECD/ pre- primary sections in all public primary schools.
- Establishment of a large university in the municipality as proposed under the KMPA framework to serve a student body of over 20,000 students in a wide range of faculties, prioritising sciences.
- Establishment of at least one well equipped public technical and vocational institution in each of the three divisions. These must be of internationally recognised levels to promote competitiveness.
- Construct/ rehabilitate staff accommodation in public schools to motivate staff.
- There is need for adequate allocation of land for educational facilities to meet the current and long term needs. These must be with wide distribution, within residential neighbourhoods, with ready access and distant or buffered from major roads. There should be an option of integration of the redeveloped or newly constructed education facilities with community facilities such as community sports facilities and resource centres.
- Special attention should be given to Namugongo Division which had the highest population but no public secondary school.
- Formulate private- public partnerships to strengthen the private academic institutions in the municipality.

3.3.4.4 Risks:

- Land availability
- Funding
- High school dropout rate, especially of the girl-child.

3.3.5 Health Facilities

The social and economic impacts of improved health services on the individual, family, and the country as a whole have significant multiplier impact on community development and quality of life of its people. Vision 20140 aims at production of a healthy and productive population to contribute to the socio- economic growth of the country through provision of quality, accessible and affordable health care to all.

Agenda 2013, framed health and wellbeing as outcomes and foundations of social inclusion, poverty reduction and environmental protection. From a health perspective, development can only be regarded sustainable when resources are managed by and for all individuals in a way that supports the health and wellbeing of present and future generations.

The NDP 11 targets to increase the percentage of population that lies within 5 KM distance to health facilities from 72% (2013) to 85%. By 2020. Kira Municipality has a total of seventeen (17) health facilities. All three hospitals were private, the municipality had no Health centre IV, only 22.2% of Health Centre III were public and only three out of the five Health Centre II were public. Suffice to say, the health facilities in the municipality were inequitably distributed, with Bweyogere Division taking the bulk of seven facilities, Namugongo Division 6 and Kira Division 4. Furthermore, Bweyogerere Division had two (2) public health facilities, Kira had two and Kireka which has the highest population and density had only one public health centre II. According to the NPHC 2014 Report, 20.7% of the population in Kira Municipality resided 5KMs and above to nearest public health facilities. The corresponding proportion for Namugongo

Division was 27.4%, Kira Division and Bweyogerere Division were 18.6% and 12.3% respectively.

Healthcare facilities in the municipality have a total of 570 beds, 70% of these were in public facilities. In addition, the municipality has approximately 150 licensed clinics and 80 drug shops which contribute to the delivery of health services in the municipality, although municipal authorities admitted that the number could be higher than those licensed. It was these, according to findings of the socio- economic study, that most residents of the municipality turn to for treatment. Private clinics were the preferred option for treatment to 85% of respondents compared to 53.5% that utilise health centres.

Although the municipality has registered improved performance based on a number of health indicators, there is still a serious gap in geographical access and delivery of quality health services caused by mismatch between health infrastructure development and capacity to deliver the needed services arising from inadequate staffing, drugs, medical supplies equipment, staff housing, lack of emergency services and weak laws and regulation.

The physical and sanitary conditions of many of the existing health facilities in the municipality constitute a risk for both the patients and the medical staff. These gaps and variations have revealed inefficiency in the ability of the health sector in the municipality to deliver efficient and effective health services.

Based on the targeted population of 2,000,000 per Regional Referral hospital, 500,00 for a district hospital, 100,000 for Health Center IV and 20,000 for health center III, the municipality has a current deficit of three health centre IV, 7 health centre III and 58 health centre II. The long-term requirements are reflected in Table 3.8 below.

Table 3.8: National Health Facility Standards and Kira Municipality Demand for 2018

Health facility	Threshold population per facility	Current situation	Demand	Remarks
District Hospital	500,000	-	0	The municipality lacks this facility since the current municipal population is below the required threshold.
Health Centre	100,000	0	3	Deficit of one health Centre IV
Health Centre	20,000	9	16	The municipality has a current deficit of 7 Health centre III.
Health Centre	1:5,000	5	63	Deficit of 58 Health center II
Fire Station	1: 100, 000	0	3	There is a current requirement for 3 fire stations since this service is totally lacking in the municipality.

Based on the 2014 population projections of the municipality, medium and short term health facilities' requirements were worked out as indicated in table 3.9.

Table 3.9: Health Services Projections (10.44% & 8.1%)

			2018	2028	2038	2040
Projected Populati	on		433,088	943,699	2,056,317	2,402,932
Service	Standards	Existing Numbers	s Demand Requirement			t
Referral Hospital	2,000,000	0	0	0	1	1
District Hospital	500,000	0	0	2	4	85
Health Centre IV	100,000	0	4	9	21	24
Health Centre III	20,000	9	22	47	103	120
Health Centre II	5,000	5	87	189	411	481
Fire Stations	100,000	0	4	9	21	24

There is glaring need for more health facilities for improved service delivery plus need to improve upon the distribution of the services thus improve upon access and quality of service. Staff motivation is key to attracting qualified staff to these facilities and availability of accommodation in the vicinity of the institutions would could be one of the avenues to counter understaffing.

3.3.5.1 Objective:

- To up-grade and redistribute existing health facilities and develop new health and emergency facilities to foster efficiency and effectiveness in the delivery of the services within Kira Municipality.
- To establish a quality health care system that would promote and support a healthy and productive population which would contribute to harnessing the demographic dividend and achieve social economic transformation of Kira Municipality.

3.3.5.2 Strategies:

- In the short term, upgrade Kira Health centre III to health centre IV, and acquire land in Namugongo and Bweyogerere Divisions for construction of one Health Centre IV in each.
- Develop 2 new district hospitals in the long term since population is projected to warrant that number in view of the threshold set by the National Physical Planning Standards and guidelines -2011.
- Phased development of 7 new health centre III in the short term, 201 in the long-term and renovate existing nine Health centres to improve on their functionality.
- Extend and promote alternative power sources to ease on the expense on electricity in health facilities.
- Develop new and upgrade accommodation facilities for health workers in all public health facilities to improve upon functionality.
- Establish the required number of fire station to independently manage emergencies. The municipality will require 5 fire stations in the short- term, 13 in the medium term and 42 fire stations by 2040.
- Based on modern European standards of 800 beds per 100,000 people, the municipality should target 3,200 beds in the short –term and 19,200 in the long-term (2040).

3.3.6 Cross cutting Issues

3.3.6.1 Gender Issues

Gender is expected disposition and behaviour that society culturally assigns to each sex. In many parts of the world, women according to culture, norms and traditions have been denied some roles, rights and responsibilities based on their perceived role in society. In Uganda, gender inequality was deeply rooted in the history and traditions of the many ethnical groups that make up the country. Women in Kira Municipality constituted 53% of the municipal population and yet were the poorest in society with no access to sources of production, shouldered the bulk of domestic responsibilities and were evidently discriminated against in areas of adoption, marriage, divorce and inheritance. The proportion of illiterate women in the municipality (8.2%) was greater than that of men (5.5%), a higher proportion of women who were not in school with highest education qualification below Senior Four (46.7%) compared to that of men (36.8%) and only 34.3% of women in the municipality use the internet compared to 44% of men.

There was also lack of equitable participation in making spending decisions despite the fact that women in the municipality make considerable contribution to domestic income. It is women who are mostly engaged in agriculture. The high TFR resulting into higher risks in form of high maternal mortality rate, lack of access to credit by women and high poverty levels especially in female headed households all exacerbate the marginalisation of women in the municipality. Due to lack of skills, women and the youth were predominantly engaged in informal trade like markets, food vending, and roadside petty trade. Attainment of sustainable development necessitates full participation of both women and men in economic, political, civic and socioeconomic aspects of the community. Therefore, there is need to pay special attention to programs geared towards women empowerment, equal opportunities in areas of property ownership, skilling through vocational training and micro-business training and encouraging them to undertake adult learning (FAL),

Inequity in access to opportunities and control of resources due to gender considerations compromises the capacity of the given community to realising the full potential of its human resources which is detrimental to the community's socio economic transformation. If the proposed PDP does not address the existing gender imbalances, women in the municipality will most likely miss out on the municipal resources. Gender based inequalities would also limit economic growth and exacerbate poverty in the municipality'.

3.3.6.2 Vulnerability

Some disadvantaged communities and individuals face challenges that limit their opportunities. To be inclusive, growth should benefit everyone while reducing challenges faced by the disadvantaged ones both in terms of benefits enjoyed and opportunities for participation. There is thus need for safety nets to ensure that disadvantaged people engage in productive employment to enable them raise their standards of living, enjoy normal standards for human dignity, and access basic service for improved livelihood. Vulnerable groups in Kira Municipality include orphans, children, people with disability, the youth, elderly and women.

Children in Kira Municipality constituted a considerable proportion of the population (42.1%), whereas 14.3 % of the population in the municipality were children aged between 6-12. The latter are primary school going age. However, according to the 2014 Census report, a good number were not in. specifically 16.9% in that age cohort in Kira were not attending school,

14.6% in Bweyogerere and 14.5% in Namugongo. The municipality had challenges of high school dropout rate, especially the girl child and a low primary –to- secondary school transition rate. This is, among others, due to early marriages- 5.7% of children between the age 10-17 in Kira Municipality had ever married, early pregnancy – 11.5% of children aged 12-17 have been victims of teenage pregnancies and 16 % of the municipality's children aged 10-17 years have been exposed to child labour². As a result, a good number of children has been exposed to various types of dehumanising conditions and the vice of prostitution is slowly spreading in the municipality. 7.1 % of children in Kira Municipality were orphans (NPHC 2014), thus vulnerable. They were subject to violence, child abuse, exploitation and neglect.

Uganda has one of the most youthful population in sub- Saharan Africa and one of the highest rate youth unemployment. The youth constitute 34.8% of the municipal population and slightly above of these (63.5%) were employed and 11.9% were neither in school nor working. The youth and women form the bulk of the informal sector, thus the need to equip them with skills to facilitate them succeed in the informal economy as entrepreneurs.

4.8% of the district population were elderly (60 years and above). Majority were too week to work thus economically dependent, lack medical care, decent housing, victims to property grabbing and usually discriminated from service delivery. In order for the municipality to enhance the full potential of the children, youth, elderly and orphans, opportunities for education, skills development, healthcare, recreation and employment among others need to be opened up and appropriate facilities and services planed for.

5.5% of the district population 2 years and above were disabled. Their plight creates pressure on the communities in terms of care and support. A good number of PWDs in the municipality experience poverty and lack of basic social services such as education and proper health care and traditionally, marginalised and denied opportunity to participate fully in social and economic development. Despite the municipality's efforts to uplift the status, roles and responsibilities of PWDs in the municipality, a lot need to be done.

Any possibility of inequity in resource allocation and denial of opportunities to vulnerable categories of the municipal population is abuse of human rights which is detrimental to inclusive growth and development. There is need for measures of redressing imbalances that exist. The proposed PP must be responsive to the needs of all categories of persons within the municipality.

3.3.6.3 Objective: -

To ensure that the proposed District Physical Development plan espouses the capacity and opportunity of both men and women play an active role in shaping all aspects of development in the municipality through unfettered participation.

To ensure that all areas of mandate of this PDP promote rights of vulnerable communities and individuals and enhance their capacities and potential for inclusive growth and development.

_

² NPHC 2014 Final Report

3.3.6.4 Strategies:

- Promote women economic empowerment through entrepreneurship, skills development, adult literacy classes and improve accessibility to credit.
- Promote the interests of women in general and women-headed households in particular in the resolution of land ownership issues and assist them in acquisition of legal land holding rights.
- Promote family planning education and support, especially spousal support.
- Incorporate gender-specific needs into detailed planning at all lower local government levels including improved infrastructure for healthy, safe water and sanitation.
- Improve informal sector commercial facilities in which women and the youth play a significant role and plan for inclusion of day- care facilities in women dominated work places such as markets to encourage nursing mother maintain their jobs.
- Involve both genders in the detailed implementation and monitoring of the municipality PDP.
- Target female employment/career opportunities especially post-secondary education facilities.
- Set up Youth Centres at the division level that combine vocational training with lifeskill training. Such an arrangement would take advantage of the linkage between human capital development, labour market outcomes and risky sexual behaviour.
- Set up a special needs training school at the municipal level.
- In the medium term, develop a fully fledged Social Rehabilitation Centre at the municipal level for people with disabilities to replace the Kireka Rehabilitation Centre which has been disorganised due to land wrangles. These should cascade down at the division level in the long- term.
- Establish public reception centre for lost and abandoned children at the municipal level and encourage the private sector set up children and infant homes at the lower local government level, but these must be setup within the current legal framework.
- Compliment the Functional Adult Literacy (FAL) program with a public library at the Division level and community libraries and tele- centre at the ward level.
- Provide comprehensive community support programs for vulnerable groups, older persons and PWDs. (People with disabilities).

3.3.6.5 Risks:

- Increasing number of vulnerable persons attributed to HIV/AIDS, disaster and chronical poverty.
- Lack of funding.
- Breakdown in extended family system and community resource mechanism for supporting vulnerable people.
- Wide spread poverty.
- Cultural norms, values and beliefs that enhance gender inequalities.
- Low literacy levels and low levels of education of the women in the municipality.
- The emerging vice of prostitution and teenage pregnancies.

3.3.7 Other Social Services

3.3.7.1 Community Centres

Kira Municipal population comprises a multitude of tribes and nationality and the major ones were Baganda (55.4%), Banyankole (13.2%), Basoga (6.5%), Bakiga (5.2%) and to a lesser extent foreigners (1.1%). The municipality has experienced droves of immigrants both from Kampala and from all districts in the country and beyond in the last decade. This trend has significant implications on planning and development related to customary land tenure system, traditional economic activities, settlement patterns, norms and beliefs that affect gender relations, tourism, resource and governance disputes. The continuous stream of immigrants coupled with rapid population growth has resulted into a cosmopolitan population thus the need for social support networks to harness and harmonise the various social norms and expectations which will enable the population take on its new modernised identity. The community structures and support systems that can mould especially the children and the youth into responsible citizens to promote community cohesion and social stability are community centres at various levels of society.

Community centres are public premises which communities can use free of charge for recreation purposes, avenues for community meetings and gatherings for exchange of ideas for societal development, or host public administrative offices at the grassroots level and information centres. As outlined in the Situation Analysis Report, the municipality lacks community service facilities since the only two community centres that previously existed, both in Bweyogerere Ward, were converted into a health centre III and a market cum Bweyogerere Division Headquarters.

It is ideal to have community centres at three levels, the highest hierarchy at the municipal level, second hierarchy is the division level and one for each of the six wards. Currently, there is limited access to community centres and the role of this service is relatively un appreciated by majority of the populace.

Although shared norms and value system based on shared vision guide positive perceptions, mind-set and attitudes which are fundamental elements for development, there were no deliberate programs and arrangements to tap from the cultural diversity that exists in the municipality and enhance community cohesion which is basic for social stability. Inculcated norms and value system attracts the population especially the youth to appreciate and participate in any transformational process geared towards development and attracts them to play a meaningful role in development of the area.

3.3.7.2 Markets

Provision of markets is preserve of the respective local government. These are distribution channels for fresh and durable foodstuff, domestic products and clothing to communities. In Kira Municipality, they are a source of livelihood to a number of youth, women and to some elderly persons and a viable source of revenue for the respective local governments. The municipality has a network of seven markets, some in residential neighborhoods, while majority were close to the main roads and connectivity ones. Markets in the municipality were inequitably distributed, very run down, and unhygienic – constituting a health hazard to the public. They were accessible to 35.9% of households, however utilisation far exceeded availability at 76.9%.

This gap has been substituted by the sprawl of informal markets and kiosks especially in the more urbanised centres in the municipality of Bweyogerere, Kireka and Kyaliwajjala, resulting into total breakdown in trade order, traffic congestion and in some instances traffic accidents.

There is also a lot of wastage in these markets as there is no organised way of preserving perishables sold therein, thus the need to devise methods of value addition to highly perishable goods. This would contribute to food security in the municipality and improved income.

There is a general lack of appropriate work- spaces in the municipality and a glaring need to setup markets that are properly planned, with all relevant facilities and amenities to serve the swelling population in the municipality. Based on specifications in accordance to the Physical Planning Guidelines and standards, the municipality's requirement for markets has been established (Table 3.10).

Table 3.10: Future Demand for Markets, Kira Municipality

			2018	2028	2038	2040
	Projed	ted Population	433,088	943,699	2,056,317	2,402,932
Service	Service Standard	Existing Facilities	Demand	Requirement		
Markets	7,000	7	55	135	294	343

Currently the municipality has a shortfall of fifty –five markets and requires 343 well distributed markets, constructed with all basic requirements and amenities by 2040.

Lack of well streamlined markets in the district is one of the major obstacle to reducing poverty and enhances food insecurity in the municipality. Markets too provide work places for a proportion of the vulnerable population in the municipality like the youth, women and in some instances the elderly. Finally, lack of well streamlined market system contributes to the weak revenue profile for the local authorities.

3.3.7.3 Sports and Recreation Facilities

These are facilities set aside purposely for public relaxation, sporting and leisure. Generally, sports facilities are considered to be a subsidized service because they cost money to construct, maintain and some are available for free use by the community. However, they have broad economic and health benefits for the wellbeing of the community since they provide space/land for the recreation and tourism. They help to attract investment in business and real estate; enhance property values and individual health, provide employment and they provide free venues for the community to relax and reduce urban stress. They also promote social harmony, creates opportunity for self-employment and livelihood.

The municipality has a number of playgrounds, public and private, though the former were not well maintained. Play lots vital for community moulding of children and youth and public open spaces were conspicuously lacking and utilised by only 33.3% of the municipal population. Public parks were very few and utilised by only 1.9% of the population. However, the municipality host the most prestigious sports stadium I the country - The Nelson Mandela Sports Stadium at Namboole which scores of residents utilise for relaxation, as physical fitness venue and a children's play area. The municipality has a number of private recreation centres and private

gardens which were accessible to 45.3% of households but utilisation was lower at 35. %. These were restrictive in utilisation because they were regarded as expensive.

The situation analysis report portrayed the need for the municipality to establish a strong network of sports and recreation facilities to meet the current and future needs. District requires significant development and extension of its sport and recreational facilities to meet current and future international/ global needs. The district's current and projected requirement for play grounds which is a vital recreation and sports facility to be included in the PDP is stipulated in table 3.11 below:

Table 3.11: Future demand for Play Grounds.

			2018	2028	2038	2040
Projected I	Population		433,088	943,699	2,056,317	2,402,932
Service	Service	Existing	Demand		Requirement	
	Standard	Facilities				
Play	5,000	9	87	189	411	481
Grounds						

There is need to orient the municipal population on the value of sports and recreation especially as a strategy for elimination of non-communicable diseases which are rampant plus it's other intrinsic values.

3.3.7.4 Objective

- Promote community identity, cohesion and social stability through establishment of community development infrastructure and related services at the grass root level.
- To establish a well-balanced network of markets in the municipality that is adequate in scale, distribution and standards for the social and economic development of the populace in the municipality.
- Improve distribution and access to sports and recreation facilities in the municipality to enhance social harmony, recreation health, careers, and tourism in Kira Municipality.

3.3.7.5 Strategies

- Establish community development infrastructure at the municipal level located in a suitable urban centre where the municipality has land. With high public transport access.
 The facility should include a small auditorium, library/ resource centre, studio for art and craft, multi-purpose centre for special interest groups, training facilities, workshops and a gym.
- Set up community centres at the division level with public transport and none motorised access. Facilities should cater for library/ resource centre, venue for community meetings, training and gym facilities, club facilities for special population, and information centres.
- Establish neighbourhood community centres widely distributed. They should be located within vehicle parks high pedestrian access, and where possible, adjacent to schools or sports facilities and should have a provision for public. Facilities to include in neighbourhood community centres include community offices, club facilities for special interest groups (youth, PWDs, Women, elderly and ECDs for children.) They should also have a kitchen and toilet for outdoor community events.

- Develop, in a phased manner, wholesale markets at various points of entry in the municipality; in the eastern, western and northern parts of the municipality. Others will be developed in the southern part in the long term with the establishment of the Inland port. These should be located in well planned zones in close proximity to highways and ring roads. The intention is to reduce on transportation costs and the volume of garbage associated especially with fresh produce.
- Develop urban quarter markets in each urban centre in the municipality, located in close proximity to high volume public transportation routes, interchanges and future rail stations (where possible). They should be integrated with a community centre suitable for this hierarchy with a resource centre, meeting venue and public administration offices.
- Establish urban precinct markets in each of the towns and future precinct, generally located in close proximity to public transportation stops and with high none-motorised access. These markets should have specialised sections for various fresh produce, fish, diary, meat clothing and other basic household goods.
- These should be pre-planned for upgrading to open shopping centres in the long –term.
- Set up neighbourhood markets of wide distribution, of high none- motorised access. They must have appropriate facilities (storage and refrigeration) for fresh produce, meat, dairy fish and other basic household goods. These too should be integrated with community centres at the neighbourhood level that can in addition host local resource centres, information centres, public meeting facilities and local administrative offices.
- All markets at the various hierarchies must have delivery access, ample storage facilities, loading and off-loading yards, designated customer parking, refrigeration facilities or coldrooms and there must be a provision of day- care centre for the nursing mothers.
- Encourage joint venture or Public Private Partnerships in the development of markets since this is a capital intensive venture and the municipality might not have the capacity to fund these developments.

3.3.7.6 Risks

- Availability of land
- Funding
- Conflict in norms, values and beliefs which limit cohesion and slow down development.
- Poor reading culture.
- Funding.
- Land availability

3.3.8 Sports and Recreation Facilities Water and Sanitation

Accessibility to safe water, coupled with good sanitation and hygiene are some of the components that directly impact on the quality of life of the people and overall productivity of the population. However, water and sanitation in all the east African Countries, like most sub Saharan countries, is characterized by low levels of access, in particular the urban slums and rural areas, as well as poor service quality in form of intermittent supply and lack of maintenance of facilities put in place. Safe water in this context refers to piped water, protected springs/wells and deep boreholes. The situation analysis revealed that there was limited distribution of piped water in the peripheral areas of the municipality, especially in the northern part, leading to use of polluted, unhealthy water sources such as springs and shallow wells.

Findings of the NHPC -2014, show that 80.5% of households had access to safe water, which is far above the national figure of 72%, but below the Vision 2040 target of 100% in urban areas.

According to the socio-economic survey conducted in 2018, the major source of water for domestic use in the municipality was public taps (48.5%), closely followed by direct connection to the system (41.3%) although efforts have been made by the central government, the local authorities and a number of CBOs and NGOs to establish safe water access points, lack of maintenance by the recipient communities has rendered some previously improved water sources unsafe.

Inappropriate disposal of faecal matter is a burden to public health provisions and exposes the community to disease. Latrine coverage in Kira Municipality was 99.4%, higher than the national figure of 92% (NHPC 2014). Majority of households (59.9%) use pit latrine and 27.6% use flashing toilets, and majority (54.3%) use vacuum trucks to empty filled up septic tanks. There is a challenge of lack of water borne sewage system in the municipality and the use of onsite and collective sanitation facilities was a source of ecological and health problems. Casual management of industrial discharge and lack of a systematic way of handling waste water in the municipality are some of the other pollution challenges eminent in the municipality. There is need to raise the bar of access to safe water to 100%, streamline waste water management and also ensure that all households in the municipality possess hygienic sanitary facilities.

Lack of access to safe and clean water for domestic use coupled with unsanitary conditions at the household level are recipe for poor health which is a drain on the country's resources and an impediment to human capital development. There is need to plan for improved access to safe water and elimination of poor sanitation specifically at the household level. Disparity in the functionality of water facilities across the municipality must be planned for and reduced.

3.3.8.1 Objectives:

Increase access to safe water supply for domestic use and improved sanitation to 100%.

3.3.8.2 Strategies:

- Extend piped water to all areas in the municipality
- Systematically implement domestic rain water harvesting at household and community levels.
- Ensure that all schools and education institutions have appropriate sanitation facilities through improvement of the pupil/stance ratio.
- Improve upon the expanse of water borne sewerage services in areas with piped water supply system.
- Promote good sanitation and hygiene practices at household, community and institutional levels. This could be done through mobilisation and sensitisation on good sanitation and hygiene practices through home and school improvement campaigns and competitions.
- Strengthen community based water management systems through formation of functional water user committees, and promote equal participation of both men and women in these committees.

3.3.8.3 Risks

- Funding
- Community perception to behavioural change.
- Unplanned settlement pattern that disrupts plans for and supply water services.
- Mind set and poor attitude towards maintenance of common user facilities

• Lack of capacity to pay for water services.

3.4 Report on Land Management and Administration

3.4.1 Land Tenure and Values

Land tenure and land price are key to determination of land availability and development in urban centres. A responsive urban environment should be able to have land accessible and available at a reasonable range of prices in order to respond to the demand of individual households and the private sector as well as urban authorities for planning and implementation of urban physical plans. Adequate urban land is needed by the authorities to enable and guarantee provision of the requisite urban infrastructure, utilities and service facilities that are badly needed due to ever increasing concentration of people in urban areas.

Three broad land tenure systems in the municipality have been identified and these included; Private Mailo (87%), Public land (12%) and Freehold (1%) as presented in the figure 3.7 below. In this respect, nearly all the land in Kira Municipality is privately owned. However, according to the household survey, there was a significant number of customary house tenure traditionally known as 'Kibanja' standing at 48.2%, implying insecurity of tenure and co-existence of customary tenure over privately owned land hence responsible for the emergence of informal settlements as observed in many parts of the municipality. The existence of customary and private mailo is likely to encourage more unplanned residential developments thereby undermining the timely release of land for major investments and infrastructure. Insecurity of tenure especially for households on customary tenure has led to informal high density settlements and has got implications on service delivery in the informal settlements.

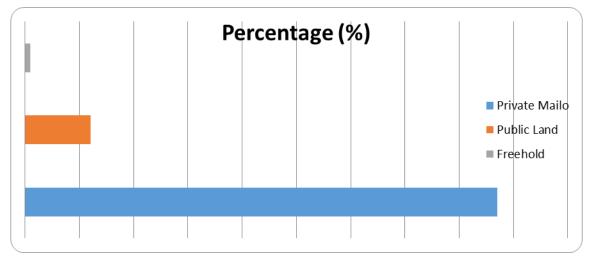


Figure 3.7: Types of Land Tenure Systems in Kira Municipality

Source: Field Survey

As much as, privately owned land guarantees permanent and long term housing investments due to its undisputable security of tenure, it has potentially undermined the realization of organized and efficient urban development. This land tenure pattern presents multiple and complex ownership rights over same land between the registered owners and customary tenants which complicates physical planning and land development. The negative implications of private mailo land on physical planning due to its limited public control in terms of ownership and development

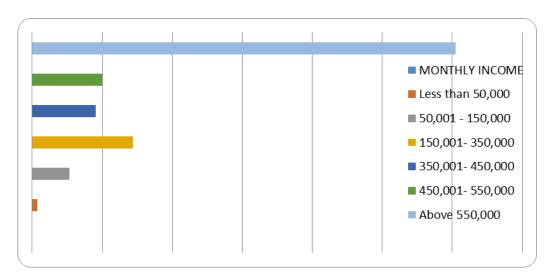
encourages unauthorized and informal development. As such, if not well planned and subdivisions not well regulated, its subsequent development encourages informal settlements. The informal practices on privately owned land have presented negative implications on basic services provision local service due to predominance of overlapping and conflicting rights of registered land owners and lawful or bona fide occupants.

The prevailing land tenure is likely to have an impact on the implementation process of the Physical Development Plan once approved given privately owned land will be required to support its implementation. Subsequently, the municipality will be required to purchase land from landowners through compensation in order to access land for public infrastructure development purposes. The large share of private land in the municipality coupled with land speculation is like to affect timely release of land required for development. Therefore, successful implementation will therefore require enormous financial resources to support acquisition of the required land for infrastructural development and public service facility provision. External resource mobilization shall become an inevitable option due to limited financial capacity both at the Municipality and District to support the implementation of key infrastructural projects.

Furthermore, the price of land in the municipality is on an increasing and irreversible trend due to large share of private mailo associated with strong security of tenure. For example, an acre of land is currently selling between UGX 300 million to 640 million from UGX 140 million in 2008. The price has also escalated due to increase in demand of land for housing as a result of population growth and a broad scale urban sprawl. Land in Kira Municipality like in other areas of Wakiso District, has rapidly appreciated within the last decade since 2008 and the study further predicts a continuous increase in the values of land and thus becoming a central constraint particularly to implementation of the physical development plan. However, titled land is more expensive than untitled and it's reported that price differences between titled and untitled land vary between 60 and 75 percent. Poorer urban households tend to opt for untitled which more often is located in unsuitable areas such as wetlands as the cheapest option. The study further indicated that land values were further determined by the level of social and physical infrastructure available within the area.

The land price to household monthly income is very high hence affecting the affordability of land by many households or residents. A highly developed land of 450m^2 (commonly known as 50ft by 100 ft) where the plot is serviced with a road, water and electricity was at an average price of UGX 100,000,000/= yet over 40% of the households in the Kira earned less than UGX 550,000/= (USD 145) per month (Figure 3.8). Therefore, the ratio of the price of land to household income is 1:182 and this means that there is hardly availability of affordable land to carter for the needs of the different segments of the households/population. The ratio further indicates that an average household would require savings of their monthly salary for 15 years to afford a highly developed plot in Kira Municipality. Thus, the municipality should develop the required infrastructure in the undeveloped parts and also provide incentives for new development so as to increase supply of serviced plots in order to make serviced plots quite affordable.

Figure 3.8: Showing Household Income



Source: Field Survey

The proximity to Kampala with its associated deficiencies in supply of affordable housing and land coupled with the increasing practices of land speculation has led to rapid escalation of land values in Kira Municipality. For instance, land speculation has been identified as a major factor contributing to sharp increase in land prices since its' considered as the only alternative investment to make easy profits (World Bank, 2017). Increased engagement in real estate business by the private sector for economic gains has further worsened the situation. Therefore, in order to achieve optimum land utilization, it may require several changes in policy standards in regard to intensity of development, extent of mixed-use development and high density construction in some selected or identified parts of the Municipality. The Municipality therefore through this PDP is advised to undertake land banking in order to support future service delivery when the values were still affordable. The land market in Kira Municipality is predominantly informal due to inability of the municipality to deliver affordable urban land in a timely manner in a society which constitutes predominantly low-income households who engage more in informal urban land transactions.

In conclusion, the value of the land and the complexity of land tenure are likely to constrain access to land for implementation of physical plans through infrastructural development. High cost of compensation and purchase of land is likely to constrain the municipal council in their efforts towards service delivery and delivery of infrastructure and utilities. The available public land within the municipality which would otherwise be used for service delivery has been heavily encroached on by informal settlements while the rest has been grabbed by the private individuals hence unavailable.

3.4.2 Objective

To facilitate better access to land for planning, infrastructural delivery and investment by increasing control over land management in the municipality and coordination with the other government land management institutions or agencies.

To encourage policy reforms to ensure that land acquisition and ownership, use, control and development are regulated by the Local Governments so as to enhance economic productivity and

commercial competitiveness for wealth creation and overall socio-economic development in the municipality.

3.4.3 Strategies/Recommendations

Improve security of tenure of customary household ownership in the high density informal settlements by encouraging and adopting systematic formal registration of customary land with the large land owners through planning and zoning progarmmes. This will increase coordination with the large land owners towards better planning and zoning to aid incremental informal settlement upgrading through provision of basic services. Formalization of tenure would also lead to greater protection of household members including the married women who are normally displaced after the death of their husbands and strengthen the ability of the municipal council towards increasing access to serviced households and other services crucial for economic growth. As such, this would permit a transition to a more formalized and acceptable urban environment. There is need to strengthen the relationship between the urban councils, large land owners and private real estate and land developers and work with them to facilitate their actions in housing and investments through effective planning and release of suitable land for development. The actions of private sector on land must be guided by planning and zoning polices and standards to avoid creation of planned informal settlements.

In light of land escalation in value or price, the municipality should consider purchasing of vacant and undeveloped land within the municipality through a land bank using locally raised revenue and /or requesting financing from the central government and other development partners. This is particularly crucial in order to improve delivery and provision of local basic services and infrastructure that is lacking in many parts of the Kira Municipality.

The Urban Councils should urge the central government to urgently implement the land policy reform in regard to overlapping ownership rights between landlords and lawful or bonafide customary tenants and strengthen the ability of urban councils to access and acquire land for infrastructure improvement and investment facilitation.

The municipal council should promote the environmental management through conservation of ecologically sensitive areas such as Lake Victoria, wetlands, drainage channels, water streams and any land to be reserved for ecological and touristic purposes, As such, such land must be designated for protection from encroachment through this Municipal PDP.

3.4.4 Risks

There is a high incidence of organic (and often unauthorized) urban physical developments which resulted into low density spatial growth and expansion giving arise to informal land markets which now provide more urban land transactions than the formal sector. Informal land markets will further undermined public control over the acquisition, use and development of land in the municipality thus complicating land development control. For example, areas of Kasokoso, Namataba, Kitto, Bukasa among others have challenges of development control. This in the way contributes to insecurity of tenure that does not allow land users to benefit from their investments in land due to limited exercise of their rights in line with conditions of access to land and legitimate instruments that restrict land use and development.

3.5 Report on Local Economic development

Uganda's National Development Plan (NDP II) aims to improve employment levels, human development and gender equality indicators among others goals. The plan outlines the Government's intentions to create quality employment opportunities and improve the labour force distribution in the country. Labour statistics are vital in the measurement of economic growth and development of a nation. These statistics furnish an indicator for the number of people who during a specified period of time contributed to the production of goods and services in the country. Labour statistics support analysis of the relationship between employment, income, training and similar types of programmes.

Economic development is central to regional and national growth and development. In this section the consultant discusses ways in which Kira Physical Development Plan supports economic growth in line with national priorities and objectives as stipulated in the Vision 2040 and National Development Plan.

3.5.1 Key Findings and Implications

According to census of Business Enterprises about 70% of the enumerated businesses were in the informal sector in the whole country, while the GKMA Economic Development Strategy puts informality at 57% in the GKMA. These figure may seem to be high especially when compared to the GKMA Framework figure of 20%, however, the Kira Five Year Municipal Plan 2015 – 20 shows that in one study carried out in the community, 50% of the respondents had brick laying as their main source of income. It was also established from the consultative meetings that a good number of residents of Kira Municipality were engaged in informal trade and most of these businesses were operating in an informal manner.

Majority of those engaged in the informal sector were women and youth whose presence is slowly gaining ground in the entire municipality. It is further supported by the household survey which noted that a reasonable proportion of the population obtain income by providing casual and manual labour (5.3%). According to the GKMA Economic Development Strategy, 93% of informal enterprises would be below the international poverty line of \$2 a day, if this business was their only source of livelihood. Also, informal enterprises are clustered near consumer centers because they depend on this for their livelihood.

The business firms are usually small business with limited amount of capital and according to the Census of business enterprises 73% of them in Kira have annual turnover of less than UGX.5 million; the Role of City Governments in Economic Development and Growth of Kampala report, by the world bank notes that 69% of the informal sector businesses in the GKMA, receive an annual turnover of less than ten millions. According to the GKMA Economic Development Strategy, a key constraint for informal enterprises is finding suitable work premises, located near customers; such location matters for firm success in the informal sector. The report further reveals that firms with permanent establishments are more likely to see increased performance and to formalize.

It was further established through the consultative meetings that the municipality does not have a well streamlined legal framework to grant support and regulation to this sector, nor is it given due consideration in both the economic and physical development planning processes as the GKMA Economic Development Strategy suggests, because in most cases it is deemed as an illegality, yet contributes to improvement of household livelihood and the national GDP.

Uganda is facing an increasing challenge to productively employ its fast growing and mainly young, literate and increasingly urban population. However, an even bigger challenge for the policy makers in Uganda is to manage the entire labour force's transition from predominant involvement in low productivity subsistence agriculture to increased involvement in higher productivity manufacturing and services sectors. In the urban areas the challenges lies in transforming from informal low productivity sector to higher more productive sectors. This will requireensuring that the labour force has the appropriate skills, which allow firms to operate at a higher level of productivity.

According to Uganda Economic Update; Jobs Key to Prosperity, 2013; The skilling of Uganda's labour force will have to address a twofold challenge, involving: (1) the provision of foundation skills through high quality primary education and through the achievement of a higher rate of transition to secondary education; and (2) the provision of the requisite skills to support the transformation of the economy in a manner that ensures a high level of inclusion. In addition to current government efforts to improve education and the skilling of Uganda's labour force, the private sector and local governments must be encouraged to participate in skilling workers, as no education system can produce the specific skills that are needed by particular industries.

The same report mentioned above also noted that the juakalis (artisans) and household-based enterprises employ half of the labor force outside agriculture. Therefore authorities, particularly at the local level and especially in urban areas, must see the informal firms as a means to create employment and generate revenue, and not as a burden. The sector can raise productivity and provide better jobs if the operators have access to capital, raising their technical and entrepreneurial skills and creating an enabling working environment.

The scale of the challenge facing Kira Municipality is indicated by the rate at which KiraMunicipal population is growing, having grown from only 141,000people in 2002, to more than doubling to 317,000people in 2014(a period of twelve years) and currently projected at 417,000peoplewith a high urbanisation rate of 10.4%. The resultant effect is the lack of order and low levels and scale of economic activity and otherwise. This population is projected to grow to 4,153,000 by 2040, the planning period.

The challenge is to ensure the provision of basic and appropriate employment on the appropriate scale and at the appropriate locations within the entire municipality to pull the population out of poverty and create wealth. This will require significant intervention in the comparative economic advantages of the Municipality, the workforce and the local economy to systematically reduce unemployment, extend education, training, apprenticeship, entrepreneurshipand expand the productive and the formal sectors hence "creating the wealth".

In thereport, the Role of City Governments in EconomicDevelopment of Greater Kampala Report, World Bank 2017, firms in Greater Kampala face numerous obstacles to grow their businesses. The report recommends that KCCA and Metro Local Governments (Kira Municipality inclusive) can play an important role to the growth of these firms by provision of enterprise services and support. These are in a unique position to provide the business community with information on affordable finance and taxation guidance. The report also noted that, while the vast majority of informal firms do not have great potential to grow, they provide many of GKMA's poorest a livelihood. Reduction of the informal sector will rely on the creation of more

formal jobs in tradable sectors of the economy and supporting informal workers to find opportunities for formal wage employment if they want to.

3.5.2 Objective

Therefore, the Local Economic Development objective of this plan is: To stimulate economic opportunities, investment and employment for Sustainable growth and Wealth creation in KiraMunicipality.

3.5.3 Proposals to enhance local economic growth

This plan notes that the GKMA Framework report, the Economic Development Strategy report and the Role of City Governments in Economic Development and Growth of Kampala report, emphasise support to manufacturing and tradable service sectors to bring about transformation. Kira has been observed to have limited space for further industrialisation besides sharing Namanve industrial park with Mukono municipality. This plan also notes that the largest sector in Kira municipality is the informal sector which provides livelihood for the urban poor.

Therefore, this plan emphasises support to the informal sector enterprises which willensure continued livelihoods to the urban poor but also improve productivity and transit to higher quality jobs. A major constraint for informal enterprises is finding suitable work premises, located near customers, which matters for firm success in the informal sector. This plan therefore provides for artisan parks in Najjeera and Butto (with common user facilities) as per the GKMA Economic Development Strategy, markets and commercial centres (with markets and shopping centres) in the local centres, where space will be provided for informal enterprises.

Kira to change role to enabler than regulator and controller. Local governments view themselves as regulators of business and economic activity and there is no legal framework to support informal sector. However, it is important for the local governments to realize the importance of the informal sector and its contribution to people's livelihoods, GDP and employment. This will require local governments to view themselves as enablers and support this sector instead of witch hunting it.

Therefore, this plan agrees with NPA's Greater Kampala Metropolitan Integrated Urban Development Program (Gkma-Iudp) proposals.Kira Municipality will require to open One Stop Business centre/sincluding recreation, skilling and incubation center, artisan parks for youth. This will be constructed at Najjeera artisan centre and Butto youth development and commercial centre.At the centre, the business sector can be supported with a good number of activities, which would include:

- Assisting business entities to develop business plans which can attract financing from the financial institutions, but also advice on where to access cheaper business credit.
- Giving support to enhance business entrepreneurship, management skills; Market analysis, products improvement to suit the market and business competitiveness. This will enable growth of existing businesses but also encourage the starting up new ones as they manage better their businesses and produce products suiting the market.

Improve public private dialogue. One of the main issues in consultative meetings was limited collaboration between the Municipal authorities and her stakeholders, especially the business community. Therefore, the municipality will have to work to improve this. This could be done by

holdingmunicipal hall meetings to disseminate the kinds of businessservices which Kira municipality can provide and will provide in the future and listen to the issues and constraints facing the private sector. This may help reduce the mistrust of government and the business community, but will help prepare plans which are more relevant to the business community and other stakeholders.

Investment promotion. As already noted, spatial analysis shows Kira may not have much space for expansion of manufacturing as a better desired economic sector. However, Kira can enhance investment in other tradable service activities to support local economic development. Such services would include construction (which seems to be gain as economic activity), transportation, Forwarding and Clearing (as the Bukasa Inland Port begins operations), Insurance and Banking. The business centre/s could play a major role by promoting Kira asan attractive investment location, but also identify potential areas for public private partnerships (PPPs). Partnering with business associations will provide business engagement centre services. It is also noted that there are already strong business associations (such as Private Sector Foundation) with whom Kira Municipality can partner to promote investment in the Municipality.

Providing information on skill gaps. According to the Role of City Governments in Economic Development of Greater Kampala Report, World Bank 2017, skilled labour was a constraint to Mediumand large sized firms. These were reported have difficulties in finding and recruiting technically skilled employees. A business engagement centre can help improve public dissemination of information regarding skill gaps. The skills development section of the centre can then identify other private sector partners who can be involved in training to ensure that the required skills can be imparted to the population especially the youth to suit the employers' requirements.

The GKMA Framework, the Economic development strategy and the Wakiso PDP plan propose manufacturing as one of the economic sectors to foster development in the municipality. This plan notes that there is not much space in Kira to encourage further industrial construction. Therefore the plan proposes to strengthen manufacturing in the existing Namanve industrial park, part of which is in Kira Municipality. However, manufacturing in Kira could be less focused on agro processing, and be more focused on other manufacturing such as Chemicals, agro chemical production and pharmaceuticals.

This plan provides for light industrial areas, commercial areas and commercial centres as a way of promoting employment and in line with GKMA which proposed different order service and employment centres and the Economic Development strategy which proposes providing support to informal sector, the youth, and economic clusters. The municipality will Support the private sector in technical and entrepreneurial skills development; and credit access at the business engagement centres as already proposed. This will include mobilising and training to acquire the necessary knowledge and skills.

The GKMA plan and Wakiso PDP proposes commercial agriculture, although the GKMA Economic Development Strategy is silent on agriculture but notes that some of the areas are still agricultural in the GKMA. However, the consultant is of the view that agriculture is still key activity in the GKMA given its contribution to livelihoods in terms of food security and household income provision, since about 15% of the households had agriculture as the main source of income; the statistics available indicate a good number of farmers as involved in mushroom and leafy vegetable growing, rearing of exotic breeds of animals was more than

involvement in local breeds implying involvement in commercial farming by the population. This plan therefore, proposes the Modernisation and transformation of Agriculture. Statistics from other GKMA areas indicate that 58% of the population involved in other employment is involved in agriculture to subsidise their incomes and also for food security reasons. Nevertheless, it should be modernized and transformed to increase production and productivity and contribute to improved incomes and wealth creation.

The GKMA framework proposes tourism as one of the major sectors to foster development, while the Economic Development strategy proposes the GKMA as major tourism centre. The Wakiso PDP identifies tourism as a big potential in Wakiso district. This plan hence proposes the Support and development of tourism in the Municipality. The Municipalityhas some tourism items including Namugongo Martyrs shrine, Mandela national Sports Stadium Namboole and Kabaka's palace. These will be developed further by introducing other tourism facilities and attractions agreeable to the religious groups involved. The attractions will include; major centre for the swimming sport, water games and water fountains, these are important to keep the place busy throughout the year.

Tourism was identified as big sector in the Wakiso district PDP; hence it would be important for the municipality to partner with the district and other local governments in the metropolitan area to boost tourism. As part of this plan a detailed master Tourism Plan for Namugongo Martyrs' Shrines has been developed to stimulate tourism further in this municipality. It is expected that growth in tourism will contribute to employment and support others sectors such as agriculture through agro processing and food consumption. This will enhance the population's livelihoods, reduce poverty and create wealth. Support will be given and partnerships encouraged and supported for tourism boosting. KiraMunicipalitycan partner with other stakeholders such as the district, private sector and religious institutions to boost tourism. Other partners will be involved who can help identify the business ventures in tourism so as to advise the population to invest in such ventures, through the Business Engagement Centre as already proposed.

With other partners, the municipalitywill mobilise the population, civil society and the private sector to invest and participate in tourism. It is therefore imperative for the municipality to mobilise the population and communities to engage in tourism income generation activities such as crafts making, hotel improvement and construction; food preparation and processing. This will contribute to employment creation especially for women and boost household incomes and improve livelihoods.

Both the GKMA Framework and Economic Strategy and the Wakiso PDP highlight the need to form associations and economic clustering among producers especially the informal sector. This plan proposes the Strengthening and promotion of cooperatives and associations. These can be avenues of saving, funding development, boost production, and create wealth in the municipaleconomy but also reduce on the informality and poverty. The population involved in all economic activities will be mobilized and trained to form and manage associations. Associations play a major role in empowering members through access to economic and social services, namely financial services through SACCOs, delivery of inputs to producers, access to markets, enhancing the bargaining power of small scale producers, imparting skills for better production and marketing services, advocate for rights through collective bargaining and dialogue. Associations will facilitate members to acquire mechanization and carry out research, innovation and encourage creativity among its members.

KiraMunicipalitywill tap into its strategic location being the first local government along the busiest trading route to/from the only and capital city with all roads to this busy route roads radiating from Kampala to other areas of Uganda and even outside, its location in the GKMA and the high population due to urbanisation and foster development in the municipality. Kira will encourage create conducive business environment by supporting the informal sector strengthen manufacturing, and promote tourism, which will strengthen service industry further and hence contribute to wealth creation and development.

3.5.4 Risks

- Impediment to access finance for business development and business needs.
- Inability of Kira Municipality to measure up to the new challenging role of enabler hence spear heading the formation of one stop business engagement centres.
- Failure to develop adequate power, transport infrastructure and reduce corruption so as to reduce cost of business operation will discourage necessary private sector investment.
- If Uganda's current poor global rating for "ease of doing business" does not improve, private investment will go elsewhere.

3.6 Report on Tourism Potential and Development

3.6.1 Tourism marketing and promotion

Weak market segmentation and targeted destination marketing for both domestic and inbound markets; Efforts to promote domestic tourism are still lacking, without a comprehensive strategy; Limited market research was being done; Majority of local Tour operators lack liability insurance which is critical in securing transactions with the outbound tour operators in the source markets; Kira brand is not well established and positioned in the desired markets. The brand was weak and barely recognized; inadequate supply of promotional materials at local governments and other MDAs resulting in very limited awareness of the potential that lies in tourism; the online marketing strategy for the tourism sector is nonexistent; limited in skill depth and human capital. The municipality has not tried to market its self as a tourist destination. It has left this role to individual tourist establishments and UTB. No Clear Strategy on Target Markets.

3.6.2 Accommodation facilities in the municipality

Generally, accommodation is managed by the private sector. The sector is further dominated by guest houses, most of them not rated and of poor standards therefore fetching low prices and therefore poor returns to the owners. Weak enforcement of the regulations on quality of facilities in the sector; Inadequate capacity, human and financial to enforce implementation of quality standards in the sector; Coordination for implementation of quality standards among the different stakeholders is inadequate; There is limited awareness on the quality guidelines and standards by both the public and private sectors.

3.6.3 Tourist attractions and activities

The product range was very narrow largely concentrated on faith based and recreation tourism. Local cultural and historical heritage resources are in a latent state while others are being destroyed; Tourism on part of Lake Victoria (Bukasa area) together with diverse avian life is still not developed. This also applies to entertainment sector; Municipal product is delivered by fragmented service providers who are inefficient and ineffective which ultimately makes the

product expensive; Limited government support for investment in the sector as there are no incentives for people interested in developing specific products; there are no realistic work plans and budgets for tourism product development at the local government level; The municipality has not used events well to market and attract tourists.

3.6.4 Human resource capacity and tourism management

There is limited knowledge of existing inventory of skills by value chain nodes as well as the skills requirements for each Tourism management and regulation of value chain actor in the industry; the tourism sector was dominated by SMEs and family owned businesses employing unskilled family members at low pay thus compromising quality visitor experiences; tourism education and training are nonexistent in the municipality. The levels of tourism skills throughout the Municipal tourism value chain are Low, at managerial, technical, operational and in key development supporting functions both in government and private sector.

3.6.5 Transport and Infrastructure development

The municipality is near the capital Kampala therefore easily accessed by tourists. The major highway through the municipality is now too narrow to accommodate the traffic there, more so in peak seasons June third every year and when there are national team engagements in FIFA and CAF activities. The road network to Namugongo matyrs shrine is still poor and narrow and circulation is therefore compromised. There is no gazzeted parking for pilgrims at the shrine, and that at the stadium is too small to accommodate the multitude of vehicles on the d-day. Rail transport is not regular sometimes working when there are big football matches at Namboole stadium. Public transport is in hands of the private sector and during peak seasons it is also a problem as its organisation is very poor and very expensive.

3.6.6 Development Goal and Objectives:

The overarching goals are: to contribute to the municipal's economic wealth, reduce poverty, conserve the environment, promote sustainable development and practice, foster national cohesion, and achieve greater GDP growth.

The following specific objectives are critical to achieve of the overall objective in the municipal council;

- Developing a positive and sought-after tourism brand identity and improving Kira's tourism image locally and abroad ensuring consistent application and promotion of a common brand identity by all public and private tourism stakeholders
- Developing promotional tools and materials as per the key markets and segments monitoring and evaluating.
- Improve and expand commercial tourism facilities and services
- Supporting the development of SMEs promoting and supporting investment in tourism plant and products.
- Building the human and institutional capacities of the sector to provide high quality services and maximising opportunities for local communities to participate in tourism.
- To improve coordination between the municipal council and private player in the tourism sector, and to increase the number of private players in the sector.
- To improve the levels of satisfaction of visitors to the municipality and therefore their experience
- To improve the ease of getting around the major attractions in the municipal council

To realise the objectives above, the following suggestions are put forward;

• Establish a craft centre in the municipality

a) Museum

- Museum at Anglican shrine should be improved and marketed so that it is visited all year around
- There should be a one mega museum that contains the facts about the Uganda martyrs but also the history of the three religions concerned here

b) Transport

- Government should implement plans for Mass transport means like Bus rapid transport, Light
 rail –metro, pedestrian walkways, Road furniture, and Water transport (Bukasa inland port) to
 improve on the easy of getting around the major attractions in the municipality ie Namugongo
 martyrs shrine and Mandela national stadium in Namboole. This should further reduce travel
 times and therefore make visiting the attractions here more rewarding and therefore
 competitive.
- Improve existing poor road access roads to and between some of the key tourist sites and the municipality should find funds and tarmac them
- Storied parking need to be established in many areas in Namugongo and other places to eradicate commotion and confusion during the peak seasons

c) Information centre

- Put in place well-maintained tourist information centre in the municipal council preferably at Namugongo martyrs shrine or Namboole stadium;
- Development of tourist stopover facilities within the municipality;
- Ensure proper coordination between public and private sector tourism industry and related stakeholders clearly defining the roles and functions of tourism institutions
- Promote effective stakeholder partnerships (public-private, public-public, private-local community, etc.)
- Providing reliable and credible data and information as a basis to inform planning and investment choices and enable performance monitoring of marketing and product development initiatives to be undertaken developing a regulatory system that promoted sustainable development, conserves the resources and ensures the quality of the tourism experience reducing and eliminating obstacles that may be deterring investment in tourism or tourists from visiting the district providing a safe, secure and healthy environment for tourists as well as for the local population that interact with tourists prioritizing actions that will help the local population derive benefits from tourism either directly by participating in the sector or indirectly by supplying the sector securing adequate levels of financing to implement the tourism strategy and plan.
- Establish Inter Ministerial Tourism Committee. International best practice suggests that an Inter-Ministerial Tourism Committee is critical to achieve the requisite level of coordination. In light of tourism's priority designation within the Uganda NDP, creation of such a committee would seem to be easily justifiable. According to key personnel within MTWH, the Inter-Ministerial Committee should ideally meet twice per year. Meetings could be chaired by the district chair person or MPs from the district. Technical sub-committees should be formed for key issues such as statistics collection, training, land access, marketing, road and air transport infrastructure, energy and ICT infrastructure,

tourism destination planning, and community tourism development. The sub-committees would be required to regularly report to the Inter-Ministerial Tourism Committee, which would undertake rigorous monitoring and evaluation of activities.

- Create TIMS and the system should include information in three categories: the country's tourism performance, its product inventory, and market intelligence.
- Performance information should include arrivals, expenditures, economic impacts, and satisfaction levels. This data can be generated through annual exit surveys and data
- Encourage Transport Options that Provide Easier and Less Expensive Access to the municipality.

d) Tourism signage

- The tourism authorities must formulate policy guidelines to develop a standardised tourism signage system in the municipality. Institutions that are likely to erect signs such as the Ministry of works, the Ministry of trade and tourism, the Ministry of the Environment, Science and Technology as well as private sector stakeholders wanting to direct tourists to their facilities would be consulted in the policy formulation so that an agreement can be reached on the types, design, colours and so on.
- Developing tourism signage, viewpoints and campsites in Kira municipal council (Plate 3.4). Government to formulate a tourism signage policy to develop a system based on international designs, general content and guidelines on standard symbols to be used around the country in compliance with UNWTO recommended the international tourism signs and symbols so that tourists are able to immediately recognise international standards that are meaningful. These are mainly three categories;
 - a) Directional and servive signage to guide tourists along the most appropriate routes during a journey, particularly where destinations and attractions are difficult to find (Plate 3.1). The following criteria should be taken into account:
 - Appropriate type, size, colour, material and lettering should be used as prescribed in the policy.
 - Only sites and attractions that actually exist should be indicated by a sign
 - Signs should be placed a good distance before a turn-off to the destination, site or attraction, perpendicular to the road so that they are noticed and assimilated and motorists do not miss the turn. A second sign can be placed at the turn off
 - Indicate distance to the destination, site or attraction
 - Signs should be clear and large enough using colors and fonts that are recognized internationally.
 - Tourist signs are generally on brown background with white lettering
 - Locations for directional signs should follow uniform traffic standards.

Approval must be obtained from the appropriate, responsible agencies prior to selecting/placing signs





Plate 3.1 Possible direction signage

Informational signs - on attraction or destination on the background, history and/or stories about the attraction or destination. The following criteria should be taken into account:

- To be positioned at attractions and tourist sites like viewpoints to explain what is being seen.
- Should be clear and consistent around the country with the same graphic background, colour, official Tourism logos (Uganda, regional and local), fonts, and materials used for the signs so that tourists will instantly recognise them.
- Informational or interpretive signs and panels must be protected from graffiti and vandalism with anti-graffiti overlay or film which also protects against UV (Figure 3.8).
- Typeface should not be condensed and lettering should be appropriate for the distance and speed at which a sign is viewed.





Plate 3.2: An example of an interpretive sign: a tourism map that can be placed at the entrance of the national park.

• Showcase the magnificent views that are in every tourism destination in Kira (Plate 3.5). Viewpoints must be prepared to encourage tourists to stop and admire spectacular views on their travels around the district. Investments may include levelling and gravelling car park areas at suitable locations although without compromising the visual and atmospheric quality of the site, erecting signs to explain what can be seen and building simple infrastructure to provides facilities and services for tourists. This would allow local entrepreneurs to establish small businesses such as catering services and limited retail facilities.

- Improve information dissemination: such as tourist suppliers, hotels and other accommodation facilities, adequate information on sightseeing tours being offered in the district.
- **Improve interpretation:** to change attitudes and behaviour, motivate and inspire, and make information meaningful and exciting.
- Improve and diversify theme-based tours: The travel trade should distinguish Group Inclusive Travel (GIT) and Special Interest Tourist (SIT) groups as their demands are different. Usually the tours should offer a variety of accommodation establishments from rustic type of accommodation (one or two nights) to four-star hotels, all included in one itinerary.
- Improve the quality of tourism facilities and services: such as training of ground tour
 operators in international business practices; in market research; product development and
 marketing.
- Improve the quality of tourism facilities and services: quality of services should not vary; tourists should be able to trust the star rating system and expect same level of quality at various star-rated hotels.; improve signage in the major towns and municipalities; improve shopping opportunities by providing information about shopping centres, boutiques and markets:
- Increase entertainment opportunities: such as evening entertainment for tourists and visitors alike or information about evening entertainment—other than bars and discos—is not easily available; theatre plays, music, and local football matches to be promoted to the tourists.
- Share our heritage and traditions: a route introducing local heritage and knowledge and connecting with local communities.
- Challenge yourself in Kira: concentrating on various outdoor activities such as swimming, biking, hill climbing, other sports like golf and football; family drive: routes should be named and packaged in order to help potential customers to recognize the product.
- **Develop holiday and leisure resort tourism; holiday** resorts along the lake in Kira; develop leisure tourism; urban resorts located close to large centres and key arrival points have the potential of attracting a large number of visitors, both excursionists and overnight visitors.; holiday resorts; local resorts to mainly attracting excursionists &day visitors from the local area and will serve as a means to distribute visitors more evenly with in the country and to balance seasonality; specialist resorts linked to an attraction.
- Recommended activities to be developed to increase the spending and length of stay at the resorts include:
 - Water sports activities in Bukasa
 - Packages to visit natural and scenic attractions as well as cultural attractions
 - Hiking and nature walking
 - community-based tourism –interactions with the local communities
 - cooking lessons (preparation of local dishes including trips to the markets)
 - Evening entertainment (e.g. shows/theatre plays, dinner cruises, festivals, drumming and dancing, storytelling around bonfire

i) Namboole stadium

- Introduce Picnic space
- Events and festivals
- Music concerts

- The stadium should attract and promote other sports activities like rugby, athletics, volley ball cricket etc
- Walking Paths
- Cycling Paths
- Outdoor Exercise Gym
- Outdoor Events
- Children's Playgrounds

ii) Guided Stadium Tours

- Types of Tours that could be developed at the stadium include
- Group Tours looking for something to do with your group? We provide the perfect experience for groups of all sizes and ages. All tours can be tailored to specific group needs.
- Student Tour targeting schools, youth clubs and coach operators on our stadium tours, allowing students the opportunity to witness first hand where their heroes prepare and play.
- PrivateTourstargeting the general public, to enjoy a guided tour of the stadium with friends and family. These tours provide a personal touch, giving the opportunity to ask plenty of questions of the tour guide
- Local authorities should provide certain basic infrastructure and facilities such as signposting of trails to facilitate outdoor activities, particularly those that have no direct commercial application but which generate economic benefit for the area.

iii) Focus on events and festivals

• As stated in the UNWTO hand book on product development, the organization of events and festivals meet several tourism objectives. They offset seasonal imbalances by holding events in the shoulder and off seasons; improve international perception and image of the municipality; attract visitor segments to whom the destination and other attractions do not appeal; connect landscape to lifestyle; attract media; bring the communities together; act as catalyst to stimulate infrastructure and business and to support other attractions; encourage first and repeat visits at facilities.

iv) Focus on MICE tourism (Conventional centre)

• Business conferences can be subdivided into director conferences, sales conferences, administration conferences, and training programmes. These conferences choose their location between holiday resorts, downtown hotels, suburban hotels, airport hotels, and conference centres. Generally speaking, holiday resorts are preferred conference destinations. Conference travel is a highly specialized business. It requires a systematic approach from the bidding stage to the organization of the conference. Conferences are usually run by professionals such as meeting planners, professional conference organizers and destination management companies.

For Kira to develop its conference tourism sector, a professional conference organising firm needs to start operation. Its activities would include:

- undertaking market research on future meetings and conferences
- keeping in constant contact with the companies based in Uganda and in other parts of East Africa
- Answering tenders, preparing bids and lobbying for major conferences on

- Conference centre(s) should be able to provide state-of-the art high-tech facilities including large screen displays, Power Point projection, simultaneous interpretation
 - facilities, and remote video conferencing facilities.
- Conference hotels of various starlevels should be connected to the conference and meeting facilities and have appropriate facilities for business people including broadband Internet in the rooms.
- Integrate conference facilities and services with the leisure and sightseeing products offered in the country–package.



Plate 3.4: Typical conference facilities

• Incentive travel; events and tours are organized by corporations to reward excellent performance of their employees, agents, and to enhance relations with their customers. Usually incentive travel is organized in groups. Typically, incentive travellers spend more money on activities, retail, and night life since the company pays their accommodation, and stay longer at the destination. Companies organizing incentive travel usually belong to high-profit industries —automobile industry, finance and banking, insurance, medicine, electrical, cosmetics etc.

v) Product improvement: development and planning approach

There is a very broad range of tourism products within Kira, each of which has its own specific context, requirements, constraints, opportunities and detailed issues. Rather than give a prescriptive list of standards and detailed guidelines in this document, it is more appropriate to help understand the key issues and design criteria that need to be taken into account when developing concepts, ideas, plans and proposals for tourist sites within Kira.

Whilst conventional design standards are most commonly applied to new development, it is also very important that existing tourist products are regularly monitored and evaluated to ensure that they are fit for purpose and are adapting to any changes in the development context and to appraise their relative success.

- Establish new and furnish existing Visitor information centres (VICs).
- Develop tourism master plan for the municipality. This should be done by the municipal council, ministry of tourism, the religious sects concerned and the general public
- Expand Namugongo shrine area to accommodate issues like private parking, information centre, craft centre, bars, restaurants and green recreation centres

vi) Accommodation

- Eliminate the shortage of affordable quality accommodation capacity in and around the Municipality;
- Diversify accommodation facilities in the municipal council E.g. community campground
- Hostels should be encouraged in and around Namugongo. Take a leaf from Back packers camping ground in Wakaliga Lubaga division

- Private homes should provide bed and breakfast services in their homes during peak seasons around Namugongo
- Municipality should plan and gazette area for bars, night clubs and restaurants and other entertainment centres i.e block shopping centres around, Kireka, Bweyogerere, Nalya and Namugongo areas
- The municipal council should lobby and give incentives to attract private sector in to the area to establish more Hotels and lodging facilities

vii) Beautification of the streets

- The municipality should name all the roads and streets in the town
- Plant all the major roads with in the municipality with Trees for example kireka Kyaliwajjala road, nalya kyaliwajjala road, Kyaliwajjala kira road, jinja high way and others
- All roads leading to the major attractions in the municipality should have defined walkways

viii) Solid waste facilities

The beauty of any place is defined by the way it handles its solid waste. Kira municipality has a lot to do in this regard,

- Indiscriminate dumping should be discouraged at all cost
- Gazette areas for solid waste collection
- Furnish hot spots with solid waste future like skips, curbs and empty them as soon as they full.

ix) Recreation and Green spaces

- These should be established in the municipality example mayor's gardens in every division of the municipality
- Green parks every parish of the municipality
- Children amusement parks a public one could be established at Namboole stadium as private one like one at time to play in Najjera, children village at quality shoopers in Kyaliwajala are expensive.



Plate 3.5: An example of a kids Park

x) Marketing strategy

- Promotion strategy: Launch a Public Relations (PR) campaign using press releases, information briefings, hosting travel and general feature journalists and TV film crews, celebrity endorsements (e.g. Musicians) and publicity events.
- Travel trade promotion strategy: Conduct advertising and promotion for the travel trade including familiarisation tours, trade shows/fairs, tour operator/travel agent presentations, tour operator support, and trade advertising. Organise:
- Familiarisation trips (fam tours) for travel trade representatives
- Trade shows/fairs
- Tour operator/travel agent presentations
- Tour operator support
- Trade advertising
- Advertising and promotion strategy for the general public: Conduct advertising and promotion for the public. Develop:

- Videos
- Social media
- Website
- Consumer advertising and direct mail

xi) Develop city tourism in Kira:

- Take tourism into consideration in town planning
- Improve the quality of tourism facilities and services
- Improve signage in the major trading centers
- adopt proper numbering of houses and improve/street names and directions
- Improve shopping opportunities by providing information about shopping centres, boutiques and markets
- Increase entertainment opportunities
- Provide information about city tours in hotels
- Consider attracting investor(s) to set up a boutique hotel chain in various divisions and townships around the municipality
- Improve information dissemination within the towns

3.6.7 Risks

- The perception of the religious leaders who are hesitant to turn the sites into tourist attractions
- Individualism, this is the biggest risk as the sect concerned each want to develop its own site their by destroying the appeal of the site
- Government commitment to developing the site into international tourist site
- Lack of funds to establish the needed infrastructure and ancillary services to increase on the appeal of the site
- Attitudes of the locals around the site and their willingness to accept compensation for their land in order to expand the shrine area

3.7 Report on Local Economic Development

Uganda's National Development Plan (NDP) aims to improve employment levels and human development and gender equality indicators among other goals. The plan outlines the Government's intention to create quality employment opportunities and improve the labour force distribution in the country. Labour statistics are vital in the measurement of economic growth and development of a nation. These statistics furnish an indicator of the number of persons who, during a specified period, contributed to the production of goods and services in the country. Labour statistics support analysis of the relationships between employment, income and other socio-economic variables and is essential to plan and monitor employment, training and similar types of programmes.

Economic development is central to regional and national growth and development. In this section, the consultant discusses ways in which Kira Physical Development Plan supports economic growth in line with national priorities and objectives as stipulated in the Vision 2040 and the National Development Plan

3.7.1 Key Findings and Their Implications

According to census of Business Enterprises about 70% of the enumerated businesses were in the informal sector in the whole country, while the GKMA Economic Development Strategy puts informality at 57% in the GKMA. These figure may seem to be high especially when compared to

the GKMA Framework figure of 20%, however, the Kira Five Year Municipal Plan 2015 - 20 shows that in one study carried out in the community, 50% of the respondents had brick laying as their main source of income. It was also established from the consultative meetings that a good number of residents of Kira Municipality were engaged in informal trade and most of these businesses were operating in an informal manner.

Majority of those engaged in the informal sector were women and youth whose presence is slowly gaining ground in the entire municipality. It is further supported by the household survey which noted that a reasonable proportion of the population obtain income by providing casual and manual labour (5.3%). According to the GKMA Economic Development Strategy, 93% of informal enterprises would be below the international poverty line of \$2 a day, if this business was their only source of livelihood. Also, informal enterprises are clustered near consumer centers because they depend on this for their livelihood.

The business firms are usually small business with limited amount of capital and according to the Census of business enterprises 73% of them in Kira have annual turnover of less than UGX.5 million; the Role of City Governments in Economic Development and Growth of Kampala report, by the world bank notes that 69% of the informal sector businesses in the GKMA, receive an annual turnover of less than ten millions. According to the GKMA Economic Development Strategy, a key constraint for informal enterprises is finding suitable work premises, located near customers; such location matters for firm success in the informal sector. The report further reveals that firms with permanent establishments are more likely to see increased performance and to formalize.

It was further established through the consultative meetings that the municipality does not have a well streamlined legal framework to grant support and regulation to this sector, nor is it given due consideration in both the economic and physical development planning processes as the GKMA Economic Development Strategy suggests, because in most cases it is deemed as an illegality, yet contributes to improvement of household livelihood and the national GDP.

Uganda is facing an increasing challenge to productively employ its fast growing and mainly young, literate and increasingly urban population. However, an even bigger challenge for the policy makers in Uganda is to manage the entire labour force's transition from predominant involvement in low productivity subsistence agriculture to increased involvement in higher productivity manufacturing and services sectors. In the urban areas the challenges lies in transforming from informal low productivity sector to higher more productive sectors. This will require ensuring that the labour force has the appropriate skills, which allow firms to operate at a higher level of productivity.

According to Uganda Economic Update; Jobs Key to Prosperity, 2013; The skilling of Uganda's labour force will have to address a twofold challenge, involving: (1) the provision of foundation skills through high quality primary education and through the achievement of a higher rate of transition to secondary education; and (2) the provision of the requisite skills to support the transformation of the economy in a manner that ensures a high level of inclusion. In addition to current government efforts to improve education and the skilling of Uganda's labour force, the private sector and local governments must be encouraged to participate in skilling workers, as no education system can produce the specific skills that are needed by particular industries.

The same report mentioned above also noted that the juakalis (artisans) and household-based

enterprises employ half of the labor force outside agriculture. Therefore authorities, particularly at the local level and especially in urban areas, must see the informal firms as a means to create employment and generate revenue, and not as a burden. The sector can raise productivity and provide better jobs if the operators have access to capital, raising their technical and entrepreneurial skills and creating an enabling working environment.

The scale of the challenge facing Kira Municipality is indicated by the rate at which Kira Municipal population is growing, having grown from only 141,000people in 2002, to more than doubling to 317,000people in 2014(a period of twelve years) and currently projected at 417,000 people with a high urbanisation rate of 10.4%. The resultant effect is the lack of order and low levels and scale of economic activity and otherwise. This population is projected to grow to 4,153,000 by 2040, the planning period.

The challenge is to ensure the provision of basic and appropriate employment on the appropriate scale and at the appropriate locations within the entire municipality to pull the population out of poverty and create wealth. This will require significant intervention in the comparative economic advantages of the Municipality, the workforce and the local economy to systematically reduce unemployment, extend education, training, apprenticeship, entrepreneurship and expand the productive and the formal sectors hence "creating the wealth".

In the report, the Role of City Governments in Economic Development of Greater Kampala Report, World Bank 2017, firms in Greater Kampala face numerous obstacles to grow their businesses. The report recommends that KCCA and Metro Local Governments (Kira Municipality inclusive) can play an important role to the growth of these firms by provision of enterprise services and support. These are in a unique position to provide the business community with information on affordable finance and taxation guidance. The report also noted that, while the vast majority of informal firms do not have great potential to grow, they provide many of GKMA's poorest a livelihood. Reduction of the informal sector will rely on the creation of more formal jobs in tradable sectors of the economy and supporting informal workers to find opportunities for formal wage employment if they want to.

Therefore, the Local Economic Development objective of this plan is: To stimulate economic opportunities, investment and employment for Sustainable growth and Wealth creation in Kira Municipality.

3.7.2 Proposals to enhance economic growth

This plan notes that the GKMA Framework report, the Economic Development Strategy report and the Role of City Governments in Economic Development and Growth of Kampala report, emphasise support to manufacturing and tradable service sectors to bring about transformation. Kira has been observed to have limited space for further industrialisation besides sharing Namanve industrial park with Mukono municipality. This plan also notes that the largest sector in Kira municipality is the informal sector which provides livelihood for the urban poor.

Therefore, this plan emphasises support to the informal sector enterprises which willensure continued livelihoods to the urban poor but also improve productivity and transit to higher quality jobs. A major constraint for informal enterprises is finding suitable work premises, located near customers, which matters for firm success in the informal sector. This plan therefore provides for artisan parks in Najjeera and Butto (with common user facilities) as per the GKMA Economic

Development Strategy, markets and commercial centres (with markets and shopping centres) in the local centres, where space will be provided for informal enterprises.

Kira to change role to enabler than regulator and controller. Local governments view themselves as regulators of business and economic activity and there is no legal framework to support informal sector. However, it is important for the local governments to realize the importance of the informal sector and its contribution to people's livelihoods, GDP and employment. This will require local governments to view themselves as enablers and support this sector instead of witch hunting it.

Therefore, this plan agrees with NPA's Greater Kampala Metropolitan Integrated Urban Development Program (Gkma-Iudp)proposals.Kira Municipality will require to open One Stop Business centre/including recreation, skilling and incubation center, artisan parks for youth. This will be constructed at Najjeera artisan centre and Butto youth development and commercial centre.At the centre, the business sector can be supported with a good number of activities, which would include;

- Assisting business entities to develop business plans which can attract financing from the financial institutions, but also advice on where to access cheaper business credit.
- Giving support to enhance business entrepreneurship, management skills; Market analysis, products improvement to suit the market and business competitiveness. This will enable growth of existing businesses but also encourage the starting up new ones as they manage better their businesses and produce products suiting the market.

Improve public private dialogue. One of the main issues in consultative meetings was limited collaboration between the Municipal authorities and her stakeholders, especially the business community. Therefore, the municipality will have to work to improve this. This could be done by holding municipal hall meetings to disseminate the kinds of business services which Kira municipality can provide and will provide in the future and listen to the issues and constraints facing the private sector. This may help reduce the mistrust of government and the business community, but will help prepare plans which are more relevant to the business community and other stakeholders.

Investment promotion. As already noted, spatial analysis shows Kira may not have much space for expansion of manufacturing as a better desired economic sector. However, Kira can enhance investment in other tradable service activities to support local economic development. Such services would include construction (which seems to be gain as economic activity), transportation, Forwarding and Clearing (as the Bukasa Inland Port begins operations), Insurance and Banking. The business centre/s could play a major role by promoting Kira as an attractive investment location, but also identify potential areas for public private partnerships (PPPs). Partnering with business associations will provide business engagement centre services. It is also noted that there are already strong business associations (such as Private Sector Foundation) with whom Kira Municipality can partner to promote investment in the Municipality.

Providing information on skill gaps. According to the Role of City Governments in Economic Development of Greater Kampala Report, World Bank 2017, skilled labour was a constraint to Mediumand large sized firms. These were reported have difficulties in finding and recruiting technically skilled employees. A business engagement centre can help improve public dissemination of information regarding skill gaps. The skills development section of the centre can then identify other private sector partners who can be involved in training to ensure that the

required skills can be imparted to the population especially the youth to suit the employers' requirements.

The GKMA Framework, the Economic development strategy and the Wakiso PDP plan propose manufacturing as one of the economic sectors to foster development in the municipality. This plan notes that there is not much space in Kira to encourage further industrial construction. Therefore the plan proposes to strengthen manufacturing in the existing Namanve industrial park, part of which is in Kira Municipality. However, manufacturing in Kira could be less focused on agro processing, and be more focused on other manufacturing such as Chemicals, agro chemical production and pharmaceuticals.

This plan provides for light industrial areas, commercial areas and commercial centres as a way of promoting employment and in line with GKMA which proposed different order service and employment centres and the Economic Development strategy which proposes providing support to informal sector, the youth, and economic clusters. The municipality will Support the private sector in technical and entrepreneurial skills development; and credit access at the business engagement centres as already proposed. This will include mobilising and training to acquire the necessary knowledge and skills.

The GKMA plan and Wakiso PDP proposes commercial agriculture, although the GKMA Economic Development Strategy is silent on agriculture but notes that some of the areas are still agricultural in the GKMA. However, the consultant is of the view that agriculture is still key activity in the GKMA given its contribution to livelihoods in terms of food security and household income provision, since about 15% of the households had agriculture as the main source of income; the statistics available indicate a good number of farmers as involved in mushroom and leafy vegetable growing, rearing of exotic breeds of animals was more than involvement in local breeds implying involvement in commercial farming by the population. This plan therefore, proposes the Modernisation and transformation of Agriculture. Statistics from other GKMA areas indicate that 58% of the population involved in other employment is involved in agriculture to subsidise their incomes and also for food security reasons. Nevertheless, it should be modernized and transformed to increase production and productivity and contribute to improved incomes and wealth creation.

The GKMA framework proposes tourism as one of the major sectors to foster development, while the Economic Development strategy proposes the GKMA as major tourism centre. The Wakiso PDP identifies tourism as a big potential in Wakiso district. This plan hence proposes the Support and development of tourism in the Municipality. The Municipality has some tourism items including Namugongo Martyrs shrine, Mandela national Sports Stadium Namboole and Kabaka's palace. These will be developed further by introducing other tourism facilities and attractions agreeable to the religious groups involved. The attractions will include; major centre for the swimming sport, water games and water fountains, these are important to keep the place busy throughout the year.

Tourism was identified as big sector in the Wakiso district PDP; hence it would be important for the municipality to partner with the district and other local governments in the metropolitan area to boost tourism. As part of this plan a detailed master Tourism Plan for Namugongo Martyrs' Shrines has been developed to stimulate tourism further in this municipality. It is expected that growth in tourism will contribute to employment and support others sectors such as agriculture through agro processing and food consumption. This will enhance the population's livelihoods,

reduce poverty and create wealth. Support will be given and partnerships encouraged and supported for tourism boosting. Kira Municipality can partner with other stakeholders such as the district, private sector and religious institutions to boost tourism. Other partners will be involved who can help identify the business ventures in tourism so as to advise the population to invest in such ventures, through the Business Engagement Centre as already proposed.

With other partners, the municipality will mobilise the population, civil society and the private sector to invest and participate in tourism. It is therefore imperative for the municipality to mobilise the population and communities to engage in tourism income generation activities such as crafts making, hotel improvement and construction; food preparation and processing. This will contribute to employment creation especially for women and boost household incomes and improve livelihoods.

Both the GKMA Framework and Economic Strategy and the Wakiso PDP highlight the need to form associations and economic clustering among producers especially the informal sector. This plan proposes the Strengthening and promotion of cooperatives and associations. These can be avenues of saving, funding development, boost production, and create wealth in the municipal economy but also reduce on the informality and poverty. The population involved in all economic activities will be mobilized and trained to form and manage associations. Associations play a major role in empowering members through access to economic and social services, namely financial services through SACCOs, delivery of inputs to producers, access to markets, enhancing the bargaining power of small scale producers, imparting skills for better production and marketing services, advocate for rights through collective bargaining and dialogue. Associations will facilitate members to acquire mechanization and carry out research, innovation and encourage creativity among its members.

Kira Municipality will tap into its strategic location being the first local government along the busiest trading route to/from the only and capital city with all roads to this busy route roads radiating from Kampala to other areas of Uganda and even outside, its location in the GKMA and the high population due to urbanisation and foster development in the municipality. Kira will encourage create conducive business environment by supporting the informal sector strengthen manufacturing, and promote tourism, which will strengthen service industry further and hence contribute to wealth creation and development.

3.7.3 Risks

- Impediment to access finance for business development and business needs.
- Inability of Kira Municipality to measure up to the new challenging role of enabler hence spear heading the formation of one stop business engagement centres.
- Failure to develop adequate power, transport infrastructure and reduce corruption so as to reduce cost of business operation will discourage necessary private sector investment.
- If Uganda's current poor global rating for "ease of doing business" does not improve, private investment will go elsewhere.

3.8 Report on Settlement and Housing Development

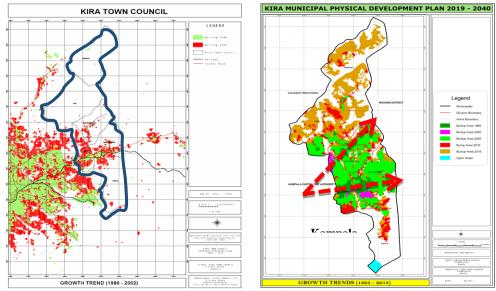
3.8.1 Settlement patterns

The primary structure depicted from the city central core that reflects nucleated settlement but eventually spreading radially. The MC settlement pattern is concentrated along one of the key central radial spines from the city core. Most developments, settlements, economic activities, services and amenities are concentrated along Jinja road. Generally the MC settlement pattern in the district bears influence and dictates from;

- Topography and drainage
- City of Kampala
- Influence of in-migration
- History, cultural and administrative dictates

The water tables along the main swamps are quite high and are suitable for sinking shallow wells which are commonly used as sources of water for domestic use especially in the less urbanized areas of Kimwanyi and Kyaliwajala.

The fast urbanization of Kira that started around 1980's was a response from the fast urbanizing city of Kampala. It was also attributed to the development control procedures in Kampala city which were conceived as prohibitive to many potential developers. Developers rushed to Kira which was considered being at the periphery of the conceived 10-mile radius of Kampala's growth (Map 3.6). In this area, development control seemed not as strict as in Kampala and thus non-prohibitive for development and consequently many developers rushed to Kira area.



Map 3.6: Influence of Kampala on the growth of Kira

The high to middle income households started looking for better, bigger, aesthetically appealing and environmentally friendly locations. Being situated near Kampala with a very attractive tenure (Private Milo), Kira became the victim of sub-urbanization from Kampala With the above, the city pressure can vividly be felt in the immediate outlying areas to the city boundary. In this area, the development pattern has tended to be concentric from the City establishment that acts as the main core. Physical development (mainly residential) extends into Kira MC radiating along Jinja road, dissect and extend through the MC.

3.8.1.1 Structure and Pattern

The settlement pattern in the Municipality has been majorly influenced by sprawl and organic development trends and growth originating from Kampala City. Urban sprawl a pattern of uncontrolled developments is increasingly becoming a common feature of the built environment in the Municipality resulting into an organic characteristics of growth arising out of the increasing demand for the peripheral land for housing and investment. The expansion of developments into the potential agricultural land has resulted into a decline in the agricultural or food production of those areas. Because of the development pressures arising out of the deficiencies experienced in Kampala City in availing affordable housing options coupled with the exorbitant land prices, there has been a significant growth and expansion of settlements in the various parts of the Municipality originating from the urban corridor concentrations along the major traffic corridors of Kampala-Jinja Road, Nalya-Seeta Road, Ntinda –Najjera Road, Kira – Kasangati Road etc and other secondary and community roads. In relation to above, the settlement structure has been defined by the development growth pattern which manifested in form of linear settlement, centrifugal settlement and leapfrog or scattered settlements.

In specific terms, the urbanization process in Kira Municipality is associated with a variety of planning and environmental problems which include; location and placement building violations in terms of setback, skyline, frontages and plot coverage, mixed incompatible uses due to misguided land uses, pollution, exorbitant land cost, wetland and forest encroachment, road reserve encroachment, inadequate housing conditions especially in the informal settlements and slums, unbalanced infrastructure supply and scattered developments. As a result, the Municipality has a number of informal settlements especially in the local growth centres of Kitto, Kasokoso, Bukasa and Namanve among others. The rural suburbs, on the other hand, are generally of low density residential area with diminishing acreage of farm land. Additionally, there has been a continuing growth of both formal and informal sectors within the various areas of the Municipality and those fronting the major traffic corridors with industrial use emerging in Kireka and Bweyogere due to better access to and connection to the major transportation routes. For instance, industrial use is emerging at Butto Bweyogere, Kireka among others.

In conclusion, generally the municipality does not present a uniform settlement pattern, the existing pattern is unplanned and organic often influenced by the private sector and individuals especially the real estate developers and there is no uniform pattern of development growth hence un-organized. The prevailing planning and settlement challenges such as poor application of planning standards, location and placement building placements, mixed incompatible uses though not easily noticed due to good appearance of the houses, encroachment on the ecologically sensitive zones are attributed to the failure by the municipality to adequately implement the Municipal Physical Development Plan which is bound to expire soon. The study however, noted that the lack of a sustainable settlement pattern was due to inadequate institutional capacity and preparedness to cause a successful implementation of the Physical Plan.

Therefore, the existing urban form of the Municipality is unsustainable and likely to become constrained if uncontrolled developments continued to take place in a haphazard and scattered manner with adequate control and guidance. The settlement pattern discussed above would increasingly become inappropriate as the Municipality becomes fully urbanized. It is hoped that the review of the Physical Development Plan will among other factors be able to propose measures that will attempt to control developments within the already developed urban areas, along and around the major traffic corridors with a view of safeguarding land against incompatible haphazard developments. In addition, it will enable identification of suitable and

priority areas for possible urban consolidation, intensification and densification to enable provision of different development needs in undeveloped areas of the Municipality.

3.8.1.2 Extent of Informal Settlements

The Sustainable Development Goals express a wide recognition of the spatial dimension of development. This is clearly translated in the incorporation of Sustainable Development Goal 11 (SDG11) "Make cities and human settlement inclusive, safe, resilient and sustainable". This review of the PDP was therefore a response to the Sustainable Development Goal 11 which recognizes informal settlements as a physical settlement issue, which needs to be faced and this calls for coordinated proposal and actions of the PDP related to incremental upgrading of the informal settlements and slums in the Municipality. The informality embedded in the current land market owing to the ongoing urbanization process has made acquisition and development of land substantially informal, most of the activities being done outside the formal procedures thus encouraging the creation of informal settlements and slums.

The growth of informal settlements needs to be reduced and eventually prevented through sound planning responsiveness and reforms in the land market that increase security of tenure as well as formulation of physical plans and building regulations. Rapid urbanization process resulting into a mismatch between the influx of people and employment opportunities if not guided early and managed often encourages the proliferation of informal settlements and settlement in unsuitable areas such as the ecologically sensitive areas and flood prone areas.



Kireka B, C, D and Kasokoso residential areas;

- Organic growth on very prime and central location within proximity of KCCA
- No infrastructural development
- No services

3.8.1.3 Challenges for Settlement Structure and Pattern in Kira

The settlement pattern of the municipality presents a number of significant challenges to future urban development process and these include: Urban sprawl and low densities, high levels of spatial inequality, fragmentation of settlement disconnections, limited diversity and inefficient land use patterns and increasing pressure on the natural environment among others.

Unplanned dispersal of Land Uses due to urban sprawl: The urban growth in Kira Municipality has not occurred in a compact manner despite the fact that over 20 years the municipality has been developing very fast at a high rate of development. However, Kira has become denser than ever before but has grown in a sprawled manner. This is due to weak institutional capacity to implement the existing Physical Development Plan in order to manage the urbanization process in a more sustainable manner. The land tenure which is predominantly private mailo and the desire to own a private house (owner-occupier) coupled with the high land values in Kampala City, has also contributed to the urban sprawl thus creating low densities in a more spread fashion into the

virgin areas of the municipality. The uncontrolled urbanization due to sprawl and unplanned dispersal of land uses has placed a large portion of the municipal population in the peripheral areas. This spread of development has not been matched with significant corresponding infrastructure and social facilities. However, due to the existence of the physical development plan, there has been dispersed and piecemeal planning growth in some parts of the municipality in form of the various private real estate developments, often influenced by the car oriented developments and erection of high rise rented housing (apartments) on the periphery of the municipality. The study has however noted that most of the private real estates have been developed with inferior and inadequate planning standards in terms of plot sizes, road width, drainage and sanitation details and general lack of supportive facilities required in a neighbourhood.

As such, densities and concentrations of people, buildings and jobs have not adequately been developed to support a sustainable municipality. There has been however an informal diversification and densification of certain parts of the municipality such as Kireka and Bweyogere, Najjera and Kyaliwajjala.

A population density analysis shows that although the density has increased during the last twelve years from 1,476 people per square kilometer to 3,324 people per square kilometer, the figure when compared to the international benchmark and the best practices, Kira's density remains low because successful compact urban centers display a much higher densities. The new development areas still have relatively lower average residential densities. These new developments are focused on private vehicle and are located in areas with limited access to public transport infrastructure. The residents located in these areas since the land was vacant and cheaper than That in Kampala city and they were ready commute to Kampala city where the majority of them work.

Analysis of the prevailing pattern in the land use change indicates residential development as the largest land use but lacked integration of other required uses such as commercial, employment centres among others. Residents in the peripheral areas such as Kijjabijjo, Kimwanyi, and Nakwero etc have to drive to nearby commercial areas to access shopping facilities. Analysis on the type of development applications also indicates that residential development applications accounted for more than 80% of the applications submitted annually and almost all applications are approved. This urban sprawled development has therefore distorted the urban form and resulted into low densities of single use settlements which impacts on infrastructure need and culminates into higher costs to the households and business community. The consequences of sprawl for the municipality if not effectively controlled and managed will include; increased costs of service delivery in waste collection, water, roadnetwork etc. Best practices indicate that compact, mixed use medium to high density settlements are more sustainable in the use of resources.

Development Settlement inequality: Inequality and informality remain a defining characteristic of the settlement pattern of Kira Municipality. The housing (residential) density is higher than the employment density (commercial areas). As earlier observed, the study further noted that commercial development does not correspond to the intensity of residential areas, requiring residents to commute to commercial areas in order to access shopping facilities and employment areas. This therefore implies that the shopping and employment areas are far way from some residential neighbourhoods and the ratio of housing to commercial requirement is quite high. Kira Municipality consists of largely residential developments that lack integration of other required

supportive uses and facilities such as commercial, and industrial. Majority of the employment in the concentrated urban trading centres such as Kireka, Bweyogere, Najjera, and Kyaliwajjala was informal associated with a lot of Jua-Kali activities. These areas of the highest population densities have the lowest concentration of formal employment. However, formal employment was emerging in some urban centres such as Kira, Bweyogerere and Kyaliwajala due to proliferation of financial institutions such as commercial banks and micro-finance institutions, hotels, Nambole sports complex, industrial and factory establishments especially in Kireka and Bweyogerere, health facilities and other office space for government and private sector business. The existence of informality in the concentrated urban centres, high population density areas with the lowest formal employment, illustrates an employment and housing mismatch in the municipal's settlement spatial urban form, which is a significant contribution to spatial inequality.

Fragmentation of settlement urban form: Over 85% of settlement pattern in Kira Municipality is unplanned hence informal. The informal settlements unlike in other parts of world, is composed of a mix of low, middle and high income earners.

However, there are informal areas such as Kasokoso, Kitto and Namataba among others which have degenerated further into slums commonly housing the low income earners (the urban poor). On the other hand, Kira Municipal Council has formal settlements unfortunately which accounts for a smaller percentage. Such formal areas include: Nalya Estates Area, Namugongo Akright among others. These areas have an element of organized settlement pattern, roads of the right standards, central sewer sanitation management, good drainage network and well aligned access roads.

The informal settlements which forms the bulk of the Kira's planning area, lack significant infrastructure and inadequate and unplanned roads with poor drainage and lack central sewer management. Informal settlements/slums have located mainly in unsuitable areas while formal settlements in more suitable areas. Unsuitable areas include: Kitto settlement areas that has invaded the wetland, forest reserves and part of the Namanve which commonly known as the "Lost City". The residents have turned this area into developable land thereby creating an informal settlement /slum. The wetland that has been encroached on forms the wetland belt of Namanve, Bukasa and Butabika. Kasokoso is another settlement which is highly informal and slummy partly located on a hill and a low lying area. It has a high rate of informality and residents have encroached on land, part of it is public, a wetland and another part is a forest reserve under National Forestry Authority (NFA). The study however noted that the hardcore informal settlements/slums have developed more on public land and on ecologically sensitive areas that are unsuitable for development. More so, it was observed that the "lost city" (areas of Bukasa, Namataba, Kasokoso etc) has a high quality land over-looking Lake Victoria and Bukasa Port and if planning had taken place, these areas would be ideal for the high income people.

The issues of spatial fragmentation in the settlement from and spatial disconnect are evident and are as a result of haphazard pattern of uncontrolled urban development. The duality of low and high income housing has a major implication on the future planning of the Municipality and therefore distorts the largest part of the urban system. Education and public facilities are equally dispersed, although some concentration, do exist especially in the heavily built-up areas.

Increasing pressure on the natural resource systems: The natural resource system provides many vital and valuable environment services in Kira Municipality and these include among others wetlands, water drainage streams, forest reserves and Lake Victoria. These areas are

essential in the function of the municipality and where there are degraded, they need to be replaced or restored to their original status which is normally at a colossal sum of money. Out of the 9,536.2 Ha of the Kira Municipality, only 1,859.9 Ha (19.53%) consists of forest reserve and wetlands. This implies that there is a total of 1,859.9 Ha of areas of ecological importance in the municipality which must be jealously conserved. There is a rapid loss and fragmentation of the natural resource and loss of vegetative cover due to the high development demand arising from the rapid urbanization process. Therefore there is need to respond appropriately to the development pressure within the municipality by demarcating and delineating the extent of all the ecological zones for the purposes of protection and conservation. The increasing cost of and in the municipality is slowly and gradually pushing the low income people to unsuitable areas for development such as the wetlands and forest reserves. Such areas that have degraded the wetland and forest reserves for development include: the Nalya Valley (Between Nalya and Kyaliwajjala) where the wetland has been reclaimed. Generally, the study observes a land availability challenge due to ever increasing cost of land due to its proximity to Kampala and other employment centres. It is therefore important to ensure that the available natural resources systems are considered as assets for integration in future urban development as land unavailable for development. This integration is critical in the context of climate change and the need for resilience in the future municipality.

3.8.2 Housing Development

Kira Municipality's population increased and is forecast to continue increasing. An estimated 4,193,343 persons are needed to be accommodated between 2018 and by around 2040 by the municipality. The projected population will inevitably result into increased demand of land for housing which is a major component in urban development. The distribution of new residential areas therefore has a key influence on the scale and location of population growth and concentrations and on the demand for services and other facilities. As such, the high population increase and rapid in-migration are putting considerable pressure on provision of housing and basic services in Kira Municipality due to its proximity to the Kampala city.

The nature of housing in the municipality was generally satisfactory as majority (92%) of the housing shelter was permanent and durable. There was an improvement in quality of construction due to the increased use of permanent quality building materials for wall, floor and roof. The study revealed that 91.2% of the houses were roofed with iron sheets and 4.9% with roofing tiles. Materials for construction were mostly burnt bricks (79.1%) for walls and (91.2%) cement screed for floor. A significant portion of the population is therefore protected from the extremes of climatic conditions such as rain, heat, cold and humidity among others. However, there will be significant financial outlays for public acquisition of land for infrastructure and service facilities since majority of structures were permanent. However, 56.7% of the house structures were bungalows, tenements (15.1%) and 20.5% and 7.8% were semi-detached and flats respectively. There is however a growth in the flats and apartments especially in Kira Division. Further analysis indicated that majority (81.6%) of households in formal employment (salary/wage earners and pensioners) were residing in bungalow houses whereas majority (48.6%) in informal employment (casual labourer) resided in tenements. This therefore indicated a positive correlation between the income levels and the housing quality. The implication is that in order to ensure affordable and decent housing for all categories people, income levels needed to be improved.

Majority of the occupants were tenants (48.9%) whereas owner-occupiers were 48.7%. This is an indicator of predominance of rental housing in Kira Municipality manifested in the various flats and apartments dotted around the municipality. The predominance of tenants signifies a transient

and unstable population which has serious implications on service provision as it affects planning and distorts the long term planning framework. On the other hand, rental housing is a taxable asset by both the Central Government and the Local authorities in terms of rental income tax and property rates respectively. As such, the taxation of rental housing will go a long way in supporting local revenue collection for improved service delivery. Considering the age of the structures, majority (76.4%) were constructed a decade ago which implies that majority are recent and still in good condition. The study further shows that in the last decade, lots of new construction work particularly residential housing was delivered hence depicting a high rate of development. Majority (48.2%) were customary (Kibanja) household tenure which implies insecurity of tenure and such households were mainly located in Bukasa, Kasokoso, Kitto, Namataba among other areas where limited ownership rights over the land was noted. As such, lack of security of tenure was responsible for the low quality housing in terms of construction and placement in those areas.

These study findings point to the importance of quality housing in terms of space but not materials. Since most houses are permanent, the problem of quality is then space which is related to planning and lay out of housing in the area. Although, the houses were permanent, majority were unauthorized and constructed on substandard plots often without proper accessibility. The study noted gross violation of planning and building regulations and standards in terms of plot size, plot coverage, observance of setbacks and frontages, thus creating a mass of informal settlements.

Quality of housing declined due to occupancy and dwelling placement violations. Some plots were over-developed with high plot coverage, setbacks were not observed and construction on road reserves was also evident in the built-up areas. For example, nearly a quarter (22.5%) of plots in the municipality was overbuilt with plot coverage of over 70% thus implying a significant level of congestion in the informal settlement areas and slums. Accordingly, 15.1% of houses in municipality were tenements and Bweyogerere Division had a significant share of single roomed units. The high number of single rooms is an indicator of inadequate space for shelter and also shows that dwelling units were overcrowded with more persons sharing a one roomed unit used for cooking, sleeping, and other household activities.

With regard to housing services, majority (89.8%) of households had access to safe water in terms of waterborne connections and public stand taps whereas 72.4% depended on pit-latrines and VIPs as the common method of human excreta disposal. A third of households shared pit-latrines and most of them were of low quality standard especially in the informal settlement and slums. The Plan proposes providing sewers and lagoons to improve sewage management especially in the high density residential and informal areas. Use of non-conventional methods such as pit latrines is not acceptable in urban areas. Three quarters (74.4%) of households disposed solid waste by burning and open dumping a primitive way of solid waste management. Charcoal was a commonly used source of energy for cooking and electricity for lighting at 89.1% and 92.7% respectively. Charcoal has a lot of effects on the environment and needs to be gradually be replaced with alternative sources of energy hence need for deeper popularisation of alternative sources of energy for especially for cooking. There is a deficiency in provision and access to basic housing services and with this rate of urbanization, it's important to plan for infrastructure and service facilities and where possible be provided in advance for areas showing high potential growth.

Majority of the existing housing stock is delivered by informal sector and built by private individuals using largely unregistered contractors. The formal housing delivery system is tailored on housing the middle and high class population leaving out the majority urban poor. The UN-HABITAT Housing Report 2010, reported that the average mortgage loan size issued by commercial banks was between UGX60 and UGX80 million (US \$27,900 – \$37,200), amounts that were far too high for low-income earners and that these commercial banks required an individual to earn at least UShs1 million (US\$ 465) per month in order to be eligible for a mortgage. Yet, the monthly incomes statistics of the surveyed households in Kira Municipality indicated that over 40% of the households earned less than UGX 550,000/= (USD 145) per month.

This implies that a significant portion of the population in Kira Municipality could not afford a housing mortgage in order to secure better housing. As earlier observed, the urban poor could not afford to purchase land let alone the completed housing units. As such, there is an increased supply of tenement units for the urban poor in the informal settlements and slums and growth of flats and apartment for the middle class population. Consequently, this has led to emergence of informal land market which has created and encouraged proliferation of informal settlements in many parts of the municipality. The study however observed that the informal housing in the informal settlement areas should be targeted for planning intervention to permit incremental upgrading without unnecessary displacement or evictions in order to have a more tolerable living environment. Renting has also become common among the middle and high income population for the well-built flats and apartments while the urban poor opt for the tenements built in the informal settlements. Formal housing delivery in the municipality is limited and provided by National Housing and Construction Ltd (NHCC) which is a government parastatal body) and other private contractors or individuals. For example, Nalya Housing Estates were built by NHCC while Namugongo Akright Housing Estate by M/s. Akright Estates Ltd.

The estimated housing future need/demand was put at 1,048,335 by around 2042. The informal settlement are planned for incremental upgrading starting with provision of basic services such as piped water supply, adequate access roads, sanitation, solid waste collection and management. Replacement of obsolete and substandard housing and reduction in housing density to relieve overcrowding will have to be carried. The alternative option available was to allow incremental development of informal settlements and rental housing for all segments of the population to meet the housing needs of present and future population. Poor quality houses will require replacement or improvement. Weak physical planning and development control at the municipality and failure to operationalise the National Housing Policy 2016 were among the major challenges facing the housing sector. Otherwise, this PDP recognizes housing as a necessity in urbanization process for economic growth.

The inadequacy of housing should be treated as a vital visible indicator of poverty in urban settlements. The housing demand in Kira Municipality is increasing over time due to the increasing of population and in-migration for which housing supply is a visible phenomenon of people's living in hygienic places. Therefore, residential and housing development, if not carefully planned, the future housing situation shall become haphazard, erratic, unsatisfactory and above all unmanageable. It is therefore important to note that housing is key in turning urban areas economically and socially vibrant and urgent efforts needed to address the current housing situation.

3.8.3 Objectives

Kira Municipality is growing fast under the forecasted projections and the land allocation should take account of population growth and urban expansion as well as employment since it's a major factor in determining patterns of settlements due to travel. The objectives for housing delivery are:

- To ensure that sufficient land is available for consolidation within the existing fabric.
- To ensure that expansion occurs along the infrastructure corridors in close proximity to public transport and other essential services, avoiding long distance commuting.
- To prepare community settlements physical plans in urban and rural areas to enhance organized and sustainable urban and rural settlement structures.
- To forestall the continued organic growth of the settlement and communities and prevent further sprawl.
- To facilitate the provision of the required infrastructure and social services required to support development of organized and serviced settlements.
- To provide and secure land for new residential development and identify areas for upgrading and densification. This is intended to ensure that serviced land is available to meet overall housing needs for all segments of the population in order to meet the forecasted demand for housing needs in the municipality.
- To provide a range of housing densities and types in most appropriate locations best related to the needs of the municipal urban population. This is intends to ensure that sufficient land and space is availed for consolidation and densification within the existing urban fabric.
- To ensure that further compact and mixed settlements occur along the infrastructure corridors in close proximity to public transport and other essential services to avoiding long distance commuting to service facilities and other amenities.
- To provide housing which is affordable to those persons who could not otherwise afford to buy or rent appropriate housing in the urban local market. This is intended to ensure provision of housing requirements for disadvantaged and vulnerable groups such as the urban poor, women, elderly, youth and people with disabilities in an equitable manner.

3.8.4 Strategies

- Existing informal settlement to be reviewed and a programme instituted for their incremental upgrading through both Government and self-help projects.
- Through this Municipal PDP, designation of suitable and sufficient land for residential purposes has been earmarked for all the categories of people at various densities. The strategy also ensures that the principles of sustainable development are carried out throughout the plan period and to ensure that land is fully utilized within the existing developed areas. Proposed planning requirements and principles will help integrate housing supply and investment in the overall physical development of the municipality.
- The Plan intends to encourage more people to build and occupy their houses (owner-occupier) as a way to meet the huge housing demand. Residential areas have been located in close proximity to employment areas, a wide variety of social and recreational facilities, adequate infrastructure and public transport.
- The PDP encourages the municipality to sensitize the stakeholders on the National Housing Policy 2016 and try to operationalise elements of the policy in order to realize the aforementioned objectives. This strategy will protect areas that are not allocated specifically for housing purposes from ad-hoc development.

- Provision of land and basic services especially for the majority urban poor through site and services schemes involving development of layouts, provision of services and allocation of plots to low income people to build houses of their choice.
- Provide infrastructure and service facilities where there are lacking and upgrade existing which are in deficiency in order to upgrade the physical environment to preserve and improve the aesthetic and environmental qualities of the municipality.

3.8.5 Risks

- The informal settlements such as Kasokoso, Kitto, Namataba, Bukasa and others could grow to become large unplanned informal areas. These areas have high potential to redevelop into high density areas.
- Environmental integration in housing needs to be undertaken in order to prevent housing construction in hazardous locations that are prone to flooding and landslides.
- Environmentally sensitive areas and marginal land such as wetlands, natural drainage, hilly tops areas, public open spaces and parks need to be protected for the good of the entire communities.

3.9 Report on Municipal Infrastructure and Utilities

Infrastructure refers to structures, systems, and facilities serving the economy of an area, including the services and facilities necessary for its economy to function. It is basically the physical systems of an area (Municipality) such as transportation, communication, sewage, water and electric systems. These systems tend to be high-cost investments; however, they are vital to the Municipality's economic development and prosperity. This existing situation report informs the development of Kira Municipality Physical Development Plan for 2040. The report also touches on cross region perspective issues because infrastructures are networks which often cross boundaries.

3.9.2. Infrastructure

For the purpose of proper analysis in this report; infrastructure is divided into; Transportation, Water supply, Sanitation, Solid Waste Management, Energy and ICT.

3.9.3. Municipality Transportation Network

Transportation is a major factor in contributing to social and economic growth and development of a region and so the presence and state of the transport network is key to development as it facilitates the smooth flow of goods and people. Transport planning is defined as planning required in the operation, provision and management of facilities and services for the modes of transport to achieve safer, faster, comfortable, convenient, economical and environmentally friendly movement of people and goods.

It is important to note that the desired transport system consists of three components namely:

- Vehicles which move the traffic that are readily available.
- A network with well-connected routes and terminals where traffic is transferred from one vehicle to another.
- Operational plan by which the traffic (Persons and goods) and vehicle are moved on the road Network in an organized set up.

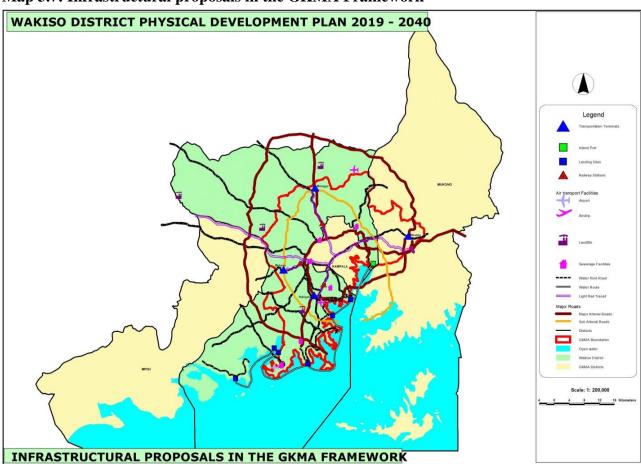
Main modes of transport currently contributing to the growth of Kira Municipality are road and rail transport. Nevertheless, there is a waterway which would provide water transport as an alternative if promoted.

3.9.4 Road transport

Road transport performs vital and social economic functions, enabling social accessibility and providing a lifeline function and contributing to quality of life. The road network also provides economic opportunities by providing a means for people and goods to access business opportunities including employment and markets.

3.9.4.1 Cross Regional Plans

There is Greater Kampala Metropolitan Area infrastructure framework (2014-2040) which sets out a road network framework and integrated transport infrastructure based on future land use strategy (Map 3.7) which encompasses all national and district roads within Metropolitan area where Kira Municipality is part thereof.



Map 3.7: Infrastructural proposals in the GKMA Framework

3.9.4.2 Municipality Road Network

The total length of road network is 293.24. Km of which 32.24Km (11%) is under Uganda National Roads Authority (UNRA) and 261 Km (89%) is under the Municipality. According to the findings, 47.04 Km (16%) are paved, 245.5 Km (84%) are not paved.

Table 3.12: Condition of the Municipality Road network

Classification		Length	Surface Condition			Connectivity	
Class	Road reserve widths (m)	Road Lengths(Km)	Paved (Km)	Un- paved (Km)	Total (Paved +unpaved)	State	Degree of Circulation
ı	(15-30)	(1-5)	22.84	9.4	32.24	Good	Moderate
II	(9-15)	(1-5)	6.8	44.3	51.1	Fair	Moderate
III	(6-9)	(0.4-2.5)	17.4	121	139.1	Fair	Low
IV	(3-6)	(0.4-2.5)	0	1.3	1.3	Good	Poor
				30	30	Fair	
				29.9	29.9	Poor	
				9.6	9.6	Very	
						Poor	
		Total	47.04	245.5	293.24		
%age			16%	84%	100%		

Source: Municipal Engineer (2018)

3.9.4.1 Road Network Characteristics

The Urban roads network in Kira Municipality had the following characteristics;

• 72% Lack adequate road reserves (which must be provided in order to accommodate the ultimate planned roadway including all cross-sectional elements and to enhance the safety, operation and appearance of the roads) as shown in Fig 3.7 and Plate 3.6.

Figure 3.7: Roadreserve widths

Road reserve widths
(15-30)
11%
(9-15)
17%

Plate 3.6: Inadequate Roadreserve width



- 84% were unpaved roads which are non-motorable during inclement weather.
- There was absence of shoulders on both sides yet shoulders are intended to perform the following functions;

- Provide additional maneuvering space on roads of low classification and traffic flows;
- Provide parking space at least partly off the carriageway for vehicles which are broken down;
- Safety margin to enable drivers to recover control;
- To enable non-motorized traffic (pedestrian and cyclist) to travel with minimum encroachment on the carriageway;
- Further still they Lacked and/ or had poor road side drains yet these drainage channels perform the vital function of collecting and conveying surface water from the road right-of-way (Plate 3.7).

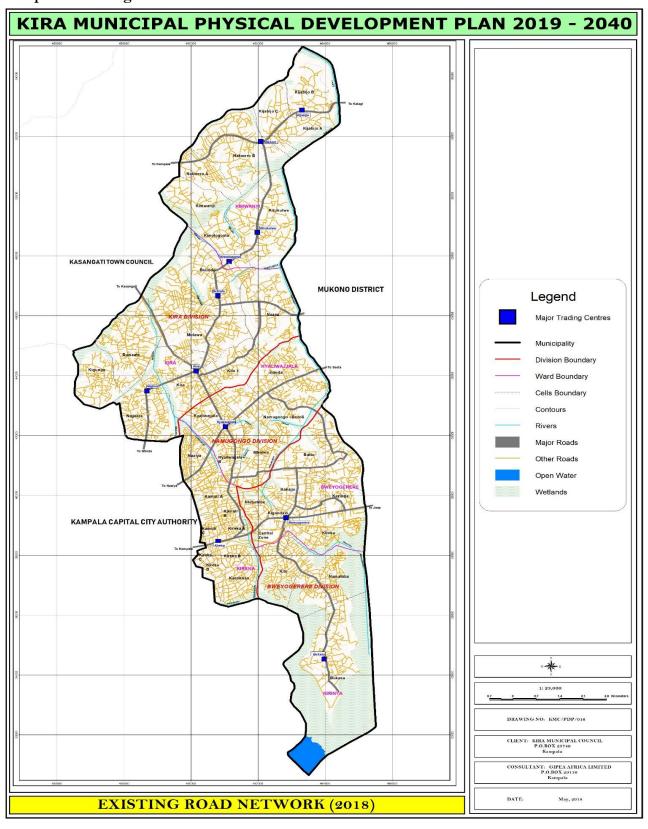
Plate 3.7: Roads without side drains





• All UNRA roads (11%) within the municipality which are desired to provide through traffic movements are highly trafficked which has compelled motorists to use municipal roads as diversion routes, exerting significant pressure on municipal network.

Map 3.8: Existing Roadnetwork



3.9.4.2 Existing Road Network Defined by Hierarchy

A road hierarchy is a means of defining each roadway in terms of its function. Functionality relates to the relationship between the roadway and the land use it serves. Ideally the main purpose of roads is to either carry through traffic (arterials) or collect local traffic (Access). The municipal roadwork length was defined by hierarchy.

Table 3.13: Existing Road Network Defined Hierarchy

Hierarchy	Length (Km)	Desired purpose	Existing Situation
Arterials	32.24	Through traffic movements	Acting as arterials, sub arterials, collectors and local streets.
Sub-Arterials (Distributors)	51.1	Connections for through traffic to arterials. Connections between local areas and arterials	Acting as sub arterials, collectors and local streets
Collectors (Urban streets)	139.1	carry traffic having a trip end within the specific area	Acting as collectors but limited by Poor road surfaces and narrow roads without adequate clearances for passing vehicles in both directions
Access (Local streets)	70.8	Direct access to properties	Acting as access streets but limited by Poor road surfaces and narrow roads without adequate clearances for passing vehicles in both directions.

3.9.4.3 Existing Transport Demand

The most recent comprehensive set of traffic data available, for Kira Municipal roads, are those produced by UNRA Traffic census for the year 2016 on UNRA roads in Kira and traffic data produced by Municipal Engineer on roads under the responsibility of the Municipality.

The available data was used analyze the road network (arterials, sub-arterials and major collectors) viz-a-vis design classification. Design classification helps to determine the capacity of a road in terms of road section analysis. Tabulated analysis shows that these roads require Road reserve widths of at least 25m yet majority were having road reserve widths of at most 15m wide. Implication is that they lack capacity to carry the current traffic efficiently.

Table 3.14: Design Classification of National roads within the Municipality

2016 PCU	Road Name	Km	Desired Roadway width	Desired Road Reserve width
7902	Bweyogerere-Bukasa	2	10	30
6425	Kasangati-Kyaliwajjala	8.9	10	30
8172	Kireka-Namugongo-Misindye	14	4-Lane	40
7902	Nambole Access Road	2	10	30
5554	Nambole-Kampala Industrial Park	14	8.6	30
25694	Gayaza-Kalagi	20	4-Lane	40
	Total	60.9		

Table 3.15: Design Classification of roads under the Municipality

Current PCU	Road Name	Km	Desired Roadway width	Desired Road Reserve width
3950	Kira-Kiwologoma	4.2	8.6	30
11850	Kira-Najjera	3.8	4-Lane	40
6715	Kamuli-Nalya-kireka	2.3	10	30
5135	Bweyogerere-Butto-Namugongo	3.9	8.6	30
1185	Kabaka Road	2.5	6.4	25
1975	Buwate Road	3.4	6.4	25
1185	Bulabira Road	1.3	6.4	25
1185	Busibante Road	1.5	6.4	25
672	Janda-Nsaasa Road	2.4	6.4	25
1975	Namugongo-Mbalwa	1.5	6.4	25
2370	Mbalwa-Agenda	2.5	8.6	30
277	RukaddeRoad	1.1	6.4	25
3950	Kireka-Umea-Shell	0.9	8.6	30
2765	Ndiwulira Road	1.5	8.6	30
6715	Welcome Road	1.2	10	30
2370	Kasokoso-Mutungo Road	2.7	8.6	30
3555	Azam-Makanga Road	2.5	8.6	30
3555	Gwatiro Road	0.6	8.6	30
5925	Butto-Bweyogerere Road	2.6	8.6	30
111	Kito-Main Road	1.4	6.4	25
111	Semirimu Road	0.9	6.4	25
111	Naremu Road	1.2	6.4	25
111	Abattoir Road	1.1	6.4	25
111	Kira-Nsaasa Road	3.6	6.4	25
	TOTAL	50.6		

3.9.4.3 Future Road traffic growth

The Greater Kampala Transport Master Plan (2008-2023) projected that there will be a traffic growth rate of 8% per annum. National population and housing census 2014 reported National GDP growth rate of 5% and the projected population growth rate for Kira Municipality is expected at 8.1%. Traffic is expected to reflect economic growth through traffic growth rate of 8% and this was used to project future traffic.

Analysis of the Projections, shows that by 2040 road operating conditions in the current situation for all Arterials will be at maximum Capacity which will culminate into ques (Traffic jams). The solution therefore is to provide additional road capacity by either widening the carriageways or construction of new arterials. Further analysis on Collectors shows that they will experience both stable and free flow road operating conditions. What is required is road section enhancement.

Table 3.16: Analysis of Future demand on road network

Current PCU/day	Road Name	Current PCU/hr	Future 2040 PCU/hr	Future level of service	Expected road operating conditions
7902	Bweyogerere-Bukasa	494	3131	E	Capacity of Road
6425	Kasangati-Kyaliwajjala	402	2546	E	Capacity of Road
8172	Kireka-Namugongo-Misindye	511	3238	E	Capacity of Road
7902	Nambole Access Road	494	3131	E	Capacity of Road
5554	Nambole-Kampala Industrial Park	347	2201	E	Capacity of Road
25694	Gayaza-Kalagi	1606	10181	E	Capacity of Road
3950	Kira-Kiwologoma	247	1565	С	Stable flow
11850	Kira-Najjera	741	4696	E	Capacity of Road
6715	Kamuli-Nalya-kireka	420	2661	E	Capacity of Road
5135	Bweyogerere-Butto-Namugongo	321	2035	E	Capacity of Road
1185	Kabaka Road	74	470	Α	Free Flow
1975	Buwate Road	123	783	Α	Free flow
1185	Bulabira Road	74	470	Α	Free flow
1185	Busibante Road	74	470	Α	Free flow
672	Janda-Nsaasa Road	42	266	Α	Free flow
1975	Namugongo-Mbalwa	123	783	Α	Free flow
2370	Mbalwa-Agenda	148	939	В	Reasonable Free flow
277	Rukadde Road	17	110	Α	Free flow
3950	Kireka-Umea-Shell	247	1565	С	Stable flow
2765	Ndiwulira Road	173	1096	В	Reasonable Free flow
6715	Welcome Road	420	2661	E	Capacity of Road
2370	Kasokoso-Mutungo Road	148	939	Α	Free flow
3555	Azam-Makanga Road	222	1409	С	Stable Flow
3555	Gwatiro Road	222	1409	С	Stable flow
5925	Butto-Bweyogerere Road	370	2348	E	Capacity of Road
111	Kito-Main Road	7	44	Α	Free flow
111	Semirimu Road	7	44	Α	Free flow
111	Naremu Road	7	44	Α	Free flow
111	Abattoir Road	7	44	Α	Free flow
111	Kira-Nsaasa Road	7	44	Α	Free flow

3.9.4.5 Road Safety

The existing road network was not keeping pace with the ever-increasing traffic. At pick hours, traffic volumes increase and driver speeds reduce and roads get congested. In general, high traffic volumes and congestion affect road safety. Road safety was affected by the increase in vehicle traffic and number of interactions between vehicles. In analysing safety, it was important to separate road sections and intersections because these have different characteristics. Normally road sections are characterised by uninterrupted traffic flow whereas intersections are characterised by interrupted traffic flow.

i) Intersections.

In Kira Municipality the most common intersections are traditional 3 or 4 arm intersections and these create many conflict zones as a result becoming unsafe. There is need to improve safety at intersections by providing signalised intersections and separation at grade intersections (Interchanges) that are considered to be safer due fewer or no conflict zones.

Plate 3.8: Kyaliwajala 4 arm intersection



ii) Road sections.

These are uninterrupted traffic flow facilities. When the traffic is not much traffic flow speed is high and vehicles can overtake each other. Characteristics of the road and road side are very important factors which play a role in road safety and traffic volumes such as the presence of area access roads, Presence of vehicle stop areas and heavy vehicles. In Kira when the traffic volumes are high it is difficult to enter and exit such road sections especially on arterials. Existing Arterials are characterised by many local area access roads that are not controlled, leading to frequent traffic flow interruptions causing jams. Roads lack vehicle stop areas and as a result, vehicles stop within the carriageway, road section narrows reducing clearance for passing vehicles.

iii) Parking, loading and lighting facilities.

It is important to put much emphasis on regulating street parking and loading in order:

- ✓ to relieve traffic congestion in streets/roads,
- ✓ to provide for safe and adequate space for temporary storage of vehicles,
- ✓ to ensure safe ingress and egress of vehicles entering and leaving public street system,
- ✓ to provide immediate access for fire and emergency services,
- ✓ and to minimize storm water runoff.

The municipality is experiencing traffic congestion partly because of unregulated street parking. To address the current situation, off street parking areas are recommended in relieving congestion on streets. And these among others include multi storied parking structures.

3.9.4.6 Key findings/issues of the Road Transport

- ✓ Providing resilient road network defined by hierarchy that appropriately meets future Municipal traffic and road services demand.
- ✓ High cost of land for infrastructure development.

- ✓ Limited resource envelope (1.2 Billion shillings for entire FY) to construct well-designed standard Bitumen roads. Considering the annual funding, Kira Municipal Council can no longer continue maintaining its road network in a proper functional state. Inadequate funding for road maintenance has limited upgrading of earth roads to gravel roads.
- There was lack of Road safety management system i.e. planning and designing, operation and use of the road network, entry and exit of vehicles. The exiting road network was characterized with many uncontrolled area access roads, no vehicle stops, heavy vehicles stops and with almost no road side area as there are road reserve encroachments. Pedestrians and cyclists are not separated from motorized road traffic.
- ✓ There was lack of traffic management system. There many (3 or 4) arm intersections within Municipal road network hence many traffic conflict zones that affect traffic flow. There was need to shift away from these traditional intersections to controlled signalized intersections.
- ✓ Absence of infrastructure provisions for non-motorized transport.
- ✓ Kira Municipality is a tourist destination because of significant religious tourism sites of Namugongo shrines. This has led to increase in motorized traffic and non-motorized traffic inflows leading traffic congestion on the municipal road network. There is greater demand for road services which requires integrated planning.
- ✓ Absence of parking management system (need for off street parking, loading to relieve traffic congestion, provide safe and adequate space for temporary storage of vehicles and provide immediate access to fire and emergency services).

3.9.4.7 Objectives

- ✓ Develop a resilient road network defined by hierarchy that appropriately meets Municipal community and business needs of accessibility and movement by providing integrated Infrastructure corridors.
- ✓ improve road transport management systems by providing traffic management interventions, off street parking facilities and instituting road safety measures.

3.9.4.8 Proposed Road Network

a) Land Use/Road Hierarchy Relationship

One of the key aims of the hierarchy is to optimize accessibility, connectivity, amenity and safety for all road users including motor vehicles, bicycles pedestrians, and public transport patrons. To do so, the relationship between hierarchy and the land uses it serves needs to be considered. The proposed Municipal road network length will defined by hierarchy to separate functions of

The proposed Municipal road network length will defined by hierarchy to separate functions of the roadways that constitute the network for efficient road operating conditions.

Table 3.17:	Proposed Road I	Network defined b	v hierarchv

Hierarchy	Length (Km)	Desired purpose
Arterials	23.58	Through traffic movements only
Sub-Arterials (Distributors)	32.24	Connections for through traffic to arterials.
		Connections between local areas and arterials
Collectors (Urban streets)	50.6	carry traffic having a trip end within the specific area
TOTAL	106.42	

b) Proposed arterial Routes

The plan proposes express ways of 23.58Km which are highways designed for fast traffic, with controlled entrance and exit, a dividing strip between the traffic in opposite directions, and

typically two or more lanes in each direction. They will require a road reserve width of 40 metres and these are;

Table 3.18: Proposed arterials

Road Name	Length (Km)	Remarks
Jinja Express way	4.58	Under UNRA
Kira-by pass	19	Under the Municipality
Total	23.58	

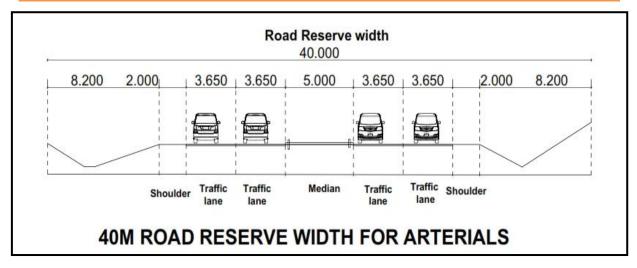


Figure 3.10: Crossection of arterial road

c) Proposed Sub-arterial Routes (Distributors)

The Plan proposes 32.24 Km which are Dual carriageways. These will be upgraded and properly engineered roads with a minimum of four lanes, adequate shoulders and proper drainage. They will be paved which require a road reserve width of 30 metres and these are;

Table 3.19: Proposed Sub-arterial Road

Road Name	Length (Km)	Remarks
Kira-Kyaliwajjala	2.46	Under UNRA
Kira- Kasangati Border	2.05	Under UNRA
Kireka-Kyaliwajjala	4.03	Under UNRA
Matyrs way	3.4	Under UNRA
Nothern-by pass	3.4	Under UNRA
Nothern-by pass-Kyaliwajjala	1.9	Under UNRA
Old Jinja Road	5.6	Under UNRA
Bweyogerere-Bukasa	6.8	Under UNRA
Jokas-namanve	2.6	Under UNRA
Total	32.24	

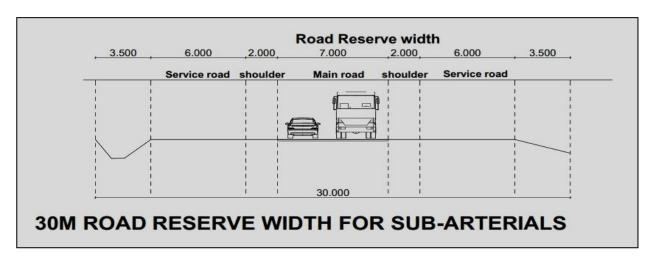


Figure 3.11: Crossection of a subarterial road

d) Proposed Collector Routes (Urban Streets)

The Plan proposes 50.6 Km which are single carriageways. These roads are proposed to be 20 - 30m wide and these will be upgraded roads which Link Municipal growth centers and designated Tourism Routes. They provide connections to all three division of the Municipality (Kira, Namugongo and Bweyogerere) and also act as collector streets within the CBD.

Table 3.20: Proposed Collectors

Road Name	Km	Remarks
Kira-Kiwologoma	4.2	Under the Municipality
Kira-Najjera	3.8	Under the Municipality
Kamuli-Nalya-kireka	2.3	Under the Municipality
Bweyogerere-Butto-Namugongo	3.9	Under the Municipality
Kabaka Road	2.5	Under the Municipality
Buwate Road	3.4	Under the Municipality
Bulabira Road	1.3	Under the Municipality
Busibante Road	1.5	Under the Municipality
Janda-Nsaasa Road	2.4	Under the Municipality
Namugongo-Mbalwa	1.5	Under the Municipality
Mbalwa-Agenda	2.5	Under the Municipality
RukaddeRoad	1.1	Under the Municipality
Kireka-Umea-Shell	0.9	Under the Municipality
Ndiwulira Road	1.5	Under the Municipality
Welcome Road	1.2	Under the Municipality
Kasokoso-Mutungo Road	2.7	Under the Municipality
Azam-Makanga Road	2.5	Under the Municipality
Gwatiro Road	0.6	Under the Municipality
Butto-Bweyogerere Road	2.6	Under the Municipality
Kito-Main Road	1.4	Under the Municipality
Semirimu Road	0.9	Under the Municipality
Naremu Road	1.2	Under the Municipality
Abattoir Road	1.1	Under the Municipality
Kira-Nsaasa Road	3.6	Under the Municipality
TOTAL	50.6	

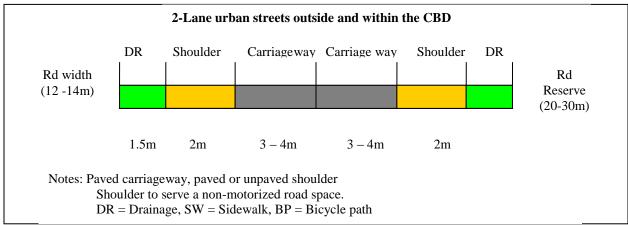


Figure 3.12: Crossection of arterial road

3.9.4.9 Proposed Road Transport Management System

3.9.4.9.1 Traffic Management System

The plan proposes that the Municipality should develop Traffic Management System. This will include;

- 6 locations where Intersection improvements are required,
- Provision of vehicle stops on all Sub-arterials and Urban streets,
- Introduction of paved walkways that are separated from motorized traffic.
- Standards for commercial plots to include ingress and egress provisions.
- Requirements for off-street parking by developers and promote the development of off-street parking facilities (Multi-storied parking structures)

Table 3.21: Proposed Intersection improvements

Location	Intervention
Kyaliwajjala Junction	Signalized Junction
Kira Junction	Signalized Junction
Kireka Junction	Signalized Junction
Bweyogere Junction	Signalized Junction
Kiwologoma Junction	Signalized Junction
Jinja Expressway	Interchange



Plate 3.11: Proposed Jinja Expressway Interchange

3.9.4.11 Risks

- High compensation fees.
- Inadequate funding for road services.

3.9.4.12 Public Transport infrastructure

These are Public transport hubs which include train stations, rapid transit stations, bus stops, tram stop, airports, inland ports and ferry slips. A transport hub (also transport interchange) is a place where passengers and cargo are exchanged between vehicles or between transport modes.

Public transport is a shared passenger-transport service which is available for use by the general public, as distinct from modes such as taxicab, carpooling, hired buses, and transportation network companies, which are not shared by the general public.

Public transport is strongly linked to land use patterns and urban growth patterns, growth has to be supported with delivery of integrated transport solutions to ensure efficient movement of people

a) Public Transport Services

- 1) Inter-regional bus services are available through private commercial companies, connecting to bus terminals in KCCA through the Municipality on major national roads.
- 2) Local bus services are available where passengers utilize 25 medium buses but on limited scale. As a substitute to Bus Services, Passengers are using commuter taxis (14-seat minibuses known as "taxis" or "Kamunyes") plying mainly along UNRA and periodically maintained gravel roads. These taxis are generally organized into privately managed operator associations. The poor condition of the road network condition has limited availability of commuter taxis due high vehicle maintenance costs; this has compelled passengers to opt for Private Transport (as dominant alternatives.
- 3) Private Transport as an alternative Private transport is categorized as motorized (Boda-bodas) and non-motorized (cycling and walking).

Private Transport is a modality of transportation in which people use their own vehicle for movement (cycle, motor cycle and cars). It has advantage over public transport that it saves time, comfortable in travelling and allows wide use of vehicle according to schedule of the person using it. But it also increases environmental pollution. It is costly as there is shortage of petrol in many countries but its wide use over recent few years has proven that people can afford private vehicles now. Maintenance of vehicle is also a challenge.

Plate 3.12: Mortocycle and bycle as some of the means for private transportation



Rail Transport Services are available but on limited scale by a Passenger service train which operates twice daily from Kampala Railway Station to Namanve. It has stopovers at Namboole, Kireka (Kira Municipality).

The number of passengers boarding the train from Namanve has steadily increased to more than an average of 1,500 people per day.



Plate 3.13: The Passenger Service Train bring used

4) Water Transport Services are not available but it has potential because of an existing waterway at Bukasa. Bukasa inland water way within the Municipality has potential to provide water transport services as an alternative to the existing public transport services if developed

b) Public transport infrastructure

 Kira Municipality lacks a transport hub A transport hub where passengers and cargo are exchanged between vehicles or between transport modes. Municipality lacks a planned Taxi-park therefore commuter Taxis Park in unregulated way along road sides and in non-designated areas.



Plate 3.14: Onstreet parking of taxis affects trade order

• Arterials lack provisions for bus stops and Pedestrian walk ways for the dominant mode of non-motorized transport (walking).

• Rail Infrastructure

There is only one rail corridor (Kampala-Mombasa rail corridor) and the rail assets are in reasonable working condition and have adequate capacity to deal with current demand. Although in some sections the reserve has been encroached on.



Plate 3.14: Status of the existing rail infrastructure

c) Threats and opportunities

- The rail network is a critical economic lifeline and should it fail, the road network would be placed under significantly greater pressure by increased freight volumes.
- Improving rail as an economic option, particularly for freight transportation.
- Taking advantage of the fuel efficiency of rail.

d) Key findings/issues

• Lack of integrated public Transport infrastructure limiting intermodal linkages (between road, rail and water transport).

- High capital costs associated with new public Transport infrastructure.
- High transport costs because there is limited competition.
- The GKMA transport system may lack the flexibility to cater for long-term changes in land use and demand if future transport corridors are not identified and protected.
- The realization of the Bukasa inland port project will provide an alternative transport system connecting Uganda and the global markets.
- Unreliable and Poor road transport services.
- Lack of infrastructure provisions for the dominant mode of non-motorized transport(walking).
- Identifying and designating new rail corridors in the Municipality for the future.
- Safety, issues with level crossings and corridor trespass issues.

3.9.4.13 Objectives

✓ Develop an improved, integrated public transport infrastructure network to support industrialization, tourism and access to social services in Kira Municipality.

3.9.4.14 Proposed integrated public transport infrastructure

Under Wakiso District Physical Development plan (WDPD) 2040-intergrated transport infrastructure. Mass rapid transit system was adopted and the following infrastructure was proposed.

Table 3.22: Proposed integrated public transport infrastructure

Infrastructure	From	То			
Light Rail	Kampala	Mattugga			
Transit system	Kampala	Kajjansi			
	Kampala	Kyengera			
Infrastructure	Location 1	Location 2	Location 3		
Nodes of modal transfer	Nakigalala (Najjansi)	Matugga	Mukono(Kyengera)		
BRT route	Bus route interconnecting modes of transfer along Mid Ring road				

The consultant has integrated the municipal public transport infrastructure strategy into the Wakiso District Physical Development Plan and therefore Mass Rapid Transit (MRT) system has been promoted with the following aims;

- > to reduce the use of non-sustainable modes (Cars and Boda-bodas) to use of sustainable modes (Walking, Cycling and Public transport).
- ➤ Ensure that the communities can reach their destinations in quick and efficient way under the target time.
- Ensure communities access affordable transport options.
- ➤ Improve safety and security of all transport users through reduction of fatalities and injuries.
- ➤ Reduce noise and air pollution, greenhouse gas emissions and energy consumption.
- > Improve efficiency and cost effectiveness of transportation of goods and services.
- ➤ Under the Municipal intergrated public transport infrastructure strategy the following are proposed;

Table 3.23: Proposed integrated public transport routes

	From	То	Km
BRT-1	Kireka	Mid Ring road	
BRT-2	Kireka	Namanve	
LRT-1	Kiwologoma	Bukasa	
Water Route	Bukasa inland port	Port bell in land port	
NMT			

Bus Rapid Transit routes and nodes.

In order to the link the Mid ring BRT route proposed in District Plan BRT routes are proposed (from Mid ring Through Kireka via Kirinya to Namanve Industrial Area) with bus stands proposed in Kyaliwajjala, Kireka, Bweyogere, Kirinya and Namanve

• Urban rail services in form of Light Rail Transit routes and nodes

In order to link Kira Municipality to the GMKA multi modal transport network. An LRT route is proposed from Bukasa inland port through Kireka and kyaliwajja to Kira Kiwologoma with rapid transit stations in Kireka, kyaliwajjala, Kira and kiwologoma (Gayaza-kalagi Road)

• Water route.

Water route is proposed from Bukasa in land port (An intermodal facility linking the central corridor through a marine bridge over Lake Victoria and the more active northern corridor that handles the bulk of freight to and from the East African hinterland through Mombasa) to Port Bell (KCCA).

• Non-motorized transport routes.

Cycling lanes are proposed on all sub arterials and one independent Pedestrian route separated from motorized traffic is proposed connecting the Kira Tourist centre (Namugongo Shrines).

Risks.

✓ High capital costs associated with new public Transport infrastructure.

3.9.5 Water Services Infrastructure

Piped Water supply infrastructure in Kira Municipal Council is under the mandate of National Water and Sewerage Corporation (Kampala water). The other water supply facilities apart from piped water is under the mandate of Municipality. Water supply facilities under the municipal mandate have a low level of sustainability due to inadequate facilitation of the Local water user committees to fully function of operation and maintenance of water sources. Consequently many, of the water sources especially boreholes have seized to work due to poor maintenance.

Piped Water which has a high level of sustainability is supplied by four different connections types:

- House connections
- Private yard taps
- Public standpipes with prepaid water meters
- Taps operated by yard-tap owners and kiosk operators

NWSC strategic plan (2013-1018) puts water service coverage in Kampala water area where Municipality lies at 82%. The shortfall is attributed to dry zones (zones with little or no water). As an alternative the remaining population in dry zones use other sources to meet their water demand.

a) Capital projects for dry zone reduction.

NWSC recently rolled out the following interventions in areas of Kira Municipality where dry zones were experienced. This is targeted to reduce the short fall in water service coverage.

Table 3.24: Dry zone reduction interventions

Dry zones in municipal area	Actions taken by NWSC to address the dry	Year of completion
	zones	
Kasangati-Kira-Greenhill section	1.0 Laying of DN 200 from Kira to Kasangati	September 2016
Kira-Kitikifumba-Kitukutwe	2.0 Kyaliwajjala-Kira_Bulindo intensification DN	September 2016
bulindo, and surrounding areas	200-2Km, DN 150-4Km, DN 100-5Km	
Seeta-Bukerere-Sonde-Namwezi	3.0 DN 150 6Km, DN 100-2km to Bukerere-Sonde-	September 2016
and jomayi	Namwezi Jomayi	
Ntinda-banda,Kamuli-	4.0 Banda-Kyambogo Supply System 100m3	September 2016
Kisonsonkole-Kiwatule	Tank,DN 100-4Km of distribution main	
Removing dry pockets in Buwate	5.0 DN 150-1.6km from Najjera 1 to Najjera 2, DN	September 2016
water supply area	100-2.7km from Najjera to Buwate	

Despite the interventions, the reductions are insignificant because there reports of intermittent water supply and dry zones in Kimwanyi and Bukasa.

Existing NW&SC Infrastructure in Kira Municipality

Table 3.25: Water Storage

Infrastructure	Characteristics	Assessment viz-a-vis NWSC Plan 2040
Water Storage	✓ Combination of 4 secondary reservoirs (Kyambogo, Gunhill, Rubaga and Mutungo) all outside Kira Municipality,	✓ Storage capacity is sufficient up to 2025 ✓ Additional capacity is required beyond 2025
Balancing Tanks	✓ Kijabijjo-200m³ ✓ Kireka-50m³, ✓ Kyambogo-100m³	✓ This is mainly supplied by booster pumping stations and from this reservoir limited small supply area are fed.

Table 3.26: Power transmission lines

Component	Characteristics	Assessment
Transmission	✓ Kampala low level System.	✓ Transmission mains are sufficient up to
Mains	✓ From Gaba Primary Reservoir to	2025
	Secondary reservoirs	✓ Addition mains are required beyond 2025

Table 3.27: Pumped and Gravity distribution lines.

Component	Characteristics	Assessment
Distribution	✓ The supply zone feeding Kira Municipality	✓ This a low-level distribution system below
pipes	is Kampala North District Metered Area	1200masl.
	(DMA)	✓ The existing distribution mains are
		sufficient up to 2025 beyond 2025 existing
		mains have to be replaced

b) Public standpipes with prepaid water meters

NWSC has introduced prop poor initiatives in form of public stand pipes (PSPs). PSPs reamian a major means of providing water services to the urban poor in informal settlements. NWSC has increased the number of prepaid water points to at least 36 in order to eliminate the exploitation of the urban poor by vendors. Due to high demand more are required.

c) Water Demand Forecast.

NWSC water supply master plan 2040 for Kampala water projected water demand for the parishes in Kira Municipality. Water supply demand is defined to be the sum of water consumption and non-revenue water. The basis for water demand forecast are present water consumption & non-revenue water figures received from Kampala water as well as population projections from UBOS for 2040.

Table 3.28: Water demand forecast

Parish	Average water Demand (Revenue water	Average water Demand (Revenue water + Non-Revenue Water) (m³/d)	
	Year 2025	Year 2040	
Bweyogerere	6482	12770	
Kimwanyi	152	686	
Kira	2636	5337	
Kireka	9638	18985	
Kirinya	921	1804	
Kyaliwajjala	4215	8288	
Total	24044	47870	

Demand for water services is expected to increase significantly in urban growth centers of Bweyogerere, Kira, Kireka and Kyaliwajjala.

Despite the high service coverage registered there are challenges facing the provision of water supply infrastructure in Kira Municipality namely;

- Additional demand of water supply infrastructure beyond 2025 is required.
- Lack of public standpipes in urban poor communities in informal settlements which are mainly in urban growth centers of Bweyogerere, Kira, Kireka and Kyaliwajjala.
- Inadequate water pressure on hill tops.
- High cost of water especially with regard to connection fees.
- Insufficient resources from NWSC to meet the growing demand.
- Unreliable and intermittent power supply that affects water production.
- Low level of connected in newly taken over towns by NWSC which renders the unit cost of operation to be high.

3.9.5.1 Objective

✓ Provide additional capacity in terms of water supply infrastructure required to meet the current and future water demand for the Municipality's population.

3.9.5.2 Strategy

✓ Extend water supply network schematically in urban growth centres of the municipality to cover un-serviced areas:

Future NW&SC Infrastructure in Kira Municipality

Table 3.29: Water Storage

Infrastructure	Characteristics	NWSC Plan 2040
Water Storage	 ✓ Additional storage capacity of 1 new primary reservoir of Kyambogo. ✓ Additional storage capacity of 1 new secondary reservoir of Sonde. 	✓ From on-going Katosi WTP (2020) to Kyambogo and from Katosi WTP to Mukono Reservoir and to Sonde reservoir
Balancing Tanks	 ✓ Kijabijjo-200m³ ✓ Kireka-50m³, ✓ Kyambogo-100m³ ✓ New tanks at selected locations 	✓ This is mainly supplied by booster pumping stations and from this reservoir limited small supply area are fed.

Table 3.30: Power transmission lines.

Component	Characteristics		NWSC Plan 2040
Transmission	✓ Kampala low level System.	✓	New transmission mains from Katosi to
Mains	✓ From Gaba Primary Reservoir to existing		New Reserviors.
	Secondary reservoirs (Mutungo, Gunhill,		
	Rubaga and Kyambogo).		
	✓ From Katosi Primary Reservoir to		
	Kyambogo and Sonde Reserviors		

Table 3.31: Pumped and Gravity distribution lines.

Component	Characteristics		NWSC Plan 2040
Distribution pipes	✓ The supply zone feeding Kira Municipality	✓	This a low-level distribution system
	is Kampala North District Metered Area		below 1200masl.
	(DMA)		The New distribution mains will be laid
			depending the proposed road network in
			Kira Municipality

3.9.6 Sanitation infrastructure

Sanitation covers key areas of excreta disposal/management, waste water disposal, solid waste management, and drainage. Facilities for Excreta disposal can be subdivided into household sanitation, school sanitation and Public sanitation. Waste water and storm water networks contribute to management of health and floods hazards in the community.

Storm water infrastructure contributes to flood management in urban areas enabling effective and efficient operation of the road network.

3.9.6.1 Household and Public Sanitation

These involves provision and construction of sanitation facilities which include: Public toilets/Latrines (to urban growth centers) emptying, collection and haulage of fecal sludge, provision of Fecal sludge treatment plants and Waste water treatment plants. The Municipality under the preventive health branch of public health department has the overall responsibility of maintaining a safe health environment including construction of public toilets, emptying, collection and haulage of fecal sludge from toilets to fecal sludge treatment plants operated by NWSC. Provision of household sanitation is a responsibility of individual households.

Under 1995 water statute NWSC is mandated to provide sanitation related activities as follows;

- Waste water collection.
- Waste water treatment.
- Fecal sludge treatment.
- Industrial wastes discharge consents.
- Investment planning and implementation.

3.9.6.2 Natural Catchment areas and drainage System

Kira Municipal Council has both a flat and rolling terrain. The municipality has three catchment areas namely; Namanve, Kinawataka and Nakiyanja details of which are follows;

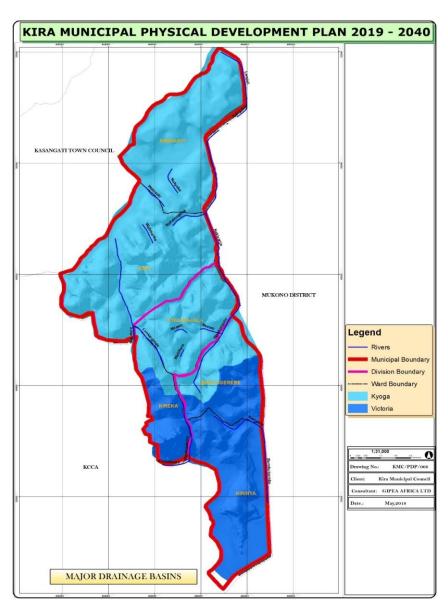
Table 3.32: Drainage system

Primary Catchments	Secondary Catchments	Rivers Contributing to catchment.	
Victoria	Namanve	Namanve-Bumbubumbu	
	Kinawataka	Wankolokolo-Kinawataka	
Kyoga	Nakiyanja	Nakiyanja, Lwajali, Wankongolo	
		and Nakalere	

3.9.6.3 Sewerage systems

The three secondary catchment areas are all under the mandate of National Water and Sewerage Corporation namely; Kinawataka, Namanve and Nakiyanja. NWSC has developed Kampala Sanitation Master Plan (2040), where NWSC highlights that Piped sewerage system will never be a suitable economic and technical option because of the population density and urban structure. Consequently, under the 2040 Master Plan NWSC has only planned and provided infrastructure for Kinawataka Catchment which will only cater for piped sewerage services in Kireka Parish in Kira Municipality.

The proposed Kinawataka systems sewerage will comprise mainly of waste and fecal sludge treatment facilities. Currently there is no sewerage system that exists in Kira municipality apart from small Treatment plants and waste stabilization ponds owned and operated by government institutions namely; Nalya Housing Estate (04 waste ponds) by NHCC and Nambole (02 waste ponds) by Nambole Stadium. As an alternative the population only relies on-site on sanitation systems.



Map 3.9: Major Drainage Basins in Kira

3.9.6.4 On-site Sanitation Facilities

Majority of the population rely on on-site sanitation for excreta disposal. One system for latrine emptying and fecal sludge collection currently exists in urban areas of Kira Municipality which is by use of Vacuum trucks (Cesspool emptiers) and these are privately owned and operated. 54% use this method and sludge is mainly transported to neighboring KCCA.

Table 3.33: Domestic sanitation systems

Type of On-site sanitation systems	% of population served
Pit/unlined latrine	60
Lined Latrine	13
Septic Tank	26

3.9.6.5 Public Sanitation Facilities

NWSC in collaboration with Kira Municipality has introduced prop poor initiatives in form of public toilets. All urban growth centers in Kira Municipality lack public toilets.

3.9.6.6 Fecal sludge collection Forecasts by NWSC

The estimation of fecal sludge collection and production is based on specific accumulation rates and distribution of on-site sanitation technologies.

Table 3.34: fecal sludge production and collection

	Septic Tank	Lined Latrine	Unlined latrine
Feacal sludge accumulation rate (I/c/a)	120	120	610
Collection rate -2015	90%	50%	10%
Collection rate -2040	100%	80%	10%

3.9.6.7 Fecal sludge Production forecast

These are fecal sludge forecasts produced by NWSC under the Kampala Sanitation Master Plan 2040. These have been calculated for areas served by on-site sanitation (sewer customers do not produce fecal sludge). The calculation is based on on-site sanitation technologies distribution within an area.

Table 3.35: Fecal sludge production forecast

Area	2015	2025	2010
	Fecal sludge collected (m³/d)	Fecal sludge collected (m³/d)	Fecal sludge collected (m³/d)
Kampala	440	540	610
Mukono	50	80	120
Wakiso	170	310	620

The implication from the above results is that sludge produced by Wakiso District where Kira lies will have exceeded that of Kampala City by 2040. Thus, there is need for Feacal sludge treatment plants in all catchment areas within Kira Municipality.

3.9.6.8 Sewage Production forecast

For sewage generation a discharge rate of 60% is considered. This means that 60% of consumed water generates sewage, with 90% maximum connection rate to the sewer network in sewered areas.

3.9.6.9 Other Environmental services/infrastructure and its impacting on sanitation.

a) Drainage

Surface water drainage was strongly connected to sanitation as most of the grey water was

generally discharged into the storm water drainage channels intentionally or accidentally. This includes feacal sludge from on-site sanitation facilities, industrial wastewater and solid waste. Storm water drainage is concerned with the measures taken to control flow of surface water by collecting it and trapping it through suitably designed conduits away from developed areas. This is done to generally discourage the adverse effects of excess storm water build up.

Undirected storm water would otherwise cause flooding thus impairing safety, health and wellbeing of the public to disrupt essential public and commercial services. Currently, storm water is undirected because majority of roads lack road side drains and culverts. Where the drains exist, they are in poor condition and often clogged by solids which at times cause flooding whenever it rains.

b) Solid Waste infrastructure

Waste disposal infrastructure includes incinerators, sanitary landfills and open dumping sites. Sanitary landfills are sites where waste is isolated from the environment until it is safe. Responsibility of waste disposal is solely on Kira Municipal Local governments however, they lack funds for collection, storage, transportation and disposal of the waste generated within the municipality.

c) Associated challenges

- ✓ Currently waste is dumped in non-designated sites.
- ✓ all urban growth centers lack waste collection points where is stored before being transported to the landfill.
- ✓ Inadequate funding especially in acquisition of garbage trucks for transporting garbage.
- ✓ The municipality lacks bye-laws to regulate waste collection especially by private collection firms.

Plate 3.15: Open dumping of solid waste





d) Solid waste generation forecast and demand

It costs UGX 20,000/= to collect one ton (OAG, 2010). The capital outlay of UGX 110 Million/month or 1.322 billion/year.

Table 3.36: Solid waste generation

Local Authority	Population	Solid Waste	Solid Waste	Solid Waste Generated
	Census 2014	Generated	Generated	tons/month
		kg/capita/day	kg/day	
Kira MC	317,157	0.579	183,633.9	5509.0

The funds required to collect solid waste generated annually surpasses the annual budget for entire sub-sector of solid waste management.

Table 3.37: Earmarked funds for solid waste management FY 2018-19

Activity	Target	Cost	Source
Solid waste management	Maintenance of landfill and	150,000,000	Local Revenue
	operationalization.		
To improve solid waste	Purchase of solid waste truck	350,000,000	Local Revenue
management.			
Completion of payment for	Payment of debts with interest	250,000,000	Local Revenue
2 garbage trucks balance.			
Solid waste management	Disbursement of funds to	360,000,000	Local Revenue
	Division to collect and transport		
	garbage.		
Solid waste management	Management of solid waste in the	104,600,000	Local Revenue
	municipality		
Total		1,214,600,000	

Solid waste generation forecast

Table 3.38: Solid waste generation forecast

Projected	Solid Wast	Solid	Waste	Solid	Waste	Solid Was	te
Population	Generated	Generated		Generated		Generated tons/yea	ar
2040	kg/capita/day	tons/day		tons/month			
4,193,343	0.579	2.4		72		864	

It was noted that:

- There was need to improve sanitation by creating Waste water treatment plants as long term strategy and more small treatment plants for major polluters (Industrial, commercial & Institutional) and affluent neighborhoods as a medium-term strategy.
 - ✓ Inadequate fecal sludge collection and disposal.
 - ✓ Lack of fecal management services.
 - o Lack of emptying services in high density areas with difficult access.
 - Lack of decentralized sludge disposal sites (long distance to disposal sites which increases costs and fosters illegal dumping)
 - ✓ Urban limitations (No space for construction of better facilities).
 - ✓ Environmental limitations (High ground water table or low soil permeability).
 - ✓ Cost of constructing disposal is high due to high cost of construction materials.
 - ✓ Cost of hiring vacuum trucks is high.
- All urban growth centers in Kira Municipality lack public toilets.
- Need to Prepare a drainage master plan to improve on proper storm water management.
- Urban councils lack planned collection points where sorting can be done before waste being disposed of to landfill.
- The fact that there no garbage trucks collecting waste from individual households, confirms that solid waste management is not properly managed.
- Need for municipal solid waste management by-law to guide, collection, transport and disposal.

3.9.6.10 Objectives

- Improve sanitation by providing tenable sanitation infrastructure and solutions that meet the growing demand in the Municipality.
- Enforcement of sanitation and solid waste management bye laws.
- Maintaining a safe health environment providing solid waste infrastructure and improving storm water management

a) Future Sanitation system

Kira future sanitation system will be based on piped sewerage system, sewage and fecal sludge treatment facilities which are under NWSC and the Municipality. Waste water collection and transfer shall be by gravity following natural gravity to avoid pumping stations. The major polluters are densely populated areas and industries.

b) Future sewerage system

The future sewerage system shall be based on decentralized waste water treatment facilities according to the natural catchment systems and details are as follow;

Table 3.39: Long Term Sanitation strategy

Catchment	Proposal	Land requirement	Better benefitting GMKA areas
Kinawataka	1 waste water and Fecal sludge treatment plant by		Banda and Kyambogo
	2025		in Kampala City
Namanve	1 waste water and Fecal sludge treatment plant		Seeta in Mukono
	serving the Namanve industrial park by 2025		District
Nakiyanja	1 waste water and Fecal sludge treatment plant by		Kasangati in Wakiso
	2030		District

Table 3.40: Medium Term Sanitation strategy

Catchment	Proposal	Location	Implementor
Kinawataka	Provide sewer network to Nambole small waste treatment plant from major commercial, institutional and industrial polluters.	Neighborhoods	NWSC
	Construction of Public Toilets	Urban growth centers and selected highly populated urban communities in informal settlements	KMC & NWSC
Namanve	Provide sewer network to Nalya small waste treatment plant from major commercial, institutional and industrial polluters.	Neighborhoods	NWSC
	Construction of Public Toilets	Urban growth centers and selected highly populated urban communities in informal settlements	KMC & NWSC
Nakiyanja	Provide sewer lagoon to serve major commercial, institutional and industrial polluters.	Neighborhoods	KMC
Nakiyanja	Construction of Public Toilets	Urban growth centers and selected highly populated urban communities in informal settlements	KMC & NWSC
All	Enact of Sanitation bye-laws	N/A	KMC
All	Preparation of Municipal Drainage Master Plan	N/A	KMC

Table 3.41: Solid waste management strategy

Local Authority	Infrastructure	Land Requirement
Municipality	Plan and provide a shared solid waste treatment plant at Menvu, Busukuma Division (Nansana Municipality)	50 Acres
Divisions	Each should plan and provide Parish waste collection points. Where sorting is done before disposal	
Sub Counties	Enact and enforce solid waste bye laws.	N/A

3.9.6.11 Risks

- ✓ High cost of land acquisition for infrastructure.
- ✓ Insufficient resources from NWSC to meet the growing demand for water and sewerage services.
- ✓ Limited municipal financial resources envelope to fund sanitation activities and environmental issues impacting on sanitation.

3.9.7 Energy Infrastructure

Energy facilities cover:

- ✓ Power (The power sub sector covers electricity generation, transmission and distribution).
- ✓ Petroleum (Petroleum is divided into upstream and downstream industries. Upstream industry deals with exploration, development and eventual production of petroleum. Downstream industry deals with transportation (both crude & refined products), refining, storage and distribution and marketing of petroleum products).
- ✓ Biomass (In terms of fuel wood).

3.9.7.1 Power infrastructure

Table 3.42: Existing power infrastructure in Kira MC

Component	Infrastructure	Assessment
Generation	• No generation infrastructure/site in	Nil
	municipality	
Transmission	• 132kV and 66 kV high voltage transmission	• Infrastructure is in good condition and
	lines. High voltage transmission (lines which	abundantly available
	transfer power from generation sites).	
	• Transmission Substations (Transmitted power is	
	stored at Substations)	
Distribution	• 11kV low voltage and 33kV high voltage	High distribution and coverage of High
	Distribution lines. (High voltage distribution	
	lines which power factories, commercial and	• High distribution in 3 parishes (Kireka,
	institutions. Low voltage distribution lines	Bweyogere and Kyaliwajjala) for low
	which power house holds).	voltage lines.
	 Distribution substations 	• Low distribution in 3 parishes
		(Kimwanyi, Kira and Kirinya) for low
		voltage lines.

Plate 3.16: Existing Power Substation





3.9.7.2 Distribution

Kira Municipality is spread with both high voltage distribution lines which power factories, commercial and institutions as well as low voltage distribution lines which power house holds. This implies that there is adequate power supply infrastructure except what is required maintenance especially with intermittent lines and reduction of high power tariffs which is major challenge in Uganda.

Key findings/issues

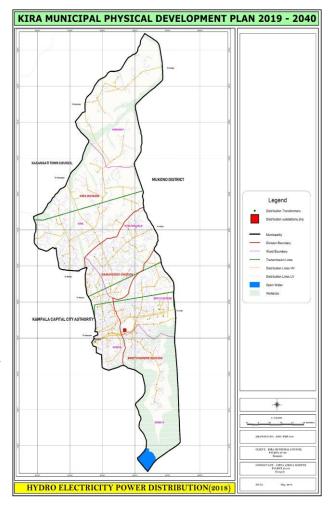
- ✓ Threat to the environment and aggregated effect of climate change.
- ✓ Transformers overloaded
- ✓ High power tariffs

Recommendation

- ✓ Government should reduce the highpower tariffs to encourage energy use for cooking.
- ✓ Use of alternative renewable sources of energy for cooking such as recycling biodegradable garbage from domestic waste and markets to make briquettes and biogas or liquid petrol gas is recommended.

Risks

- ✓ High power tariffs.
- ✓ High poverty levels.



Map 3.10: Distribution of HEP

3.9.8 Information and Communications Technology infrastructure.

ICT infrastructure includes Physical telecommunication systems and networks (Cellar, Broadcast, cable, satellite and postal) and the services that utilize them (internet, voice, mail, Radio and television).

It also includes all those assets which enable the exchange of information between two or more parties, and it incorporates all telephone, mobile and internet technologies as well as TV and radio transmission.

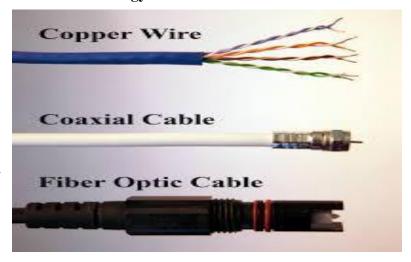


Plate 3.17: Some of the required ICT infrastructure

The copper legacy network and low capacity broadband network connections, fiber network enabling content rich data and video transfer, mobile phone base stations, wireless nodes and broad cast transmission stations all comprise ICT infrastructure.

ICT provides services directly to the consumers and also indirectly by supporting delivery of infrastructure-based services. It facilitates economic wellbeing and also contributes highly to social interactions and wellbeing across the district. The district with high potential of tourism and industrial establishment would require organized and well managed as well as easily accessible ICT.

Broad band is transmission capacity with sufficient bandwidth to permit combined provision of access to voice, data and video. Cable Internet access, shortened to cable Internet, is a form of broadband Internet access in which infrastructure previously used solely for cable television carries digital Internet.

Cable TV networks and telecommunications networks were the two predominant forms of residential Internet access. Recently, both have seen increased competition from fiber deployments, wireless, and mobile networks.

Mandate for ICT infrastructure provision.

The Ministry of Information and Communications Technology (MoICT), heads and coordinates all the ICT sector related activities in collaboration with the regulatory bodies namely the Uganda Communications Commission (UCC) and the National Information Technology Authority Uganda (NITA-U). At the service provision level, are the Ministries, Departments and Agencies (MDAs); Local Governments (LGs); Academia; and the Private Sector.

3.9.8.1 Existing strategic investment plans/Options.

National Broadband Strategy-2020 defines the minimum throughout requirements for high speed transmission and access for voice, data and video to homes and businesses in Uganda. The Government of Uganda, through the National Information Technology Authority of Uganda (NITA-U) has implemented the National Data Transmission Backbone Infrastructure and e-Government Infrastructure Project (NBI/EGI). Its major aims are to connect all major towns within the country onto an Optical Fiber Cable based Network and to connect Ministries and

Government Departments onto the e-Government Network.

3.9.8.2 Optic Fiber Network infrastructure.

The National Data Transmission Backbone Infrastructure and e-Government Infrastructure Project (NBI/EGI) was implemented and completed which consisted of the following; connecting all major towns across the country to optic fiber network (Kira Municipality Inclusive) and EGI component designed to connect Local governments on to e-government network.

Privately owned optic fiber networks have been rolled by MTN, Airtel, UTL, Africell, Roko Telecom, Infocom, and Google among others.

3.9.8.3 Mobile Broadband Infrastructure.

GSM was the predominant technology for mobile internet based on 3G mainly and 4G LTE in Kira Municipality.

Table 3.43: Mobile broadband infrastructure

Type of Infrastructure	Status			
Transmission	Two (2) International Gateways- Voice, Data, Internet			
	National SDH and PDH Microwave Systems for Inter- Exchange Transport			
	Optic Fibre Rings in Kampala			
	PCM copper-based systems for Inter-Exchange Transport			
Switching	GSM Mobile Switch at Mengo			
	✓ Analog & Digital Telephone Exchanges all over the country for landline services			
	✓ Data Nodes for Country-wide Data Network			
Access	Copper Cable Access Network in major towns			
	✓ GSM base stations			
	✓ Optic Fibre in Kampala			
	Broadband Wireless System			

3.9.8.4 Future Pressures and Trends.

Overall, the sector appears to be in a strong position; however, there was a significant lack of publicly available data at municipal level in comparison with some other infrastructure sectors making analysis difficult. Demand continues to rise in Kira Municipality, with particular increases in demand for mobile services and internet in urban growth centers.

3.10. Report on Land use and Settlement Patterns

The following section includes a discussion of the existing land uses in Kira Municipality, analysis of the implementation of the structure plan for 2009 -2019 and land availability for future development in the municipality.

3.10.1 General land use pattern

The existing Land Use Analysis classified fourteen (14) level land use categories as required by the level of planning. These are residential, commercial, Mixed Commercial, industrial, institutional, Environmental Forests, recreational, wetlands/nature, open water, extractive, civic, agricultural. Table 3.32 and Map 3.11 provides a comparative analysis of change in land use over time - between 2018 and 2009 in terms of their acreage and percentage change.

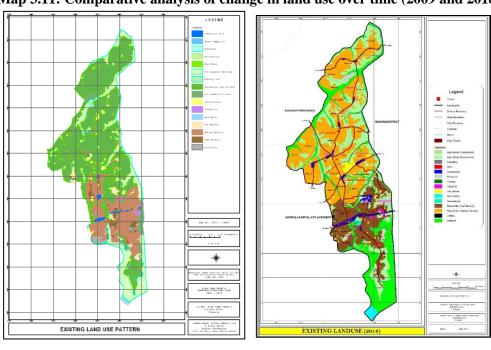
Table 3.44: Comparative analysis of change in land use over time (2009 and 2018)

Land Use	Kira MC Land Use proposal 2009 - Area in Hectares (2009)	Kira MC Existing Land Use 2018 - Area in Hectares (2018)	Change (ha)
Civic	0	6.1	61.0
Commercial	261.4	230.3	31.1
Extractive	83.4	145.5	-62.1
Environmental Forests	164.5	2.7	161.8
Environmental Wetlands	1728.5	1,157.2	571.30
Institutional	142.4	163.8	-21.4
Industrial	314.2	28.1	286.1
Open Water	33.1	80.5	-47.4
Residential	5,151.7	4,863.4	288.3
Recreational	12.6	37.8	-25.2
Agriculture	2,450.6	2,112.4	338.2
Utilities	2.6	3.7	-1,1
Cemetery	0	4.8	-4.8
lagoons	31.3	0	31.3
Dumping site	6.9	0	6.9
Buffers	690	0	690

Source: Kira MC mapped Data 2004 and 2018

Maps 3.11 displays the comparative land use analysis described in table 3.32. On the basis of the classified land use and analysis indicates that under civic there was land acquired for new land used which had not been planned for such as cemetery and civic areas. It is also noted that most of the planned land used were on the increase in demand for land. Such included extractive, institutional, utilities and cemetery. Further still some land used reduced from the originally planned land requirement such as forest, wetlands, industrial, among other.

Map 3.11: Comparative analysis of change in land use over time (2009 and 2018)



3.10.2 Analysis of Implementation of the 2009 – 2018 Kira Plan

In 2009 Kira a town council then developed a structre plan to guide development. This report under Table 3.33 below provides an analysis of level of implementation of the 2009 after ten years.

Table 3.45: Analysis of Existing Land Use and Levels of Compliance to the Structure Plan 2009-2018

	Land use Kira TC Structure Plan 2009-2018 Existing Land Use Situation 2018				
		Structure Plan Provisions (Ha)	PDP emphasis	Existing land use (Ha)	Observed Land Use Challenges that must be addressed by the Kira Municipal PDP 2019 – 2040
1	Residential Low Density	1326.9	Emphasis was redevelopment and densification of the existing		Failure to detail plan and enforcement of compliance
	Residential medium density	1347.5	developed residential areas of Kireka, Bweyogerere and Kyaliwajjala and control sprawl.	3471.4	resulted into sprawling development. Areas of Kimwanyi parish and part of Kira parish
	Residential high density	2051.9	The parish of Kimwanyi and part of Kira parish still exhibited dominance of agriculture and were rural in nature hence was majorly reserved for agriculture	1392.0	have experienced tremendous residential and commercial development compromising original PDP provisions.
2	Urban Agriculture	2450.6	The parish of Kimwanyi and part of Kira parish still exhibited dominance of agriculture and were rural in nature hence was majorly reserved for agriculture	2096.6	
3	Commercial Land Use	261.4	Plan provided a hierarchy of commercial areas; Higher order with the CBD proposed at Kireka (1.6 ha), lower order centres were Kimwanyi (22.9 ha), Kira (56.4 ha), Najera/Kyaliwajjala (4.6 Ha), Bweyogerere (17.8ha), and Kirinya (25.5 ha); and the Local centres were Nakwero and Bulindo. The PDP emphasis was for the TC to undertake detailed planning and management of the commercial centres and surrounding residential areas to control sprawl and free land majorly in Kimwanyi and parts of Kira and Bukasa parishes for agriculture	230.3	Uncontrolled and unplanned emergence of other centres in Bulindo, Nakwero, Bukasa, Nakwero and Kijabijo B. The centres have emerged in response to growth of residential land use in these formerly less developed areas. The challenge of lack of planning is causing growth of unplanned residential settlements in Bweyogerere, Bukasa, Kasokoso and unplanned developments elsewhere with clear lack of services and infrastructure.
4	Industrial Land Use;	314.2	The plan strategy was to control the increase in informal Industrial activities and promote industrial activities that create opportunity for welfare/economic development and enhance legalizing formal job creation that are compatible with the Natural environment. Areas designated for industrial Developments were the Namanve Industrial Area (NIA) in Kireka (56.331 Ha), Bweyogerere (213.809 ha) and Kirinya (47.996	28.1	Besides the NIA Industrial area, areas originally planned for industrial use in Kakajo, Naalya, Kamuli A and Ntebetebe reflect minimal industrial developments. Residential land use has outcompeted the planned land use an indication of challenges in enforcement of compliance

			На).		
5	Extractive	83.4	The plan restricted extractives in order to reduce environmental degradation	145.5	Area for extractives almost doubled which means environmental degradation was at its highest.
6	Environmental Forests	164.5	The plan proposed the protection of the natural and planted forests in the area	2.7	This use was almost depleted
	Environmental Wetlands	1,728.5	Wetland were protected to serve their intended ecological purposes for sustainable use	1,157.2	This shows serious wetland encroachment
	Environmental open water	33.1	This consisted of areas which were considered to have no vegetation cover as per the satellite images of the area	80.5	There is an indication that the water levels at the lake increased by more than 50%
7	Institutional	196.1	This was to take care of the educational, health, religious and cultural services in the area	163.8	It shows that over 80 percent of the planned land was put to use.
8	Recreational	12.6	This considered open spaces like pray grounds, parks etc.	37.8	More land was acquired for this purpose which show more need for the service.
9	Utilities	2.6	This considered things like taxi park	3.7	This land use expanded to include other services other than the taxi park
10	Cemetery	-	Not planned	4.8	This includes individual burial grounds like grave yards in the area which the plan had not planned for
11	Civic	-	Not planned	6.1	Given the level of development demand for civic use increased to include private and public civic areas
12	Lagoon	31.3	Planned them to serve areas of Mulawa, Janda and Bukasa	0	Not implemented but there wereprivate laggons developed in areas such as Naalya Estates
13	Buffer	690.6	Planned to buffer all wetland, rivers, natural forests and open water areas	-	All were totally eliminated by new developments
14	Dumping site	6.9	Planned at Kiwoloogoma	-	Not implemented
	Total	9536.2		9536.2	

KIRA TOWN COUNCIL STRUCTURE PLAN 2009 - 2019 Significant areas where there was failure in enforcement of compliance; Invasion of residential development in areas originally planned for agriculture in Kira, Kimwanyi, Kijabijo, nakwero and Bukasa Proliferation of unplanned commercial land use Sprawl and developing majorly as residential area with low and un-optimal land use densities Invasion of residential development in areas originally planned for industrial use Depletion of forest land in NAME OF STREET OF STREET EXISTING LANDUSE (2018)

Map 3.12: Comparative analysis of the implementation of the 2009 Structure Plan

It was further noted that agricultural use in Kira occupies 2,112.4 ha which is 22.1% of the total land area. In comparison, the land use was the most dominant in 2009 (5,427.2 ha), which was 56.2% of the total area of the Town Council thus indicating a high invasion of other land uses into formerly agricultural land. (Map 3.13)

Map 3.13: Comparative analysis of the Decline of Agricultural Land Use in Kira Town between 2009 and 2018

3.10.3 Land Availability (Physical Potential and Constraint)

Kira Municipality is facing the challenge of dealing with uncontrolled rapid urban growth and unplanned development due to failure to adequately implement the existing Physical Development Plan and limited institutional capacity to control developments. The total land for the municipality covers 9536.2 Ha. Land use pattern of Kira Municipality exhibited a higher percentage of built-up areas which resulted into continuous reduction or loss of prime agriculture land for food production. The built-up areas mainly comprise of areas that immediately surrounds Kampala City. The land use pattern as observed in the municipality was categorized into four major land uses.

Agriculture Vs Other Land Uses 2018

Table 3.46: Land Use Categorisation

Agriculture Vs Other Land Uses 2009

Land Use	Area (Ha)	Percentage (%)
Built-Up Areas	5,483.5	57.5
Agriculture	2,112.4	22.1
Forest	2.7	0.03
Environmental	1,937.7	20.37
Total	9,536.2	100.00

Source: Field Survey

The general land use pattern of the municipality comprises built- up areas, agricultural land, forests and environmental land (wetland and water bodies). Built-up areas are areas under predominately urban use comprising a variety of land uses such as residential, commercial, industrial and institutional uses together with their supporting facilities such as roads, public utilities, open spaces and vacant land. Existing built-up areas in Kira Municipality accounted for 5483.5 Ha or 57.5% of the total area. The built-up areas were found in most part of the municipality, however, the most built-up areas were located in Kiraka, Bweyogere, and Najjera among others.

Agriculture land covers a total area of 2,112.4 Ha and accounted for 22.1% of the total land comprising both land under subsistence and commercial farming. Agricultural land has been encroached on and converted to meet the additional housing needs due to population increase and rapid growth. Although it's further threatened by the urban sprawl, this PDP will ensure adoption of planned growth that will support conservation of the prime agricultural land to allow food production.

Forests cover 2.7 Ha of the total land mainly found in Kaazi in Buloba. However, forest loss and fragmentation of forest cover is a major issue as forest land has been subsequently converted to agriculture and urban use due to high development pressure. It's now a noteworthy effort to sustainably protect and manage the available forests. The challenge that exists is that majority of forests are privately owned.

Environmental, which include major rivers, ponds and wetlands account for about 20.37% of the total land. This category also includes the open water of Lake Victoria drainage channels, wetlands, streams and springs which were strongly evident in the municipality. This category require protection from further encroachment as most of the areas have been degraded and converted to urban use. These areas have been invaded by the industrial use through erection of factories and warehouses especially in Bukasa and this has unfortunately become a normal practice in the municipality.

Land Availability

The land availability refers to the available land for further urban expansion in the future. Kira Municipality has experience decades of significant urban growth and is currently the third fastest growing urban centre in Uganda. As a Kampala's dormitory area, Kira has developed into a residential and touristic urban centre and vital to Vital to Kampala's economic growth and Greater Kampala Metropolitan Area in general. The urban areas of Kira have developed on hills linked with wide valleys of wetlands and drainage channels that flow into Lake Victoria. Kira has grown and is still growing outwards from the Kampala along the traffic corridors with developments spreading outwards from the small urban corridor and concentration areas on hills and down the slopes into the low lying wetlands. This growth has led to an increasingly inefficient pattern of development of majorly unplanned and informal settlements often encroaching on the ecologically sensitive areas such as wetlands and hilltops and thus resulting into difficulties in providing adequate services and infrastructure that is badly needed in most parts of the municipality.

Over 55.6% of the municipality is fully built-up with residential, commercial, industrial, institutional and recreational developments. Kira is becoming fully urbanized with a significant portion of semi-urban and some areas with rural settlement characteristics. In this respect, over 76.4% of the municipal land is constrained measuring 7,294.1 Ha hence unavailable for future

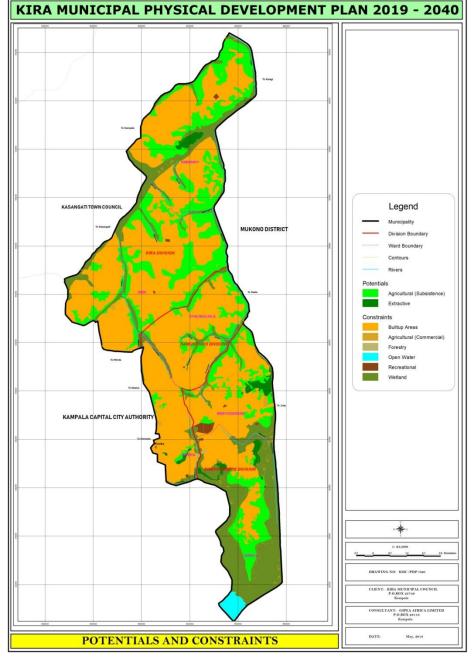
development, of which built-up areas contributed 72.6% (Map 3.14 below). To this end, almost the entire land in Kira is developed or under protection hence unavailable for development. Approximately, 25.4% of constrained land was wetlands. With less than 24% of land measuring 2,242.1 Ha being undeveloped and vacant, some being under subsistence farming, and the available land cannot meet the growing needs of the present and future projected population. As such, there is a critical shortage of developable land in the municipality which urgently calls for planning interventions and measures to enhance and promote optimum utilization of urban land in the wake of increased population growth.

The phenomenon of urban growth in the municipality resulting from broad scale urban sprawl originating majorly from areas of Kampala, Wakiso and Mukono that surround Kira municipality, has led to rapid urbanization leading to informal settlements in unplanned and hazardous areas thus resulting into a decline in the urban natural environment. Broadly, the study indicated residential use as the largest land use covering an area of 4,863 ha accounting for over 51% of the total land use. This implies that over half of land in Kira Municipality was under residential use hence developing into residential dormitory of the neighboring areas including Kampala City.

There is therefore a rapid conversion of the agricultural land to urban use through invasion and succession forces turning the prime agricultural areas for housing and investment. Given the fact that Kira Municipality is rapidly urbanizing, the presents a need for future urban land required to meet the projected development needs of present and future population. There is anticipated demand for land generated by the increase in urban population such as housing and employment needs. This will involve issues to do with the degree of intensification of development, extent of mixed-development, desirable settlement form and pattern without jeopardizing priority and other key land uses such as agricultural production for food security and biodiversity conservation. Therefore, to cater the needs for the increase in urban population up to the year 2040, more land will be required for urban uses.

A major issue for Kira Municipality is the need to address the need for creating and sharing of more space, particularly encouraging mixed-uses and higher density in already built-up/developed areas as well as easing mobility and accessibility by use of public transport system in view of environmental aspects and implications on the quality of life within the Municipality. This PDP ensures the establishment of public open spaces and recreational spaces to provide identity of the newly emerging communities and to support development of high density and mixed use development through adoption of smart growth concept.

The result of the analysis showed that about 2,242.1 Ha of total land in Kira Municipality was available for future development hence indicating a critical shortage of developable land within the planning area. However, a total of 5,300 Ha of built-up area is further available for further infill and densification as observed earlier. Any in-fill and densification would need to be accompanied by significant improvements to the existing services. Densification will be experienced when subdividing existing plots and providing the necessary sanitation (sewerage) and other infrastructure. The demand for housing is high in Kira due to the growing preference of the areas by the middle income households/population given its proximity to Kampala and access to a range of public transport and other service facilities.



Map 3.14: Potentials and Constraints

Source: Field Data

3.10.4 Objective

- 1. To facilitate and ensure adequate supply of urban land for all urban development needs and provide space for all activities for all segments of people including the vulnerable groups such as the women, youth, urban poor, elderly and people with disability.
- 2. To minimize urban growth on agricultural land and promote optimum utilization of the already developed land.

3.10.5 Strategy/Recommendation

• To provide and secure land for various land use development and identify areas for upgrading, densification and intensification through mixed development. The plan, therefore proposes that densification to be done through plot subdivision to promote high densities, construction of high rise buildings in form of flats, apartments and detached houses, restriction of skyline of any buildings and structures to a minimum of two storeys and to observe a minimum plot size of 450m².

The plan proposes that high density developments should take place along linear routes close to appropriate public transport and other infrastructure. This strategy is also designed to protect land from adhoc development and safeguard the irrational conversion of prime agricultural to urban uses and at the same time protect the conservation of the ecological zones.

3.10.6 Risks

- The rapid urbanization and unprecedented population growth over the past decades in Kira Municipality is likely to create enormous pressure on Kira's capacity to provide access to basic services and the gap between demand and supply of land and housing in growing day by day yet it has been noted that there is shortage of developable land within the planning areas.
- The Municipality is also suffering from limited availability if financial resources to purchase land and provide the required urban infrastructure in order to support urban quality life.
- The majority of the land in Kira Municipality operates under a complex land tenure regime that recognizes independent rights over land and structures thus giving rise to legal disputes and frustrating service and infrastructure delivery. The majority of land in the municipality is privately owned as the available public land is already encroached on by informal settlements while the rest was grabbed by individuals.

Part IV

4.0 Kira Municipal Development Trends, Scenarios and Spatial Development Model

Kira Municipality is a place of promising opportunity, which is reflected in its growth and ongoing demand for housing, employment, tourism and urban agriculture. To ensure that new growth captures the community's vision for the area, the Municipality embarked on the Physical Development Plan to set forth the policy guidance to improve the area's quality of life, promote a sustainable environment and economy far into the future.

Kira Municipality strives to achieve a quality growth development pattern "that makes efficient use of the developable land; optimizes urban services and infrastructure. It also uses innovative mixed-use approaches; promotes a wide variety of transportation and housing options to absorb and effectively serves a significant portion of the future population growth of the Municipality. It protects the environmental character of the Municipality through compatible, high quality and environmentally sensitive development practices, and helps provide a distinct separation of urban and rural land uses.

The purpose of the following sections of the report is to present the Physical Vision for Kira Municipality for the next 20 years and the actions required in order achieving this vision. The consultant addressed the Municipality scale, to create a comprehensive vision for the future development of the whole Kira Municipality.

Accordingly, the report focuses on two components, the Physical Development Plan which is the conceptual structure of Kira Municipality and presents guidelines for large scale planning and development. The consultant is aware that there are other administrative units above and within the Municipality which are autonomous but not independent with a mandate of preparing similar plans both at high and at a lower level. These are the District and Divisions respectively. The District PDP, the Municipality PDP and the Physical Lower Level Administrative Development Plans complement each other to construct a full and comprehensive development and planning strategy for Kira Municipality.

4.1 Objective:

The objective of the plan is to provide a progressive framework for coordinating development trends and growth of the Municipality in order to have a sustainable future.

4.2 Scope

The Conceptual Municipality Physical Development Plan identifies the growth strategy in more specific spatial terms. It is intended that the conceptual plan be used as an overall guide to more detailed planning to ensure that important land use priorities, transport connections, infrastructure, social service provisions and environmental corridors are considered and taken into account.

The Kira Municipality Physical Development Plan is informed by the analysis of the existing spatial situation and physical aspects of the Municipality. It examines possible future scenarios, roles and potentials of the Municipality over the planning horizon, and the defined Physical Development Vision for the Municipality to project the future development scenarios. The summary below indicates the processes leading to the definition of Kira Municipality Conceptual Spatial Development Model;

Step i: Analysis of the existing situation in the Municipality

- Spatial/physical
- Social and cultural
- Economic
- Environment and natural systems

Step ii: Examination of possible future scenarios

- Impact of Kampala City; invasion succession Kira dormitory area
- In-migration from rural areas to Kira Municipality
- Population analysis and projection for future Kira Municipality

Step iii: Roles and potentials of the Municipality over the planning horizon

- Role, influence and Significance of Kira Municipality in Wakiso District and the GKMA as a whole.
- Administrative; Municipality, and Divisions administration and services
- Growth and urbanization trends, urban sprawl
- Gateway to and Showcase Uganda (Town to other parts of the country and through regional routes e.g. Kenya)
- Culture and a tourism Destination

Step iv: Stakeholder Definition of Development Vision for the Municipality

- Local Governments medium term strategies and development vision review
- Stakeholder inputs on desired direction
- Municipality stakeholders consultation input and defined Physical Development Vision for the Municipality

Step v: Kira Municipality Conceptual Spatial Development Model

4.3 Planning Hierarchy of Kira Municipality Planning Area

The Kira Municipality Planning Area was divided into three levels of planning: 1. Municipality Structure, 2. Division, 3. Detailed Local Development structure. Accordingly, the Kira Municipality Planning Area conceptual plan was broken down to three type of planning zones: Existing Urban Cores, New satellites, and Kira semi- rural. The following flowchart illustrates the Kira Municipality planning hierarchy.

Kira Physical Development Framework addresses the Municipality Physical Development Plan (MPDP) and constitutes the first level of the Kira Municipality Planning Area planning hierarchy. This section deals with the conceptual structure of the Kira Municipality Planning Area. The section begins with the spatial analysis of the existing situation in Kira Municipality and examines possible future scenarios. Next the potentials of Kira Municipality are examined, and finally a Physical Vision (PV) is constructed for the Municipality.

Wakiso PDP **Municipality Physical** Kira **Development Plan** Municipality, Town Council and Sub **Existing Urban Cores Rural Pure New Satellites** Counties PDP Farm land **Local Detailed Plans** CBD's Peri-Urban **Action Area Plans Urban Designs**

4.1. Conceptual Structure of Kira Municipality Planning Area

Figure 3.9: Planning Hierarchy

4.4 Spatial Analysis of existing situation in Kira Municipality Planning Area

The spatial analysis of Kira Municipality Planning area in its current state is necessary in order to understand the present and future development scenarios. The spatial analysis, as opposed to other types of analyses, focuses on the spatial and physical aspects of the existing situation. The situation in Kira can be summarized as follows:

i. The Challenge of In-migration from the City and from Outlying urban areas

According to the National Population and Housing Census 2014 Kira Municipality currently accommodates 317,157 residents, a number which decreases during the day as millions flood Kampala, the Capital City for work and return later to sleep in Kira as dormitory area of Kampala. As Kira Municipality continues to attract residing migrants from all corners of the country, a population growth is predicted in the short and long term. Increased in-migration has different implications on the functioning of Kira Municipality such as employment, transportation and housing to mention but a few.

ii. The Existing Physical Structure and Networks

a) Incoherent and Imbalanced Physical Structure

The Municipality bears the significant Impact of the radial movement network from and to Kampala City center concentrating all activities of significance, or of higher order in and towards or inside the City Centre.

The structure lacks a coherent and even partially balances. Its growth has been and remains radial sprawl along the movement routes as "fingers" or "stubs" and fills in the gaps especially areas close to the city, amoeba-like, without meaningful structure, amenity or adequate service forming concentric, increasing inner densities and spreading out concentrically, restricted only by access constraints, severe slopes (largely to the west) and water bodies (with significant construction and encroachment on marginal lands including extensive wetlands in the Municipality).

The "finger like network" and the centers there along do not constitute functional corridors. They lack almost all complementary elements except movement, housing, basic local services (primary schools, low order clinics) and largely small local, informal commerce often located in ungazzetted areas.

Jinja road at Namanve industrial zone, provide some signs of developing into "activity corridors". The routes along Jinja road and to a lesser extent Kayunga road display intensive generally lower-order activity but are not structured to function as integrated functional Corridors. The Municipality generally lacks a clear hierarchy of urban centres and sub-centres, with visible functional specializations but all generally dealing in lower order activities strung out along the primary radial routes.

Urban structure enables, organizes and directs human activity and land use. It determines the legibility and impacts on its functioning and hence its efficiency and productivity. It attracts channels, enables or constricts movement. It sorts, orders, enables or limits levels and scale of activity (residential, economic, recreational, *et al*). It contributes to the urban form, intuitively informing both resident and visitor as to the "natural" location of facilities and activities; or fails to do so. It balances and integrates the natural and the built elements into a cohesive whole or mixes them in a haphazard, mutually detrimental manner. It confers identity to the City and the specific neighbourhood, be it positive or negative, in as much as the individual home confers identity to its residents.

As such, Kira area urgently requires a coherent, legible, functionally efficient and integrated structure, to begin tackling its current severe social, economic and environmental problems and its considerable future challenges.

b) Impact of Infrastructure Networks

It is important to consider Kira Municipality in the greater context of the entire district as seen in the Map 1.1. The Municipality is based in the eastern side of Wakiso District near Mukono Municipality. It is traversed by major road and railways to and from the capital City – Kampala in the southern part hence is the main transit and gateway in Uganda. Being such, the structure of the Kira in relation to the City must be taken into consideration and as such will have implications beyond the Municipality boundaries.

c) Municipality Physical Form

The Municipality's topography, its hills and valleys have determined the Municipality's form and dictated the initial settlement pattern. But it could also sort out the apparent transport movement routes developed between these elements and outlying centers in the lower valleys, generally skirting the wetlands and crossing them at narrow or strategic points. Sporadic infill and sprawl over the years has however blurred out these historic elements and is slowly transforming the Municipality into a single contiguous, ever growing, lacking order, clarity, legibility and identity. Nonetheless, the Municipality still retains significant natural values and still grants the potential

to develop as a setting of Quality, green, utilizing its natural potential to provide amenity for its residents.

d) The Challenge of Sprawl

Kira Municipality today is characterized by a rising urban sprawl. The urban sprawl stems from the main Capital City Kampala into Kira Municipality. It extends beyond the boundaries of the urban nodes in the Municipality into the peri-urban and rural rich agricultural areas spreading even beyond the Municipality boundaries. Two additional urban centers exist within the confines of Kira Municipality: Kireka - Bweyogerere Namugongo - Kyaliwajjala and Bulindo - Kiwologoma. Though these centers are scattered within the Municipality, they are linked and dependent on the whole Municipality and its neighbors for services, employment, etc. The areas between these centres are littered with disorganized settlements along the roads, especially in the northern part of the municipality which form the urban sprawl. In the south there is disjointed instrumentalism with compact settlement which are devoid of requisite infrastructure. The density in these areas is equally high in comparison to Kampala the immediate neighbor to the west. The recent adjustment in the administrative set up of the Municipality has compounded the issue even further to the extent that it is quite difficult to find a sizable chunk of land in the Municipality undeveloped.

These settlements burden the existing infrastructure and services of the Municipality as many flood the Municipality daily in search of employment and services. Continued unplanned sprawling growth holds several dangers to the future of the Municipality:

- Burdening existing infrastructure
- Poor functioning of the Municipality and the district systems
- The decreasing quality of life and living conditions
- Destruction of urban economy
- Damage to the ecological system
- Blocking modern development

The implications of the unbalanced growth and unplanned urban development pose a serious threat to the Municipality and must be avoided.

The only course of action which can eliminate the above threats of the continued unplanned and disorganized growth is to form a Planning Strategy capable of addressing the sources of the above threats. Based on the analysis of the existing situation, the Municipality roles and potentials over the planning horizon, future scenarios and threats the consultant conceptualized a Planning Strategy to guide the preparation of Kira Municipality Physical Development Plan:

- The defined new Physical Vision for Kira will guide the development of the Municipality in a planned and organized manner.
- Determining urban limits and proper planning of existing and new urban centers within the Municipality will ease the pressure on the Municipality infrastructure and services, allowing future development.
- A planned Municipality structure will control sprawl and encourages guided settlements.
- Sustainable development which protects the most important existing Municipality environment and natural resources will ensure a modern and quality Municipality for future generations.

Map 4.1 Kira Municipality in a regional context



4.5. Kira Municipality Conceptual Spatial Development Model

Kira Municipality serves as the gateway to Uganda by land through the eastern corridor. The major internal and international bus services pass through the Municipality. The Municipality is a conduit for a large proportion of goods and people moving in and out of the City and the country, and a significant proportion of internal trade. Such a structure and the relationship with Kampala City have implications within Kira and beyond the Municipality boundaries.

In the analysis of the current situation and potentials the consultant examined several planning models for the future development of the Municipality. The examined models are based on our analysis and findings on the current situation and potentials in Kira Municipality, consideration of the Greater Kampala Metropolitan Framework and Wakiso District PDP requirements. These models constitute potential Conceptual Topological Schemes for the long term development of the Kira Municipality planning area.

A total of four models were examined by the consultant for this purpose namely:

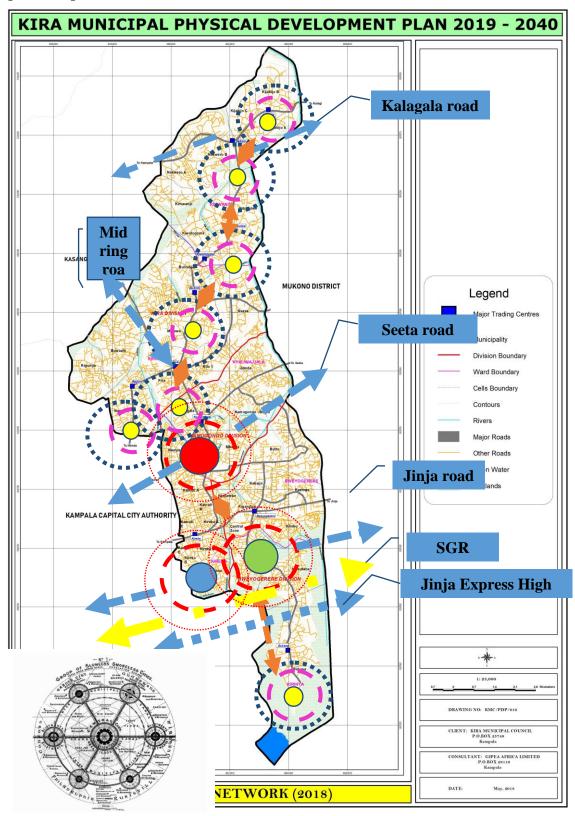
- The "Independent Concentric Towns" Model (ICTM)
- The "Transport corridor/wedge" model (**TCM**)
- The "Integrated Concentric Towns and Transportation Model (ICT&TM)

Each model has its strengths and weaknesses, and offers different potentials. The summary below provides the suitability analysis of each model that guided the choosing of the most suitable spatial model for the Kira Municipality spatial development plan. The preferred model was the independent concentric town model.

4.5.1. The "Independent Concentric Town" Model:

The Municipality is the seat of Municipality administration, control and service delivery through the three Division Councils. The key urban centres identified include Kireka, Bweyogerere, Najjera, Kira and Kyaliwajala (Map 4.1). The "Independent Concentric Towns" Model builds on organizing and protecting the existing situation in the Municipality. Some of these centres were also adopted in the Wakiso PDP development strategy. The centres in this model are the proposed focal points within the Municipality where to concentrate development. The centres would be planed as independent and self-sustaining basing on the locations comparative advantage or economic specialization giving each centre a unique identity and economic specialization. The concentric towns will be connected to each other through a system of roads, both existing and new. The core areas will be highly concentrated with developments and the level of concentration will diminish as you move away into the periphery referred to as the commuter zone. These centres will eventually meet and overlap each other creating nucleated centres serving peripheral areas. The model tempts as the most suitable given that there would be no need for drastic alterations or significant externalities.

Map 4.2 Independent Concentric Model



4.5.2 Benefits of Independent Concentric Towns Model

The benefits of this model include the following;

- i. It respects and matches with the current built up in the Municipality
- ii. The nodes are the growth poles with defined extent to which certain typology of developments are permissible hence reducing pressure on land and regulating sprawl from extending beyond the defined urban limits. This in essence would ensure sustainable use of resources.
- iii. Environmental degradation will be contained. With provision of buffers, the wetlands can be expected to thrive and perform their natural functions of filtering the impacts of the built environment. The danger of encroachment into or even depleting the wetlands resources will be eliminated.
- iv. Within each centre, there is a high possibility of optimum use of land and saving land for other uses
- v. It reduces the cost of infrastructure and service provision. The pressure on the Municipality infrastructure and services will be minimized and it will offer developers with alternatives.
- vi. The model has the advantage of triggering and creating a balance in spatial development in the entire Municipality. It eliminates the amorphous 'brown agenda' structure by dispersing unplanned development into land that would have been used for other purposes and/or environmental protection.
- vii. Within the individual centres, it allows a sustainable mix of forms and functions, and creates a balance in spatial development. Hence it facilitates balanced growth and economic opportunity in both the centre and the periphery but also preserves sustainable use of the environment and natural resources.

4.5.3 Challenges with Independent Concentric Towns Model

Despite the above mentioned benefit, this model has some short comings such as;

- i. Given the weak economic base of the Municipality, improved infrastructure will be expected to be found primarily, if not exclusively, by the centre.
- ii. The urban centres in the Municipality had grown organically starting as local shopping centres majorly to serve the neighbourhood dormitory residential areas. The economic specialization and identity of these centres is not clear. The direction dictated in the model indicates that this may tend to aggravate the amorphous nature of development, further adding to the emerging incongruous mixed forms and functions. Thus creating a further imbalance in spatial development within the centre, with undefined and limited economic opportunity. The model therefore demands clear identification of the center's economic potentials and comparative advantage in relation to others in the Municipality as a whole so as to guide planning around the strengths of the local economy. This would guarantee economic sustainability and competition.
- iii. The model creates multiple core and power centres. Kyaliwajjala, Bweyogerere and Kireka as indicated in Map 4.1.
- iv. The wealthy and generally well-to-do middle classes will be limited in size, proportion and concentrated around the core. This contradicts the concentric theory where such category of people prefer to live in the commuter zones which this model tends to discourage. However, given the widening gaps and their social impacts, their

personal safety and security will be threatened by those in need at the periphery. As a result gated, fenced and patrolled housing compounds will spring up and become the norm for both the wealthy and the middle classes which aesthetically is not appearing.

v. The challenge of sprawl will remain given the relaxed controls in land use and standards emanating from the lack of planning and guided mechanism.

4.6 Key issues considered when selecting the preferred conceptual model

- The current administrative set up of Kira Municipality encourages proliferation of urban centres. Areas which have been purely agricultural have been urbanized e.g. Kira, Kiwologoma and Nakwero. This in a way will make the regulation of urban sprawl very difficult.
- The impact of real estate developers cannot go without mention. They have identified, acquired and subdivided land in the northern part of Kira Municipality turning areas which were well known for food production into residential areas. In areas here they have established such estates, ancillary services and other developments have been attracted there and land values have gone up making the use of such land for agricultural purposes uneconomical.
- The comparison of soil fertility and the location of the established real estate development are very paramount in taking choices between food production and provision of highly required shelter for the residents and the new comers. Decision has to be made between agriculture and the built up environment.
- The primacy of Kampala City which is too small in terms of size attracts many people who end up seeking for accommodation in Kira Municipality.
- Kira Municipality is commonly referred to as part of the dormitory area for Kampala City. But from the socio economic survey carried out by the consultant it was revealed that it has also become a dormitory for the whole country where by a good number of senior civil servants throughout the country do own a house in Kira where they retire every weekend. This is as a result of the Kampala City Pull Factor.
- The improved infrastructure development has also attracted massive developments in the periphery of the Municipality. The tarmacking of major roads in the Municipality has made the Municipality look nearer to potential developers. These good roads have attracted public transporter on various routes.

4.7. Spatial Suitability Analysis

The evaluation of metropolitan planning models was conducted through a Location Analysis and Spatial Suitability Analysis process. The process entailed examining and mapping a number of Municipality spatial aspects;

- The Municipality topography, natural features and assets
- Existing ecological zones,
- The Municipality growth centres and settlement patterns
- Existing and emerging industrial sites, public services and business cores
- The national, regional, metropolitan and Municipality infrastructure, traffic and transport modes)

The aim of this analysis was to scan the areas of the Municipality, Kampala metropolitan area and adjoining area to identify potentials and suitability for development based on future growth forecasts. The output of the Spatial Suitability Analysis was a Spatial Suitability Map which integrated the different aspects in the Planning Area. The Suitability Map was

integrated with the Topological Schemes of the possible municipality planning models to create a Physical Vision for the Municipality's long term spatial form.

The Suitability Analysis identified sites having greater potential, functions and development areas, land uses, restricted areas and open areas for potential development. An analysis of topography and a slope analysis were also conducted in order to identify area suitable for development.

Suitability Analysis pointed to the 3 existing urban centres but with potential for development. The centres are already having dense development but with potential to accommodate more development. Each area was examined according to ranking criteria which included its suitability for development according to the following;

- Permitting terrain,
- Connection to existing urban structure in the Municipality
- Connection to the main radial roads through the Municipality
- Vacant land still existing
- Key features to utilise for controlling sprawl

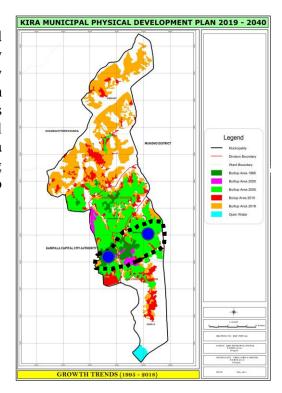
The identified areas included the following:

- Kireka, Bweyogerere,
- Kyaliwajjala Namugongo
- Kira Kijabijjo, Bulindo, Nakwero, Kiwologoma Najera and Kirukutwe
- Bukasa,

The detailed Spatial Suitability was purposely to determine the areas with highest potential for new development and for strengthening of existing core.

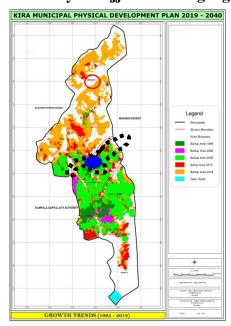
i. Kireka_Bweyogerere Urban Centres

The Kireka –bweyogerere area was examined and found to have permitted terrain. The area already has urbanism tendency along the Jinja highway hence very well connected to the existing urban structure (Kampala – Mukono). The area is highly built up and future development will require regeneration for optimum use. This area was found to be more suitable for strengthening of the existing core which already includes two active centres.



Map 4.3: Jinja Road Urban Centres

ii. Kyaliwajjala - Namugongo

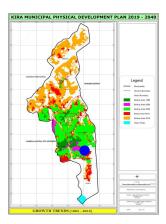


The area has permitting terrain and lies along the Naalya Seeta road hence is very well connected to the existing urban structure However, similarly to the Kireka-Bweyogerere area, the Kyaliwajjala area was also found to be too densely populated and with almost no open land available land suitable for large scale new development. This area was found to be more suitable for strengthening of the existing core which already includes an active centre. It also attracts a lot of human activities which may require urban renewal to be able to accommodate future requirements.

Map 4.4 Naalya – Seeta Road Urban Centres

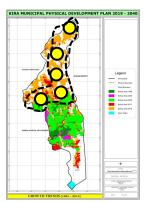
iii Bukasa

The Bukasa area was examined and found to have permitting terrain. It shares a border and is very well connected to the City especially via the lake. Furthermore, the area was found to be with already dense development but with available and vacant lands in abundance.



Map 4.5: Bukasa Road Urban Centres

iv Najera, Kira, Kijabijjo, Bulindo, Nakwero, Kiwologoma urban Corridor



The sites were examined and found to have permitting terrain. They are located along Najjera, Kira Kijjabijjo road hence are very well connected to the existing urban structure. Furthermore, apart from Najjere other areas like Kira, Bulind, Kiwologoma, Nakwero and Kijjabujjo were found to be moderately and spatially developed with available and vacant lands still existing. The terrain was conducive and it is the only remaining area in the municipality where tangible developments can be proposed with very minimal costs.

Map 4.6: Najera, Kira, Kijabijjo, Bulindo, Nakwero, and Kiwologoma urban Corridor

4.8. Proposed Conceptual Structure Scheme

Following the analysis presented in previous sections here are the consultant's recommendations for the Kira Municipality Physical Structure:

- Adaption of the Integrated Model ("Satellite Cities and Transport Corridor Wedge") as the structural model for Kira Municipality with a defined urban limit.
- The Municipality to have two CBDs one at Kyaliwajala and the other joining Kireka and Bweyogerere.
- Planning, management and strengthening the existing urban cores and centres of;
 - Kireka Bweyogerere
 - Kyaliwajjala
 - Kira, Kijabijjo, Bulindo, Nakwero, Kiwologoma, Najera and Kirukutwe
 - Bukasa.
- Provide linkage between the above urban centres and other outlying Urban Councils with modern infrastructure.
- Identification and instituting a buffer (wedge) area between the urban areas in the Municipality and the outlying Municipality of Mukono and Kasangati Town Council to control sprawl.
- Putting to optimum use of undeveloped land in the Municipality.

The above recommendations act as guidelines for the Physical Vision and Policy of Kira Municipality and a basis for the operationalization of the Municipality Physical Development plan.

4.9. Kira Municipality Physical Vision and Policy

The integration of the Conceptual (Topological) schemes and Suitability map led to the crystallization of a Physical Vision and Development Policy for the Kira Municipality planning area. The Development Policy is aimed at implementing the Physical Vision of Kira Municipality to create a well-organized and modern urban metropolitan system.

The Development Policy is composed of three planning operations:

- Planning, management and strengthening the functioning of the existing urban centres
- Construction of modern road network to provide linkage between the above urban Centres and the outlying urban areas.
- Creation of buffer area between the built up area and the ecological zone to control sprawl, allow densification and optimum use of land resources.

i. Planning, management and strengthening the functioning of the existing urban centres

The selected areas for widening and strengthening of existing cores are;

- Kireka Bweyogerere
- Kyaliwajjala
- Kira, Kijabijjo, Bulindo, Nakwero, Kiwologoma, Najera and Kirukutwe
- Bukasa,

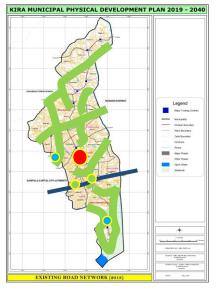
The sorting out of the Municipality Physical Structure will require putting in place individual urban centre's Physical Development Plans. This will help to sort out the incoherent and imbalanced Physical Structure and to address the current severe social, economic and environmental problems and other considerable development challenges. The interventions will require widening and strengthening of the town's physical, social and economic set-up in terms of employment, environment, natural set-up and services, as well as organized residential areas.

The centers must be planned and developed according to modern standards, creating organized and sustainable urban centres capable of accommodating a large number of inhabitants. The new centres will become perfect substitutes offering quality housing, employment and other services outside Kampala City. This will allow the sustainable development and growth of the Municipality.

ii. Construction of modern road network to link the urban and centres:

The functioning of the identified urban metropolitan road system will require a good and modern road network system to serve and connect them and also connect these centres to the City and the rural Municipalitys. The road system will be an improved radial road system based partially on the existing system but expanding it for better connectivity within the Municipality and beyond. The main components of the road system will be provided in the PDP for the Municipality.

Map 4.7: Connected Centres in Kira by Linear-circular roads



iii Creation of a buffer to Control Ecological Zones

The Municipality PDP must sort out the incoherent and imbalanced physical development structure to address the current severe environmental problems in the above Municipality. To achieve this plan must create a buffer with stringent conditions within the Municipality. The green belts will help to break the brown agenda and also increase of the functionality of these ecological zones

Map 4.8: Buffer and wedges in Kira

4.10 Conclusion

The analysis of the physical structure of Kira Municipality is based on a number of spatial models which if critically looked at will show that not one specific model can be used to solve the current and likely future development challenges of Kira Municipality. The consultant has however put forward the different scenarios for the client to consider and select one that is best understood to deal with the many identified challenges in Wakiso. The decision of the client will then inform the consultant on the next course of action.

4.11 Kira Municipal Development Vision

Based on the above development senarios the report proposes the vision to be used as the future desired development. In order to achive this the consultat carried out the SWOT analysis to guide the trend and basis for developing the vision for Kira.

4.11.1 SWOT Analysis

The overall Strengths, Weaknesses, Opportunities and Threat (SWOT) of Kira Municipality reflects the prevalent current situation of the town and provides a foundation as well as a basis for formulating the key strategic objectives and well aligned strategies to capitalize on identified strengths, address weaknesses, concentration and exploring the existing opportunities and mitigate and avoid threats exposed to the Municipality. The SWOT analysis as presented in the table below is a summary of the more important points and issues to highlight.

Table 4.1: Kira Municipality SWOT analysis and key findings:

STRENGTHS WEAKNESSES wwing and expanding population of Presence of disorganized and

- Has a Big, Growing and expanding population (320,500) people residing and living in Kira Municipality.
- Commitment of the Municipality to formulating a Master Plan to attain orderly and sustainable development plan.
- Existence of a comprehensive legal, policy at the national level and bylaws to support provision of improved service delivery.
- Goodwill of government to develop and transform the Municipality.
- Strong Political will and commitment to transparency, accountability and results Ownership of the plan by all stake holders.
- Willingness to embrace Government policies among Political leaders, District employees Development partners and other stakeholders in the pursuit of the LGDPII results
- Sustained annual and quarterly planning and commitment of resources
- Compliance with accountability systems and strict enforcement of laws and regulations, including creation of awareness and empowerment of community members to demand for Accountability from the Leadership
- Effective monitoring and evaluation to support implementation
- Increased private sector capacity and participation.
- Existence of an effective partnership with

- oPresence of disorganized and Haphazard Densification and Development in Bweyogerere, Kireka and Kira parishes all in Kira Municipality.
- ONumerous illegal and unplanned developments.
- oLack of appreciation and resistance of physical planning and related standards.
- OUnlawful acquisition of land within the Municipality.
- OAbsence of a conventional method for solid waste management and garbage disposal.
- oIncreasing development slums and informal settlements in Kireka Parish e.g. Kusokoso slum and "the lost city" in Bukasa ward, Kirinya parish among others.
- OWeak enforcement of compliance to Physical Planning laws and Standards among others.
- oIncreasing and exposure to health, sanitation and environmental problems.
- OInadequate housing and shortages.
- oHaphazard collection, store, transportation and indiscriminate disposal of solid waste and poor facilities and equipment.
- o Poor and adequate drainage systems.
- o Poor Solid waste management and disposal e.g. Kira MC generates 6004

- non- state actors.
- Good, effective and efficient resource mobilization and utilization capacities.
- Strong political support and Enthusiasms for the attainment of orderly development.
- Presence of high levels/ vibrant commercial services.
- Major employment / job creation centre.
- Industrial, Manufacturing hub with numerous medium, small scale and cottage industries in particular Bweyogerere, Kimwanyi, Kira, Kireka, Kirinya among others.
- Moderate presence and availability of financial institutions i.e. Commercial banks, credit institutions, savings and credit cooperative associations (SACCO) and other microfinance institutions which ease access to fiancé for local economic development.
- A host and home to many national leaders, wealthy and outstanding individuals and personalities in the country as well as at the national level.
- Hub for middle class neighbourhoods (medium density) new apartments and estates are being developed and constructed in Naalya mostly which is found within the Municipality.
- Crossed and beneficiary of the constructed national infrastructure in particular the Northern bypass and Kampala- Jinja road highway.
- A hot and booming land and property markets operations.
- High level of housing development and presence of Real Estate developments and investments.
- Availability of standard health facilities both governments aided and private.
- Presence of Sports and Recreational facilities (public parks and open spaces)
- A moderate Local own source revenue base that can sustain a continued future desired Municipal Investments.
- Presence of a quality local road network (just need opening and widening/ expansion).
- A home and presence of national special tourist's sites with potential for tourism

- tons per Month.
- o Poor and adequate sanitation facilities.
- Degradation of the Blue and green areas e.g. rivers and its attributes with (effluents, washing bays, industries, construction and slaughter slabs among others).
- o Destruction of the green vegetation covers in Kira Municipality.
- Environmental Degradation (vegetation cover, wetlands, forests and soil).
- Urban poverty.
- o Idol and loitering youths.
- o Increasing Unemployment and job scarcity.
- Increasing pollution(water, air and noise)
- Lack/ limited Sensitization about physical planning to the citizens within the Municipality.
- Lacks of physical planning interventions and developments aren't following the physical planning standards and guidelines.
- Uncoordinated plans/ planning processes between Kira and central government (NEMA) among others.
- Unimplemented planned government projects and programmes many are still stalled.
- o Limited central government planning and coordination efforts i.e. central government does plan for Kira but with very minimal Municipal involvement.
- Negative Political interference i.e. Kasokoso.
- Limited and insufficient government transfers compared to population and status of the municipality.
- o Insecurity and emerging urban safety concerns due to increased population, crowding, unemployment and congestion.
- oLimited involvement of stakeholders in planning and development.
- oLimited staff leading to non-implementation of plans.

- development and promotion (Kabaka's residence at Banda in Kireka, Namugongo Martyrs Shrine in Kyaliwajjala and Nambole National Stadium).
- Clear Administrative jurisdiction boundaries and not conflicted.
- Good Municipal Leadership and technical capacities.
- Has headquarters Office thus a formal address and location.
- Availability of large chucks of Land owned by municipality with owner titles.
- Availability of Qualified Municipal technical staff with capabilities to delivery efficient and quality services.
- Presence of numerous NGOs and stakeholders (Outstanding and influential people/ national figures) interested in the development of the Municipality.
- Secured Status of Municipal Council upgraded from that one of a Town council which led to the increase in government funding and autonomy.
- Presence of good and quality social services (schools/ educational facilities and health facilities).
- Hotel, lodges, guest houses and retail shops centre/ hub.
- Presence of industrial and manufacturing activities.
- A host of numerous fast growing and expanding centres/ townships in terms of development in particular Bweyogerere, Kirinya, Kireka, Kyaliwajjala and Najeera.
- Prime and strategically located thus the easy access for developers and investors.
- Existing good quality infrastructural services
- Development of resource centres for the youths within the Municipality.
- Availability of labor for production purposes due to the growing and expanding population in the Municipality.
- High presence of NGOs and lottery clubs among others within the Municipality.

- oUnplanned and poorly guided land subdivision.
- oIgnorance of the law by the population and leaders.
- oLimited and inadequate staffing levels.
- oFailure to formalize the informal sector/ expanding unregulated informal sector.
- oIncreasing land fragmentation due to the increasing land demands and development pressures within the Municipality.
- oTitling of sub-standard and small plots of land (less than the-would be minimum of at least 100x50).
- oMushrooming churches in very close proximity.
- oIgnorance of the policies, laws and guidelines relating to development control and permissions.
- oPoor coordination and cooperation arrangements with the central government agencies regarding matters and development agenda of the Municipality.
- oLoss of trust and confidence in the urban local authorities by the citizens.
- oLimited stakeholders' sensitization programs on planning and development matters.
- oLack of and limited information access by the communities regarding planning and development matters within the Municipality.
- oExistence of undeveloped and idol land within the Municipality.
- oInadequate working and operational tools, equipment, office space and transportation means.
- oLack of skills by the majority of the youths and women.
- oInadequate and limited technical and administrative capacities to effectively delivery on the given mandate.
- oLow staffing levels both at the Municipal Council Headquarters and divisions.

OPPORTUNITIES

- Kira Municipality according to the 2014 population & Housing Census is amongst the 10 topmost largest towns within the country thus attracts and is incorporated in the nation-wide development and growth agenda interventions and programs.
- Abundance and presence of natural resources suchlike fertile land for ecotourism development, high scale agricultural land, industrial/ manufacturing development among others.
- Incorporated and planned to benefit from the GKMA Spatial Development Strategy.
- Targeted and incorporated in the GKMA Economic Development Strategy.
- Close proximity to Uganda's Capital City creating a potential for easy marketing of products as well as easy access to jobs and employment.
- Covered under the GKMA Transport Master Plan/ Greater Kampala Metropolitan Area Transport Authority (MATA).
- Big beneficiary of the Passenger Train Services of the Kampala- Namanve that transverse through Kira Municipality route thus the Municipality enjoys eased mobility of residents to jobs/ employment centres in the capital city of Kampala.
- High potential in developing a competitive and vibrant industrial development sector.
- Proposed Inland-Port at Bukasa in Kirinya to stimulate high level developments in the area.
- Expected Standard Gauge Railway line.
- Planned and upcoming numerous hotels to be built and developed in the Municipality a great support to tourism development and promotion.
- National roads go through the

THREATS

- Prone to severe congestion emerging from high volume of motor traffic due to the existence of narrow widths roads typical characteristic in the Municipality.
- Health, sanitation and environmental risks and problems.
- Erosion and destruction of natural and ecological resources.
- Climate Change effects.
- Pruno & exposed to high mass inmigration as a result of redevelopment initiatives in Kampala.
- Escalating slum formation within the Municipality.
- Absence of sewage and sewerage infrastructure thus posing a threat to sanitation and environmental management aspects of the Municipality.
- High level prevalence and reliance on on-site sanitation mostly traditional pit latrines (81%) and improved (VIP) latrines (10.4%) as well as septic tanks especially in the middle to high income population within the Municipality.
- Potential health, sanitation and environmental hazards and risks.
- KMC is experiencing a very high rate of urbanization which is estimated at 12% (GIPEA Social Economic surveys) its far away above the national one which is 5.2%.
- Experience and Exposure to high level development pressure and demand for land for development and investments from Kampala Capital City (no more space for development and expansion) thus the pressure is diverted to KMC.
- Insecurity and urban safety concerns (increasing crime and

- Municipality.
- Presence of water and electricity supplied by National Water and Sewerage Corporation- NWSC and UMEME.
- Covered and incorporated in the Greater Kampala Metropolitan Area- GKMA to benefit from all planned national development programs and projects with the GKMA
- Strategic location and accessibility, the Municipality is a go- through route to other destinations.
- Hosts and presence of special cultural sites like the palace of the Kabaka of Buganda.
- Proximity to most of the government ministries, departments and agencies-MDAs.
- Presence of several MPs and other high level outstanding government officials that eases advocacy and lobbying for development investments in the Municipality.
- Closeness and proximity to other urban local governments e.g. Mukono and Kira that will permit the adoption and consideration of the metropolitan and territorial planning approaches in matters of spatial planning and provision of quality services to the citizens.
- Adoption of metropolitan and territorial planning approaches in the provision of quality services, utilities and infrastructure to the citizens through building partnerships and alliances with other urban local governments.
- Strategic and prime location and eased accessibility to potential investors.

- violence).
- Rapid population growth due to a very high urbanization rate of 12%.
- Increasing Unemployment and joblessness.
- Ignorance of population about development requirements and demands that could lead to the resistance of the emerging development proposals.
- High imposed central government taxes (by URA) which may deter/chance out business people (formalizing the informal and evasion of tax).
- Increasing Air pollution from industries e.g. Azam.
- Increasing Traffic jam and congestion.
- Political interference even from higher authorities/ orders above that do frustrate development initiatives.
- Delayed and prolonged implementation of government programs and projects due to lengthy clearance from central government offices e.g. (NEMA).
- Increasing Corruption and abuse of public resources.
- Orders from above restricting and obstructing development in the Municipality.

Part V

5.0 PHYSICAL DEVELOPMENT PLAN PROPOSALS

5.1 Introduction

Based on the preceding analysis, this part of the report presents the proposed plan, the methodology for formulating the plan and the suggested implementation procedure. This volume presents the planning vision, objectives and a background to the proposed land use Zone Plan, which comprises of the plan and the implementation schedules. This part further presents a detailed description of the major components of the plan including; land use, urban form and densities. The plan is described as "proposed" because it has to be deposited for public scrutiny following which it will be presented to the National Physical Planning Board for approval.

5.2 The planning vision and objectives

The proposed vision considers the National policy and vision as defined in the National Development Plan, the Nansna Municipality vision and mission statement, the opportunities and constraints for future development as identified in the situation analysis. The National Development Plan (NDP) defines the national long term vision as 'a transformed Ugandan Society from a peasantry to a modernised and prosperous country within 30 years', with a theme 'Growth Employment and Socio-economic transformation for prosperity. This plan was adapted and approved by the Government of Uganda and serves to guide the definition of planning and developmental vision for Kira Municipality. The Kira Municipality adopted Vision is stated as below;

Vision Statement: "A planned, Industrial, Competitive Business Hub and Tourism Municipality/city with efficient infrastructure, quality services and good governance by 2040".

With due consideration of the above vision and the current and projected development needs of Kira, the proposed vision is that of 'ensuring Kira's future as economically vibrant, attractive and a transformed modern city'.

Therefore the adopted planning concept is 'a <u>Smart City'</u> which is built on the following pillars; Economic vibrancy, Sustainable Mobility, Environmental sustainability, Human capital development and Good governance. This means that for Kira Municipality to attain the desired future, focus must be put on how to utilize a networked infrastructure to improve economic and political efficiency to ensure cultural, socio-economic and sustainable urban development. Therefore, there is need for creativity in infrastructure development; competitiveness to increase local prosperity through business led urban development, <u>smaller cities delivering smarter services</u> and inclusiveness in decision making (collective community participation).

5.2.2 Proposed draft strategic objectives for the PDP

- To promote spatially orderly and sustainable development in KMC by 2040;
- To promote compact city development with vertical and high rising buildings in KMC by 2040;
- To develop and sustain a strong and sustainable industrial and value added production manufacturing sectors in KMC by 2040;

- To develop and promote tourism, hospitality and cultural heritage sectors in KMC by 2040;
- To provide efficient, sustainable and quality urban infrastructure and services in KMC by 2040;
- To develop and enhance competitive Local Economic Development (LED) and entrepreneurship sector in KMC by 2040;
- To protect, conserve and promote a sound and resilient urban environment in KMC by 2040;
- To improve on urban security and safety in KMC by 2040;
- To promote good governance and management and strengthen existing governance; mechanisms and structures in KMC by 2040.

5.2.1 Planning Objectives

The following proposed planning objectives were derived from the above vision and the preceding sectorial investigations analyses, conclusions and recommendations as summarized in Volume I. The objectives have guided both the preparation and evaluation of the plan. They are also intended to establish a framework for the preparation of more-detailed planning schemes and strategic action programmes and/ or interventions.

5.2.2 General Objectives

The general objective of the physical development plan is to provide a framework and guidelines for the future orderly and coordinated sustainable development of Kira Municipal Council for the period 2018-2040, which: -

- Is practical, achievable and sustainable,
- Encourages increased economic productivity in the private sector, creation of employment opportunities and foster economic growth,
- Provides increased access to serviced land, improved adapted housing and most importantly social services in order to improve the living condition and alleviate poverty for low income groups,
- Promotes environmentally sustainable development with conservation of the environment of the area,
- Promotes the plight of the vulnerable and disadvantaged groups such as children, women, disabled, the youth and the displaced.

5.2.3 Sector Objectives

5.2.3.1 Financial Objectives

- 1 To improve Kira Municipal Council financial management capacity by strengthening revenue base and promoting sound urban cost recovery policies.
- 2 Identify planning and strategic action revenue management programmes which can be implemented and monitored by the Municipality.

5.2.3.2 Infrastructure Objectives

1 Upgrade and improve the existing physical infrastructure in order to accommodate a full range of users and also support the potential future growth.

2 To explore the potential for community participation in the planning, provision and maintenance of urban infrastructures in the Municipality and to make efficient use of them.

5.2.3.3 Environmental Objectives

- 1 To protect the natural environment of the Municipality from all forms of degradation for purposes of promoting sustainable urban development.
- 2 To pursue energy and water conservation policies and waste reduction, reuse and recycling within the Municipality.

5.2.3.4 Social Objectives

- 1 To provide and ensure equity to access of appropriate social facilities in relation to their range and threshold.
- 2 To provide a range of social facilities that meets the needs of the population in Kira Municipal Council.
- 3 To ensure that planning proposals and policies address the full-range of all socioeconomic groups resident in the Municipality.
- 4 To ensure that affordable land for housing and services is provided in proportion to the actual needs of the people of Kira Municipal Council.
- 5 To enable economic growth by increasing employment opportunities and encouraging investors in Kira Municipal Council.

5.2.3.5 Urban Development Objectives

- To encourage consolidated urban growth, this makes full use of existing resources, and infrastructure as opposed to dispersed and ribbon but expensive urban sprawl.
- 2 Encourage and plan for densification of existing low density areas in order to reserve the undeveloped areas for food basket in Kira Municipal Council while reserving the rest of the land for future use.
- Encourage a full range of mixed land use zones in order to promote live-work relationship and self-containment land use zones.
- 4 To provide land use regulations, that would encourage appropriate orderly developments, which are inclusive and easily understood by residents and the local the authorities.
- 5 Develop a systematic and orderly procedure for land sub divisions, which will ensure access to existing and future road network.
- To provide update-planning guidelines based on reviewed growth trends and existing situation and to put right the mistakes brought about by lack of proper planning in the past.

5.3: Description of the Proposed Physical Development Plan (2019-2040)

5.3.1 Introduction

The plan presents a proposed framework for development of urban component relevant to the town under the two broad categories. The land use proposals and the future detailed planning. In each of these categories planning standards and development control mechanisms are suggested.

5.3.2 Suitability analysis

Urban planning is necessary to be carried out by utilizing methods that as much as possible take advantage of spatial analysis of development requirements. Suitability analysis for development of the different uses was conducted and modelled for provision of layers used in the land use proposals. A brief description of the suitability analysis is given below.

5.3. 2.1 Criteria for land suitability analysis

In order to analyse land suitability for various land uses, the consultant developed a criteria based on map- able indicators as illustrated in (**Table 5.1**).

Table 5.1: Criteria for suitability analysis

Criterion	Map-able Indicators	Remarks
Convertible vacant land	Subsistence agriculturePlanted ForestsGrazing land	Land cover that can be convertable for physical development
Wetlands	Swamp wetlandForested wetland	Land cover not suitable for future physical development
Forests	 Natural 	Gazetted forests to be protected
Slopes	 0% Flat 1% - 5% Gentle slope 5.1% - 9% steep 9.1% - 14% Moderately steep 14.1% - 20% relatively very steep 20.1+% Highly very steep 	Steep slopes present development problems and increase costs. The plan considers highly very steep slopes not developable
Rocky outcrops	 Extensive extractive areas especially the stone quarries 	
Drainage	• 0 - 100 m • 101 – 150 m • 151+ m	Distances from the natural drainage features for their protection
Built up areas	Intensively built upHard areas	Hard areas include land under religious sites, special areas, high

		density residential and institutional
Commercial servicing areas	Sub-districtParish areasLocal servicing areas	Classified map of commercial servicing areas basing on existing trading centres and population catchment served
Services demand based on population	 Mainly the range of services The threshold of services 	education, community centres,
Connectivity	road densityLand useinter-connectivity	To determine the circulation within the area
Water resources	• 0 - 100 m	For their protection
Wetlands	■ 100 m	For their protection
Forests	Natural forests	For their protection
Topography	Hill tops	For protection
Infrastructure Service levels	 Hierarchy Well serviced Moderately serviced Poorly serviced Un serviced 	Water Sewerage/waste disposal method Garbage Energy
Land values	Costs per acre	Determine areas for different social classes though mix use is encouraged

Source: Field Survey

5.3.3 Principles of selected physical plan proposal

- 1. A plan with an urban form of densification and dispersion which encourages mixed use development taking advantage of the current development trends.
- 2. A plan that is cost effective by taking into account the existing situation.
- 3. A plan that promotes and encourages hierarchy of circulation network and commercial centres for easy access to goods and services.
- 4. Maximization of the general circulation in the planning area.
- 5. A plan that encourages mixed uses for activities that are fairly compatible.
- 6. Protects the environment for sustainable development.
- 7. A plan that promotes and encourages the development of affordable social services and infrastructure for sustainability.
- 8. A plan that is cost effective by re-organizing and relocation of certain land use activities to promote aesthetic development.

Part VI

6.0 REPORTS ON LAND USE PROPOSALS

This section of the report focuses on different reports on land use proposals for the proposed alternative, which has been developed from the analyses and the principles of design of the physical development plan.

6.1 Residential Land Use

The total land proposed for residential use is 5,974.9 hectares. Two types of densities are therefore proposed for residential land use namely:-

6.1.1 High density

High density residential comprises of compact small plots of not less than (12m x 25m) or (39.4ft x 82.05ft) to 15.24m x 30.5m) or (50ft x100ft) and covers a total land area of 1625.0 hectares (17.04%). It was proposed to accommodate all classes of different income levels who are expected to live and work in and out of the Municipal boundary. It is recommended in this plan that this land use should be near places of work in order to allow easy movement and minimize the cost of transport for the low and medium income earners. The proposed areas for high density residential include; Bweyogerere, Kireka and parts of Kyaliwajjala Wards because of their proximity to the commercial and industrial centres. The plan recommends urban renewal for high density areas of Kireka Ward.

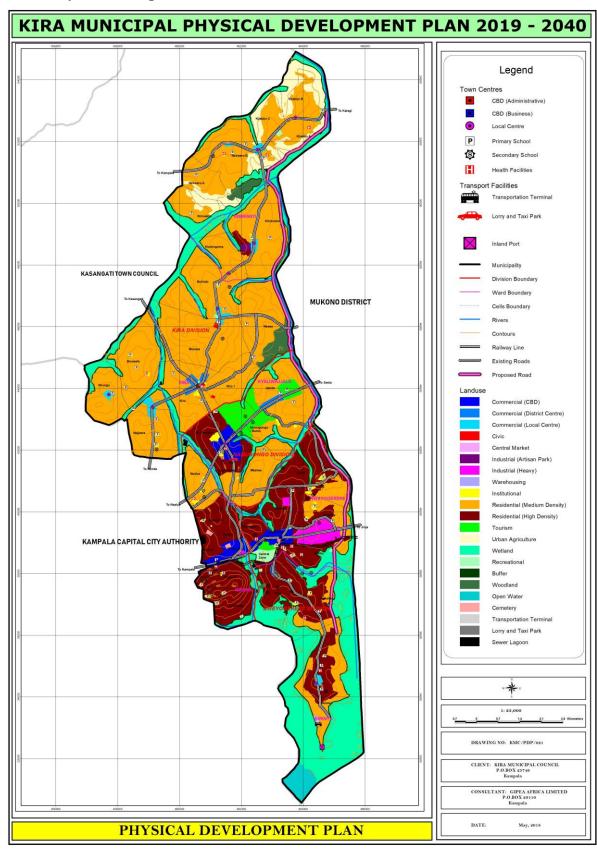
6.1.2 Medium density

The proposed medium density residential comprises of medium plots ranging between 20m x 30m (65.6ft x 98.42ft) and 25m x35m or (82.02 x 114.82) as provided for in the National Physical planning Standards and guidelines 2011. It is meant to accommodate all classes of different income earners who will be living and working in Kira Municipality. Medium density residential covers 4,349.9 hectares of land (45.6%). It was also recommended to accommodate all classes of income levels .It is proposed in wards of Kimwanyi, Kira and parts of Kyaliwajjala, Bweyogerere, Kireka and Kirinya Wards. Map 6.1 and Table 6.1 illustrates the location of the proposed land uses and their coverage in hectares respectively.

Table 6.1: Land use classification and distribution

ТҮРЕ	COVERAGE (HECTARES)	PERCENTAGE
Buffer	393.0	4.121
Cemetery	4.8	0.051
Central Market	0.5	0.005
Civic	5.1	0.054
Commercial (CBD)	191.0	2.003
Commercial (District Centre)	57.1	0.599
Commercial (Local Centre)	77.4	0.812
Industrial (Artisan Park)	7.5	0.079
Industrial (Heavy)	101.9	1.068
Institutional	94.7	0.993
Lorry and Taxi Park	0.6	0.006
Open Water	80.5	0.845
Recreational	35.9	0.376
Residential (High Density)	1625.0	17.040
Residential (Medium Density)	4349.9	45.615
Sewer Lagoon	10.6	0.111
Tourism	182.2	1.911
Transportation Terminal	1.8	0.019
Urban Agriculture	348.4	3.653
Warehousing	2.0	0.021
Wetland	1857.2	19.475
Woodland	109.0	1.143
Total	9536.2	100.000

Map 6.1: Kira Physical Development Plan



6.1.4 Building Standards for Residential Development

Standards for building lines (**Table 6.2**) and Plot coverage (**Table 6.3**) were also formulated for future guidance of urban development in the Municipality as provided for in the National Physical Planning Standards and Guidelines 2011.

A Building line is the distance from a road reserve to where a building can be erected and in this case emphasis was put on residential development. It eases future road expansion in case need arise with minimal demolition. A building line also protects the road from encroachment. The Consultant recommends that Kira Municipal Council; specifically the Municipal Physical Planner communicates to property owners about these standards. Violating the set building line within planned residential zones will not be permitted.

Table 6.2: Proposed Building line standards

Density	Standard range (metres)
High	2-4m
Medium	3-5m
Low	5 -10m

Plot coverage refers to area of the plot that is built as opposed to the un built. It is recommended that all buildings should follow prescribed coverage to allow aesthetics (beauty) and greenery in their lawns and gardens (**Table 6.3**). It is recommended that the developer can be advised on how best to utilise the un-built area by professionals such as planners and landscape architects.

Table 6.3: Plot coverage

Density	Percentage coverage
High Density Residential	70%
Medium Density Residential	50%
Low Density Residential	30%

6.2 Commercial Land use

Commercial areas are structured in a hierarchical manner. High order goods will be provided in the high order centres for example CBD. Low order goods such as goods needed on day- to- day basis will be provided in district and local commercial centres in order to improve on accessibility and encourage sustainable neighbourhood development. Commercial land use in this proposal covers a total land area of 325.5 hectares (3.4%). The proposed minimum plot size is 15mx30m (49.21ft x 98.42ft) and the recommended plot coverage is between 80% and 95%. The uniquiness of Kira Municipality especially in terms of geographical shape eccessitates the provision of two CBDs i.e one at Kyaliwajjala to act as the administrative centre while another is provided at Kireka – Bweyogerere to act as the business centre. The Central Business District in total covers 191.0 hectares (2%). The District Centers located in Kira, Kyaliwajjala and Kireka covers an area of 57.1 hectares (0.6%). Local commercial centres located in each Ward cover the remaining areas under commercial land use. Local commercial centres cover an area of 77.4 hectares (0.8%). It will help in extending services nearer to the people within their locality. This

hierarchy will also promote equitable and smart growth of satellite towns but at the same time encourage urban rural inter linkages to support economic growth.

It is proposed that Kira Municipal Council through the Town Clerk's office should be responsible for both planning and management of the commercial centres.

6.3 Industrial development

Industrial covers a total land area of 1,259.4 hectares (4.288%). This has been split into industrial heavy covering 101.9 hectares (1.1%), Artisan Park covering 7.5 hectares (0.07%) and warehousing near the inland port covering 2.0 hectares (0.02%). The recommended plot coverage will vary according to the hierarchy and level of industrial development; 84% for heavy industrial zones and 16% was sufficient for heavy industrial zones. Heavy industrial land use was proposed in Kireku and Kazinga cells in Bweyogerere Ward and Kireka A in Kireka Ward. Light industrial / Artisan Park was proposed in Kitukutwe in Kimwanyi Ward while warehousing was proposed at Bukasa in Kirinya Ward.

However, it's recommended that the green belt of different canopies should be enhanced around the industrial area and proper landscaping during detailed planning in order to reduce on pollution from industries. The plot sizes will be determine at detailed plan level because it is quite difficult at this stage to determine the kind of industrial development that will be attracted to the area.

6.4 Agricultural use

This category is divided into two sub categories namely; urban agriculture which is basically subsistence and large scale agriculture. Urban agriculture is proposed in order to tap the potential of food production in the Municipality. This was because a lot of land was identified to be un developed during the land use inventory. As a way of promoting food security, urban agriculture was maintained covering a total of about 358.4 hectares (3.7%). This form of agriculture will make the Municipality to be self – reliant in food supply and support agricultural processing industries which may develop in the future. However, the land for agriculture can be converted into other uses in future if need arises but with approval from the National Physical Planning Board.

6.5 Civic use

Civic services include; administration such as the Municipal and Division headquarters, courts. The plan proposes office space for all administrative units and also the existing civic services were maintained as it was discovered that their distribution is sufficient to service the Municipality. Civic covers a total land area of 23.02 hectares (0,078%). The municipality should invest in establishing offices other than relying on rented space and or squatting on Buganda Kingdom premises.

6.6 Institutional use

Institutional land use include; educational, health and religious facilities. Existing Institutional was maintained as it was discovered that; what was existing was sufficient to service the Municipality in the next 22 years. The total land area covered by institutional land use is 94.7 hectares (0.9%). Figure 6.1 illustrates the distribution of the proposed land uses by percentage.

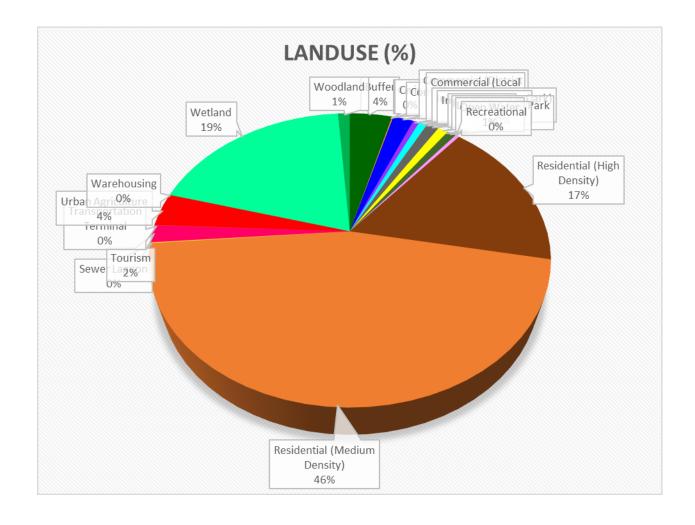


Figure 6.1 land use distribution by percentage

6.7 Environmental

Under environment all natural resources are covered these include land occupied by natural forests and wetlands. It also covers areas for sanitation like landfills and sewer lagoons. In this plan environmental land use covers an area of 1,854.76 hectares (6.314%) of which 1,797.13 hectares (6.118%) was under wetlands. In order to conserve the ecologically sensitive areas, it is recommended that;

- The wetlands should be buffered to a distance of 30 meters in order to prevent encroachment by the residents. The buffer covers an area of 397.54 hectares (1.353%). By doing so, illegal activities such as settlement, unregulated sand/ stone mining and brick making is controlled in such areas.
- The wastes should also be properly managed. The responsible authorities should provide garbage containers in the very busy areas of the Municipality such as markets, and also provide a mechanism of transporting the collected wastes to the nearby waste collection ground.
- The green belts in the Municipality should be properly maintained. It improves on the aesthetics of the area but also such green areas like the grass and trees absorb the carbon emissions from the nearby polluting human activities.

The plan does not propose for a land fill since land was procured at Menvu in Nansana Municipality covering 4.66 hectares to serve the Municipality. This will go a long way to address the pathetic manner in which solid waste is being handled in the municipality generally.

The plan also proposes conventional sewer lagoons to improve the sanitation condition of the municipality. These cover an area of 10.6 hectares (0.11%) located in Central Zone, Kamuli C, Naalya, Kira, Kitukutwe and Nakwero B cells.

6.8 Recreation facilities

In order to involve the community in active leisure and good health, the community especially the young people needs such Open spaces like play grounds and parks to exercise their bodies. The plan therefore proposes land for this purpose covering an area of 35.9 hectares (0.4%) of the total Municipal land. The facilities are proposed in each of the three divisions of Kira Municipality.

6.9 Social Services

In order to project the future demand for social facilities the consultant developed a matrix for standards. This matrix puts into consideration the catchment area, the range, the land requirement and the distribution as illustrated in table 6.4. These standards were used to determine deficiency and guiding future planning needs at lower levels.

Table 6.4: Proposed Standards for Social Services

Facility			Standards		
Category	Catchments	Walking	Land requirement (Ha)	Location	Distribution
		distance			
Nursery Sch.	2,500	300-500m	0.1-0.25	Zone	1 per zone
Primary Sch.	4,000-5,000	1-1.5km	1-3	Ward	1-2 per Ward
Secondary Sch.	8,000-1,0000	1-3km	4-6	Ward	1-2 per Ward
Vocational Inst.	50,000 - 100,000	n/a	4 -10	Division	Per Division
Health centre	30,000-40,000	2-2.5km	1-1.6	Ward	1-2 per Ward
Cemetery	50,000-750,000	n/a	1-2	Division	3-5 per Division
Religious	3,000Approx.	n/a	0.25-1	Ward	3-5 per Ward
Community centre	10,000-15,000	n/a	0.25-0.5	Ward	I per Ward
Police post	20,000	n/a	0.1-0.25	Ward	1-2 per Ward
Play ground	Variable	n/a	1	Ward	1 per Ward
Market	>2000	2.5 km	0.2	Ward	Neighbourhood
Fire station	400,000	n/a	0.1- 0.5	Municipal	

6.9.1 Education Facilities

Basing on the analysis done on the existing education facilities, it's recommended that the existing primary, secondary and tertiary institutions should be maintained because their distribution is adequate (See key sector analysis section) to service the Municipal boundary for the next 22 years. However, there is need to improve on the quality of existing health and education facilities by the authorities concerned or even new ones constructed if need arises in order to ensure quality and to cater for the future demand for these facilities. It is also recommended that, each primary school develop a nursery section to cater for young ones who need this service.

6.9.2 Health facilities

Basing on the analysis in map 4.2, it is recommended that the existing facilities are not adequate to serve the future population. The facilities seem to be over burdened by the ever increasing population and also in those areas where services appeared adequate there was need to boost and upgrade these services to meet the ever increasing health needs.

6.10 Tourism

The Municipality's development is premised on tourism especially religious tourism since it houses the Uganda Martyrs Shrine at Namugongo. Inorder to have this area developed to international standards, there is need for an action plan for this area to cater for the requisite demands it poses on the entire Municipality. The plan proposes a tourism zone covering a total of 182.2 hectares (1.9%) at Namugongo covering the Catholic, Prptestant and Muslim shrines.

6.11 Other services

The following facilities are also recommended at the parishes: -

6.11.1 Market

There are a number of markets in the Municipality. However, analysis carried out indicates deficiency in the distribution of these markets as other areas are not served. It is recommended that, there is need for more markets to serve the people, without moving very long distance. The existing markets should also be upgraded to meet the future demand. The plan proposes land for a central market is 0.5 hectares (0.005%). It is proposed in Kyaliwajjala. However this is meant to be supplemented by other market facilities at Ward level.

6.11.2 Community centres

The survey indicates that such facilities in Kira Municipality are very inadequate and their standards are low. At the moment there is no community centre in the entire town and as such, it is recommended that each Ward at list should have its own community centre in order to serve the people better.

6.11.3 Cemetery

This plan proposes a cemetery at Kireka A and Kamuli A covering an area of 4.8 hectares (0.05%). The plan considers land values as the basis for location of this facility.

6.11.4 Transportation terminals

In order to curb down on the commuter taxis parking in un gazzetted areas, a transportation terminal is proposed at Bukasa on a land area totaling 1.8 hectares (0.02%). The terminal's location is meant to link the dry land to the open water near the warehouses and the inland port in order to ease flow of traffic from either direction of the Municipality. The plan also proposes for a Lorry / Taxi park at Kyaliwajjala covering 0.6 hectares (0.006%).

6.12 Transport and Infrastructure

6.12.1 Traffic & Transport management

The Traffic and Transport Plan conforms to general planning objectives of the Kira Municipal Council physical development plan, addresses present and perceived future needs in the transport system of the Municipality and presents solutions. The plan can be implemented during the planning period 2018-2040, given a reasonable improvement in institutional and financial resources.

6.12.2 The Transport System

The transport system to serve the movement of goods and people in Kira Municipal Council during the planning period and beyond will be focused on the restoration, preservation and development of the present system. At the same time, a methodology is presented for addressing the expansion of the system to meet future demands during and beyond the planning period. Road transport will continue to be the dominant mode of mobility. The plan assumes that water transport is not viable in Kira Municipal Council. The Municipality should however endeavour to upgrade the roads as a way of making the movement of goods and services cheaper and easier in the area.

Road transport components of the physical development plan include the road infrastructure, public transport facilities, pedestrian and non-motorized transport, parking and road safety. Also included are the organizational and institutional arrangements for managing each of these services. The plan puts forward proposals for development of these components to serve the needs of the various population centres and transport flows. It seeks to improve facilities for non-motorized means of transport since these constitute majority of journeys in the parishes and are environmentally sustainable and affordable.

6.12.3. Road Network

The proposals for transportation provide for commuter traffic management within and out of Kira Municipal Council. This is based on the current and projected future needs for transportation in Kira Town but also considers short term solutions to the current transportation problem. Various transportation problems were observed during the survey. There are a number of reasons for the increase in traffic; demographic dynamics, changing travel patterns and land use changes. Recommendations on roads include: -

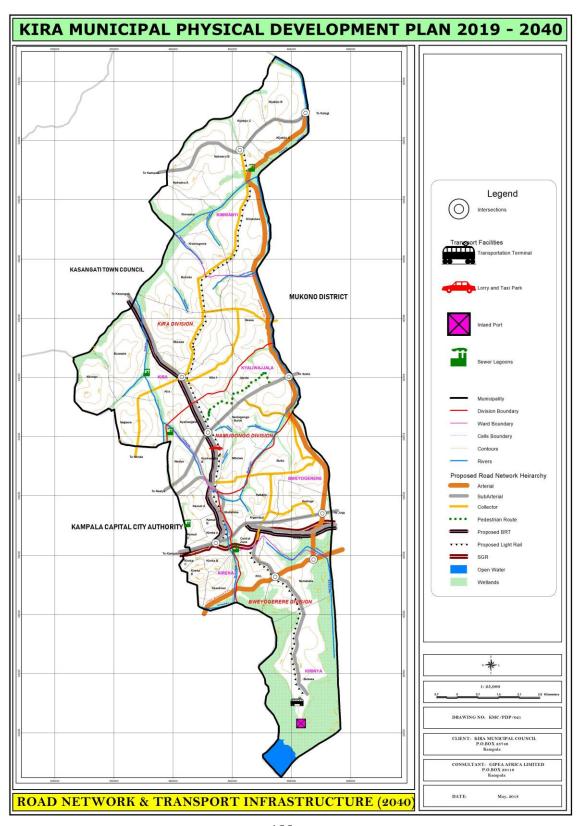
- a. Cost-effective use should be made of the existing infrastructure and facilities,
- b. Transport costs for all modes should be minimized whenever possible
- **c.** Additional infrastructure investment should only be proposed if it clearly shows full cost recovery and it's affordable.
- d. There is need to upgrade the existing municipal roads to take care of the ever increasing traffic from the city Centre.
- e. Tree Line Avenues are recommended to reduce on carbon emissions from vehicular traffic along the major road but most importantly along all the secondary roads to trap dust partials which are very prevalent whenever traffic moves.
- f. Road side drainage channels should be properly managed to avoid blockage of these channels by solid waste for example plastic bottles and polythene bags to avoid flooding cases during rainy seasons.

- g. All road reserves are to be planned, surveyed and gazetted to avoid future encroachment. There is need to step up enforcement to control and stop encroachment on road reserves by the authority.
- h. A road hierarchy has been proposed to clearly define the intended use. They include; primary, secondary, local/access and tertiary roads as illustrated below;
- i. There is urgent need to name all roads in the Municipality. Each Division should take up the responsibility of identifying and naming critical roads for easy orientation.

(A) Primary roads

The proposed road reserve for primary road is to range between 30 - 60m wide covering carriage way, reserve and service reserves. This was adapted from the GKMA and Wakiso PDPs. Primary roads in this case includes; Old Jinja Road, Jinja Expressway and Gayaza - Kalagi Road. These roads link the municipality to other regions and the country at large. This has an advantage that in the future, road expansion becomes very easy and less costly due to lack of compensation. What needs to be done is for the Municipality is to enforce these reserves without any favour.

Map 6.2: Proposed roadnetwork and infrastructure



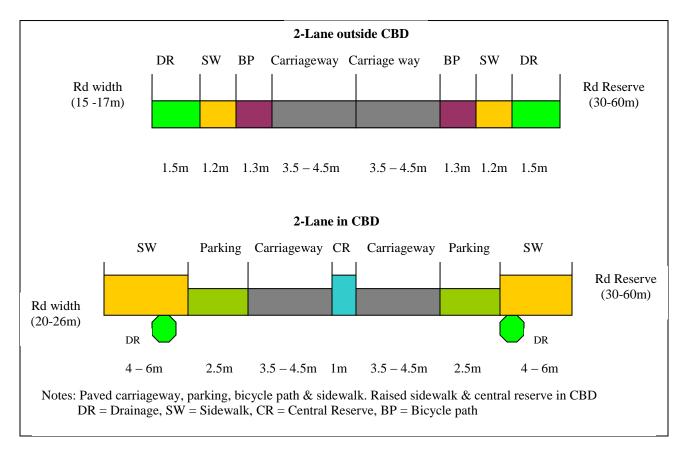


Figure 6.2: Typical primary road cross section

(B) Secondary roads

These roads are proposed to be 20 - 30m wide and they include Kira Bypass which connects all the four division of the Municipality, Northern Bypass, Gayaza Kalagi road, Jokers Namanve, and other roads within the CBD. These roads link up the four divisions in the Municipality.

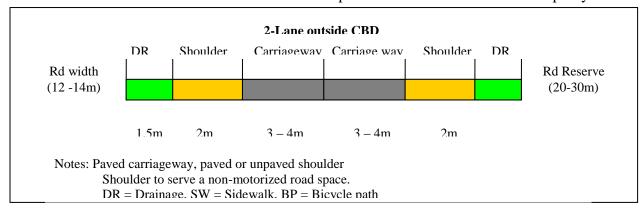


Figure 6.3: Typical Cross Section of a Secondary Road

(C) Access roads

These are proposed to be 15 -20m wide and they link up all the parishes in the three divisions. Kira Municipal Council administration should upgrade these roads to lose surface road Grade 1. The proposed new roads include;

This should be possible through connection with existing roads from the municipality to ease anticipated future traffic congestion and also removing heavy trucks from the town centre. Road surfaces should be first class murram and systematically upgraded to tarmac in phases. There is need to have the roads stone paved and also include ditch drainage.

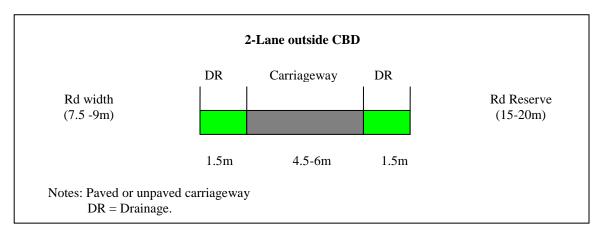


Figure 6.4: Typical Cross Sections of Access Road

(D) Tertiary Roads

These provide the final distribution of traffic to and within the trading canters. Other tertiary roads were proposed in the parish to take people to different final destinations in the Municipality. Other access roads will be proposed in the detailed planning of the population or busy local trading centres' of the Municipality.

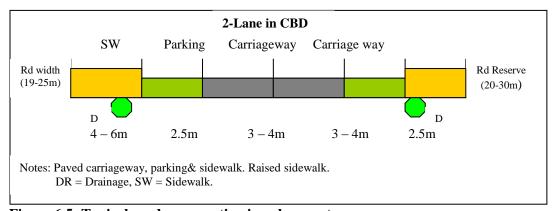


Figure 6.5: Typical road cross section in urban centre

6.12.4 Parking

Management of street parking need to be properly managed. All parking regulations should be enforced. Motorists should be made to respect no-parking zones, avoid double parking and other parking ills, through introduction of penalties, like clamping and issuing fine tickets. Parking zones should be well marked and signed. Parking fees for all vehicles should be introduced in the CBD and other district commercial centres. This will not only offset costs for enforcement of parking regulations, but increase the Municipality's revenue base. Paid street parking will also encourage the private sector to provide on-site parking, and to develop dedicated commercial off-street parking.

6.12.5 Loading and Offloading

On street loading and off-loading should be discouraged as much as possible. This can be done through the following key measures: -

- 1) Setting high dues for bulk loading and offloading on the street,
- 2) Planning for service lanes and opening them,
- 3) Regulated issuance of trading licenses for stores dealing in bulk goods like cement, steel, beer and soda that are not desirable on the main streets.

6.12.6 Traffic Signs and Road Markings

These can barely be seen on Kira Municipality roads and/or streets. Their absence is leading to disorganized use of the road infrastructure. The CBD should be given priority in installation of traffic signs and road marking. Long lasting materials like thermoplastic should be used for road markings, as this will be cheaper in the long run. The thermoplastics should be mixed with reflective beads, while the material for signs should be reflective to enable road users read signs and markings even at night. The municipality can attract the private investors to provide such facilities in exchange for outdoor advertisement under a Public Private Partnership (PPP)

6.12.7 Street Lighting

The CBD and the entire town is generally dark, save for security lights on some of the buildings, which too do not provide adequate lighting. The CBD should be given priority when installing street lights. This will make the urban night environment safe especially for non-motorized traffic. A well light CBD and district centres will also increase the level of economic activity as people will feel safe to continue working and shopping even at night. PPP arrangement can also be used to support the provision of such a service in town.

6.12.8 Public Transport

The public transport service will continue to be driven by the private sector. However there is need to encourage more public transport services like buses in Kira Municipal Council since people use public trucks and Boda boda which are not safe and are used by both passengers and their cargo parked together. The role of the Kira Municipal Council here is to control and improve the service. Other public transport means like motorcycles are encouraged in the Municipality but they should be regulated to avoid the Kampala "Bodaboda" syndrome. There is need to introduce public transport connecting the four divisions. This can ably be done by tarmacking some of the key roads linking up these divisions.

6.12.19 Pedestrians and Non-Motorized Vehicles and Facilities

It is a global trend to shift from high energy consuming ways of life to low consumption. Particularly emphasis is being put on less consumption of fossil fuels like petroleum, the main energy source for the transport industry. A low fuel consumption transport system is already happening in Kira Municipal Council and should be encouraged by provision of the necessary facilities. To start with, walkways should be designated with direction not people forming their own depending on where one wants to go. Use of bicycles should be encouraged as part of the road infrastructure. For pedestrian facilities, attention should be directed to the local trading centres where pedestrians are highly concentrated.

6.13 Utility services

Power supply in the Municipality can only meet the current demand. In future there will be need to upgrade the existing power substation to take care of the future industrial needs and other proposed services. There are also places with no power majorly in Gombe and Busukuma Divisions. There is need to extent the transmission lines to such places if they are to develop like other places. For water supply the municipality needs to increase on the network so as to allow people in the periphery access clean and affordable water. Like it is suggested in the Wakiso District Physical development Plan, NWSC should take over the supply of piped water in the entire municipality. The plan water to supply Kiwenda trading centre could come from Wamilongo ass had been established by the water department.

The Municipality also should take keen interest in the planning. Developing and maintaining of drainage systems especially in densely populated areas of Nabweru and Kira. This will go a long way to protect the expensively constructed road but at the same time control flooding in the area.

Part VII

7.0 Written provisions

7.1 Planning Heirarachy

Planning in Kira Municipality will take place according to the proposed hierarchy below.

- 1. Kira Municipal Physical Development Plan (KMPDP)
- 2. Division Physical Development Plan (DPDP)
- 3. Precinct / Neighbourhood Physical Development Plan (PPDP)
- 4. Site Development Plan (SDP)

7.2 Municipal Physical Development Plan (MPDP)

This plan will give a framework for future land use development in the Municipality. It will guide the major land use zoning, the physical infrastructure and social services. It will also indicate the boarder planning standards and guidelines which will guide the three other lower planning levels.

7.3 Division Physical Development Plan (DPDP)

Because of the unique nature of each of the four divisions of the municipality, the plan finds it necessary to develop a Division Physical Development Plan. It will ensure convenience, efficiency and equity of service provision to all categories of residents in the area. This plan will be aligned to the municipal and district plans but bringing out more details peculiar to a given locality. It will be planned at a scale 1:5,000 with reference to the context of the municipal plan. It will include;

- 1. Zoning land use plan (scale 1:5,000)
- 2. Integrated Infrastructure plan (scale 1:5,000)
- 3. Detailed development standards and guidelines
- 4. Written provisions

7.4 Precinct/Neighbourhood Physical Development Plans (PPDP)

Every precinct/Neighbourhood shall have a Physical Development Plan. The Precinct Neighbourhood Development Plan (PPDP) is to be planned at a scale of 1:2,500 with planning reference to the context of its respective division.

The PPDP is to allow orderly, coordinated, harmonious, progressive and sustainable development of the area to which it relates in order to promote health, safety, order, amenity, functionality, accessibility, general welfare and economy to all its inhabitants and efficiency in the process of development.

The PPDP will include the following components:

- 1. Land use plan (scale 1:2,500)
- 2. 3D Urban Design and images
- 3. Written provisions
- 4. Statement of compatibility with and/or divergence from the DPDP and compatibility with the Physical Planning Act 2010. In the event the PPDP is prepared by a body other than the KMC or the MoLH&UD, this statement will be a sworn statement signed by both the representative of the body proposing the plan and by the lead planner.

The PPDP will address the following provision

A. Physical elements

- 1. The area to which the PDP is to apply, detailing and in accordance with Boundaries and Division Map. Boundary changes of not more than one hundred (100) meters will not be considered changes to the PPDP. PPDP boundaries must be adjacent with no overlaps or gaps.
- 2. Detailing, adjusting and altering the boundaries, area, shapes, and positions of any land use including roads, streets, pedestrian and cycle paths and rights- of —way;
- 3. Classification and subdivisions of the plan area for residential, commercial development, institutional and service facilities, business and industrial development, infrastructure, environmental protection and natural resource management, public and private open space and tourism, or a combination of any of the above. No land or structure within the plan area will be developed or used for any purpose other than in accordance with the plan.
- 4. Determining the type and density of development generally or in any particular locality, for all or specific uses and functions consistent with the average density targets.
- 5. Assessing the balance in the supply of and demand for local public services, facilities and amenities for the projected population, identifying any gaps and in the event of a projected shortfall defining requisite ameliorator solutions to ensure appropriate service provision.
- 6. Determining the location of public service facilities including major public institutions, education (primary school upward), health (HC III upward), community facilities, sports facilities, major ecclesiastical facilities for all denominations, playground, etc.
- 7. Conservation and enhancement of historic buildings and objects of architectural, archeological, historical or scientific value.
- 8. Feasible routes for existing, upgraded, and new roads, streets, cycle routes, pedestrian routes, rights –of- way, railways and canals, probable sites for bridges, docks, harbors, piers, power-lines, telecommunications, water drainage and sewerage or any other work or undertaking of public utility.
- 9. Determining the appropriate location for major infrastructural facilities including water storage and distribution; collection, transfer, treatment and disposal sites for solid, liquid and hazardous waste; power transformation facilities; communication masts with appropriate exclusion areas; etc.
- 10. The 3D urban form and architectural principles of the urban fabric
- 11. Traffic analysis of the proposed plan and comprehensive transportation plan for the entire precinct/Neighbourhood.
- 12. Mapping and assessment of environmental values and defining mechanisms for their appropriate use, protection, rehabilitation and/or preservation.
- 13. Mapping and assessment of sources of pollution and defining mechanisms for their resolution or mitigation;
- 14. Mapping and assessment of all historic buildings and landmarks and defining mechanisms for their appropriate use, protection, rehabilitation, and /or preservation.
- 15. Assessing access needs and ensuring access to services, opportunities and public transport for all residents with special emphasis on pedestrians and on the disabled.
- 16. Assessing needs and defining mechanisms ensuring all plots in the precinct can be connected to power supply, on-plot water supply and water borne sewage systems.

17. Undertaking appropriate participatory and consultative processes, identifying, assessing, balancing, and addressing, as best possible, relevant stakeholder and public (civil society) interests, needs, desires and preferences.

B. Redistribution of land ownership (when necessary)

- 18. Facilitating easy accessibility to land ownership within the plan area by carrying out land adjustment to facilitate easy and efficient use of the land.
- 19. Effective exchanges of or cancellation of existing land sub division as may be necessary or convenient for giving effect to the PPDP.
- 20. Adjusting property rights between owners of land.
- 21. Acquisition of land for public use by the KMC.

C. <u>Implementation</u>.

- 22. Defining implementation stages, prerequisites and conditions for PPDP implementation
- 23. Action plans for implementation
- 24. Directing Construction Licensing and Enforcement
- 25. Any matter necessary or incidental to the implementation of the PPDP.

D. PPDP Approval

Subject to requirements of the Physical Planning Act 2010 and consistency with higher order plans, all proposed PPDPs will be assessed, rejected or approved in part or in full or subject to changes by the KMC: all deviations from KMPDP are subject to National Planning Board approval.

All PPDPs will be initiated by the KMC or prepared by other parties subject to prior KMC approval which will include prior definition of plan boundaries and mechanisms and benchmarks for reporting and consulting.

KMC approval of each PPDP will include:

- a) All requirements and processes defined in the Physical Planning Act 2010 for local Urban Physical plans.
- b) Preparation of the plan under the direction of a Physical Planning Committee (PPC) chaired by the KMC Town Clerk.
- c) Preparation of plan on the basis of extensive stakeholder and public (civil society) participation and consultation.
- d) Presentation of the proposed plan in an open, structured consultative forum for public feedback to be held in the precinct or within easy access thereto;
- e) Assessment and recommendation of the plan by the KMC Planning Department.
- f) Presentation of the proposed plan to the KMC Council.

7.5 Site Development Plan (SDP)

All plots larger the one hectare (1.0Ha) for development and construction and all plots including any construction to a height exceeding ten (10) meters and/ or planned to house twenty (20) or more residential units and/or including any structure exceeding five hundred (500) square meters and/or including any structure where in over fifty (50) persons may congregate and all proposed development requiring changes to KMPDP or PPDPs shall have a Site Development Plan (SDP). Variation of up to fifty (100) meters from NPDP and variation up to twenty (50) meters from

PPDPs is not considered a change requiring an SDP unless such a change impacts the alignment of roads, rail infrastructural networks, in which case any variation requires an SDP.

A site plan Development operationalizes the provision of a precinct/ neighbourhood or urban system physical development plan. The SDP defies land use arrangement and boundaries and buildings location in a scale of 1:1,250-1:500. The SDP will be the prerequisite for Development permission for development of a structure on the site.

The SDP will include the following components:

- 1. Land use plans (scale 1:1,250 -1:500).
- 2. 3D Simulations, images and Layouts.
- 3. Written provisions
- 4. Statement of compatibility with and/or divergence from and/or absence of relevant higher order plans and compatibility with the Physical Planning Act 2010. In the event the SDP is prepared by a body other than the KMC or the MoLH&UD, this statement will be a sworn statement signed by both the representative of the body proposing the plan by the lead planner.
- 5. Statement of approval from the Uganda Police Emergency Services with regard to fire protection, emergency, exit provisions, emergency water supply and access for emergency service vehicles.
- 6. Statements of approval from the relevant Water, Sewage, Power and Waste disposal service providers regarding compatibility with their existing and/or planned systems and approval of interim solutions proposed if so incorporated in the proposed plan.
- 7. Statement of approval from NEMA for all plans incorporating commercial, industrial and/ or health service facilities(HCIII upwards)

The SDP will address the following provisions:

- 1. The area to which the SDP is to apply.
- 2. 3D urban design characteristics of the public and private domains, location and general form of buildings and ensembles of buildings, layout of roads and streets, pedestrian and cycle paths, location of infrastructure networks and facilities, layout of open spaces, and integrating all the components in a whole fabric.
- 3. Architectural design parameters of buildings and complexes of buildings.
- 4. Detailed layouts and sections of all land uses in the site, either for residential, commercial, industrial, public and private services, tourism or combination of both.
- 5. Infrastructure plans, environmental protection, and natural resource management principles, including on-site power and water supply linkages as well as acceptable solid waste disposal solutions and linkage to water- borne sewage system or in its absence provision for future linkage and provision of acceptable on site interim solutions for sanitation.
- 6. Traffic, transportation and parking impacts and solutions including adequate on -site parking provision.
- 7. Local public service and facility needs and their provisions, either on-site or alternative identified solutions within easy access.
- 8. Provision for fire prevention and emergency services, including access and water supply.

- 9. Implementation plan, development stages and time table, cost and financing of infrastructure, service facilities and public open space.
- 10. Detailed subdivision of planned areas into lots for construction.

SDP Approval

All proposed SDPs are to be submitted to KMC. KMC is to examine each SDP and submit its comments and recommendations regarding the plan. Subject to requirement of Physical Planning Act 2010 and full consistency with the higher order plans, all proposed SDPs will be assessed, deferred, rejected or approved in part or in full or subject to changes by the KMC Physical Planning Committee as provided by the Physical Planning Act 2010.

All SDPs be initiated by KMC or prepared by other parties subject to prior KMC approval which include prior definition of plan boundaries and mechanisms and benchmarks for reporting and consulting.

KMC approval of each PPDP will include:

- a) All requirements and processes defined in the Physical Planning act 2010 and Public health Act for local Urban Physical Plans;
- b) Preparation of the plan under the direction of a Steering committee chaired by a representative of the KMC Physical Planning Committee.
- c) Presentation of the proposed plan in an open, structured consultative forum for public feedback to be held within easy access to the neighbourhood of the site being planned;
- d) Assessment and recommendation of the Division planner for Physical Planning Committee
- e) Presentation of the proposed plan to the KMC Physical planning committee.

Part VIII 8.0 STRATEGIC INTERVENTIONS AND RECOMMENDATIONS

8.1 Approach

The long term vision for Kira as indicated above, presents challenges of generational scale. The preconditions for such development have to be set in place before Kira Municipality can begin to develop into an organised urban area as decision makers and residents desire. These preconditions need to be met largely over the coming decades under the proposed strategic interventions.

Kira Municipal Council is the enforcer of by-laws and/or ordinances set out by her. It has been recognized that Kira Municipality is a highly urbanizing area with the necessary human resource but lacking finances to implement these laws by itself. Therefore the Physical Development Plan proposes for further funding from the central government, international organizations, NGOs, the private sector and other local institutions for effective implementation of the proposed strategic intervention as illustrated in (**Table 8.1**).

Table 8.1: Strategic interventions

Development issue	Strategic intervention	Time frame	Actor
Land use planning and management	 Embank on the development of Division and Neighbourdood Detailed Plans in each division to control the haphazard physical development with emphasis on Kyaliwajala and Namugongo Divisions. Survey and gazette all public open spaces, reserves for primary and secondary roads, ecologically sensitive areas and other physical infrastructures to protect them from future encroachment 	5 years 5-10 years	 Kira Municipal Council. MoLH&UD MoLG Development partners. Private sector
	 Preparation and implementation of detailed plans for Commercial Centers and Industrial areas with emphasis on Kitukutwe, Kimwanyi Artisan Industrial and Business Park in Kira in order to create employment and to attract balanced growth in the entire municipality Popularize the plan to all stakeholders 	5 years 1 year	

Population explosion - There is need to redistribute possible employment opportunities across the Municipality. The CBD inevitably remains a focal point for the local economies. This should be complemented and balanced by significant employment centers in the Municipality such as industrial areas, district and local commercial centres. - There is need to control population explosion through supporting programs aimed at curbing rural urban migration and improving the management of the Municipality with the view of minimizing problem related to the Municipality caused by population pressure. These programs include, integrated rural development which allow the provision of appropriate rural technologies, rural electrification and support of improved agricultural practices hence staying the rural population. This should be implemented in conjunction with other social policies. - Research and capacity building activities should be implemented in the Municipality through organizing workshops, seminars and consultation where major decisions on emerging population issues are discussed. There is need to carrying out studies to understand the complex interrelationship between population, environment and development. The result of which will assist to fill the gap in information thereby easing access to adequate services.		especially the lower administrative levels, business community and land owners so that they appreciate the plan and endeavor to follow it		
	-	employment opportunities across the Municipality. The CBD inevitably remains a focal point for the local economies. This should be complemented and balanced by significant employment centers in the Municipality such as industrial areas, district and local commercial centres. There is need to control population explosion through supporting programs aimed at curbing rural urban migration and improving the management of the Municipality with the view of minimizing problem related to the Municipality caused by population pressure. These programs include, integrated rural development which allow the provision of appropriate rural technologies, rural electrification and support of improved agricultural practices hence staying the rural population. This should be implemented in conjunction with other social policies. Research and capacity building activities should be implemented in the Municipality through organizing workshops, seminars and consultation where major decisions on emerging population issues are discussed. There is need to carrying out studies to understand the complex interrelationship between population, environment and development. The result of which will assist to fill the gap in information thereby easing	10 years	 Wakiso D C Central Government International Agencies Uganda Investment

Housing development	■ The Municipality should acquire land, plan and service it and encourage investors in providing low cost housing for purposes of addressing housing shortage in the municipality and also improve on the slum areas. The council can target the public land at Kimwanyi for this purpose.	10- 15years	 Kira Municipality Non- Governmental Organization MoLH&UD Private sector
	■ The Municipality should develop prototype development plans to encourage the poor who can't afford architectural services in order to put up planned structures with approval and assistance from the Municipality.	2 -3 years	
	There is need to address the issue of security of tenure to support housing development. The Bibanja owners need to be issued with registration certificate as provided by the laws of Uganda.		
	Central government must revisit the policy on construction material such as cement and iron sheets to make them affordable. The issue of taxing sand could also be reviewed to avoid escalating the cost of putting up a house which the poor can't afford.		
Economic development	• Revenue enhancement for the Municipality is very critical. There is need to identify other revenue sources which are not yet tapped and also maximize the collection of property rates. There is need to develop a computerized register and use of technology to support tax collection. The use of E-taxation is highly recommended.	3-5 years 5-10	 Kira Municipal Council MoLH&UD MoLG MoT&A Development partners. Private sector
	Develop major markets in at least each division of the municipality to enhance job creation and improved livelihood of the population and the youth in particular.	years	■ MoT&T
	• There is need to regularize the informal	2 -5 years	

markets ■ There is need to develop the Municipal link road to connect all parts of the municipality.	l ector UD
■ There is need to develop the Municipal link	ED

Environmental health The Municipality should encourage collective responsibility by promoting "The Keep Kira Clean Campaigns" through	 Kira municipal Council NGOs NEMA
awareness creation, competitions at Ward level and where necessary enactment of Municipal bylaws especially in areas of solid waste management to ensure community participation so as to reduce on open dumping of waste especially Kira and Bweyogerere, and Kireka areas. • Environmental education/capacity building; to encourage and promote onsite environmental management, conservation and monitoring by the Lower Local Council and public. • Wetland management programme; to ensure demarcation of valued wetlands as habitats, flora and fauna in them and other cultural values, • Refuse disposal management; for extensive research on appropriate collection, transportation and disposal. Kira Municipal Council will be a lead in this venture and can opt for municipal collection or privatized methods, it is encouraged that a joint venture with other urban councils like Nansana MC and Kasangati TC to develop the facility is essential. • Tree planting programme for landscaping and creation of a roadway portal for	

	 domestic or local community aesthetic value. Human waste treatment; to reduce the use of pit latrines and adaption of lagoons especially in congested areas. 		
Social services	 Need for construction of more community centers at list one per ward where training sessions especially of the youth can take place. Construct a rehabilitation centers at each division for the physically and mentally disadvantaged youth to impart skills so that they can become self-sustaining. 	3-5 years	 Kira Municipal Council NGOs MoHS

8.2 General recommendation

8.2.1 Institutional development

- Develop sensitization programmes for Kira community to begin the transformation process from rural to controlled urban systems that meet the acceptable standard and way of life.
- To enable smooth running and management of the development of the Kira Municipal Council it is necessary that within the Municipality Institutional Framework, a sector be created specifically to oversee the physical development of the planning area. This is advisable in order to allow for direct generation and allocation of funds, manpower, materials and other resources specifically for the developing lower local plans for the proposed areas in the strategic plan.
- In order to reduce degradation of ecosystem and disturbance such as vegetation loss and in order to encourage development in accordance with development guidelines and ensure environmental safety, the proposed sector/institution at the municipality should identify key development sectors in the planning area in order to develop and set guidelines, environmental quality standards, laws, rules and regulations governing use and management of natural resources and development projects. Relevant sector bylaws must be laid down e.g. for natural resource conservation; for any indigenous tree felled for construction purposes a replacement must be done. Incentives to encourage compliance and penalties for violation of laws and regulations especially among private sector developers such as visitor centre operators, industrial owners and amenities providers must be defined. Appropriate economic incentives are also necessary to attract especially the private sector to invest in tourism projects in the area.

- The local sector development guidelines must be harmonized with the current guidelines from e.g. relevant government agencies, the ministries, and various existing national laws and policies related to conservation.
- Local management and enforcement organs e.g. pollution control organs within the planning area need to be developed, strengthened and empowered with training and skills, funding, manpower, materials and equipment to effectively regulate and supervise development activities. Contribution and involvement is expected from relevant stakeholders including NGOs operating in the area, local government offices, business enterprises, and other relevant bodies and individuals.

8.2.2 Physical Development

- In order to sustainably utilize the natural environment and to direct development activities according to the area development plan, physical planners of the area must clearly zone the area into designated development areas during the development of detailed schemes. This will result into positively restraining disorderly development and land speculation and will also minimize negative environmental impacts of development on the ecosystem.
- To avoid any unnecessary alterations to the landscape and disturbance to the ecosystem, Environmental Impact Assessments (EIA) must be carried out by registered environmental parishioners before any development related activity such as construction and reconstruction, water supply development, industrial plant establishment, infrastructure development, transport projects, sewerage management, commercial agriculture, tourism development etc, is done. Approval from NEMA must be obtained on completion of the normal procedures of an EIA and presentation of an Environmental Impact Statement (EIS). For development plans to be approved they must be accompanied by a certified EIS. The final approval by the Municipal Physical development Plan is mandatory.
- All developments of infrastructure, facilities, amenities, and other activities must be done in accordance with the required standards, in the designated zones, by competent organs and for approved purposes. This will enable systematic monitoring and evaluation of the development projects and also minimize environmental and social impacts of the projects.

8.2.3 Marketing and advertisement

- There is need to train local people in the Municipality to become professional entrepreneurs.
- There is need for creation of an Information Centre where residents and visitors can easily obtain any form of information about the Municipality.
- Preparation of brochures, pamphlets, magazines, souvenirs for advertisement and visitor information but also very importantly information on development requirements and standards should readily be available to developers and residents to minimise delays.

- Use of regular local and national radio programs to give information, educate, encourage participation, create awareness, and raise interest of the local people in the Municipality activities was considered very essential.
- Monitor quality of products and processes in order to attract investors and generally visitors.

8.2.4 Capacity Building, Training and Skills Development

- In order to sustainably implement the plan there is need for building capacities of technical staff and the policy makers in understanding and implementing developmental programmes in Kira Municipal Council. It is the wish of this plan to see the Physical Planner, the Community Development Officer, Environmental Officer in any, Surveyor and Civil Engineer trained in graduate programmes such as; integrated urban and regional planning, ecotourism development and management, development control mechanisms/systems and land management, GIS and Remote Sensing, Natural resource management, PPP in urban infrastructural development and others. Such courses range from 3 month to 1 year programmes locally and aboard.
- It is highly recommended that the programmes must be tailored toward enhancing capacities of local staff for better management. For the policy makers programs like urban development and management, finance management and budgeting, mobilization and communication strategy are recommended. Recommended institutions for such programmes include UMI, MUK, Public Service Institute in Jinja and Nsamizi for local courses and ITC Netherlands, RCMRD Kenya, ESAMI Tanzania for international courses among others.
- Institutions involved in Community and Environmental Education need to be encouraged in order to provide conservation knowledge, provide necessary skills for transformation of their activities to conform to proposed land use changes, encourage behaviour change, and enlist their positive participation and acceptance of development and conservation initiatives. Institutions such as NGOs, CBOs and the Municipal Community and Environment offices should be identified, motivated and liaised with to intensify conservation and development education among the community members.

8.2.5 Resource mobilization

- The District Service commission responsible for recruitment of staff in Kira Municipality needs to employ competent persons skilled enough to aggressively lobby both local and international bodies to provide financial and material resources for the development initiatives. Such skills may include ability to organize and manage fundraising activities, write funding proposals, lobby international and local donors, solicit for grants, etc.
- Competent organs need to be consulted to define and/or revise user fees, fines, local taxes, etc. to match the scale of development expected in the area and the services to be provided. This will be a convenient way to generate local funds from the area for its own development activities.
- Local manpower should always be given priority in employment in areas such as facility management and provision, construction, enforcement, local leadership, local program management, community education, monitoring etc. This is a strategy to ensure participation of the local people in development initiatives and getting them involved in beneficial non-consumptive use of resources.

Part IX

9.0 DEVELOPMENT CONTROL

9.1 Introduction

Given that Kira Municipal Council is under Wakiso District Local Authority, it's recommended that development control will be the responsibility of both Kira Municipal Council and Wakiso District Local Government so as to allow conformity of the Kira Municipal Council Development Plan with that of the district.

There is need to provide affordable shelter options and its related services but which conform to the planning, building and engineering standards so as to ensure safety of people's lives. In most cases the existing statutory, planning, building and infrastructure standards do not conform to the local needs and resources of people in Kira Municipal Council with the regularities and complexities involved in enforcing them notwithstanding. Such emanate from political interference, administrative weakness and resource constraints. Therefore recommendations for the standards made herein have put into consideration the above issues.

The areas addressed here include building requirement, infrastructure requirement and planning requirements.

9.2 Building requirements

It's recommended that Kira Municipal Council setup and review existing by-laws, planning regulations and infrastructure standards to operationalize the recommendations made in form of guidelines in each sector considered in this plan.

All the developments above shall be guided by qualified relevant technocrats who will ensure the following requirement are satisfactorily followed: -

- Well ventilated,
- Well illuminated by natural light during the day,
- If residential each adult should have enough space in the room to stand, sit and sleep in.
- Provide resident with sufficient facilities for the storing of food and utensils. (The nature will depend on the locality of the parish being addressed).

Other functions of the Kira Municipal Council shall also include but not limited to; Guide developers on matters related to application and requirements for buildings to be developed (see Annexes for Application and approval samples as provided by law, which could be adopted). Such requirements shall include inter alia;

- Written application for development,
- Site and layout/block drawings,
- Landscape plan in case the development is more than 1,000 square metres
- Plumbing and drainage installation drawing,
- Building material and specifications,
- Fire protection specifications,
- Structural drawing in case of storied development,
- Refuse disposal specifications,
- Public safety requirements,

- Sanitary provisions,
- Electrical layout drawing,
- Consideration for disabled groups in case of public building,
- Gender specification and consideration say ion case of rest rooms etc.

The Physical Planning Committee (PPC) on receiving such application should expedite its approval or rejection within 30 days. In case of approval of a building, the PPC shall issue a permit allowing consent of the development. In case of objection, the PPC shall do it in writing to the affected parties giving reasons for objection. Samples of the required permissions and applications are indicated in the attached annexes (Annex 1 -7).

The building/engineering section should ensure that building construction and site operation are carried out as stipulated by the Uganda's Building Regulations. The Engineering Department should also provide technical guidance to Developers where appropriate. The following particular areas are strictly recommended: -

- Structural plans (Prototype plans),
- Landscape, public open space and earth works,
- Building construction,
- Temporary building erection,
- Demolition works,
- Site operations,
- Material selection,
- Plumbing and drainage works,
- Refuse disposal,
- Public safety,
- Gender specification,
- Building and property maintenance.

9.3 Infrastructure requirements

The Kira Municipal Council should be responsible for the entire infrastructure to be planned, established, developed and used/maintained so as to ensures accessibility, it does not become a health hazard and shall not be a danger/injurious to the community. Such infrastructure shall include but not limited to the following: -

- Water borne systems other than those operated by NWSC,
- Water supply other than those operated by NWSC,
- All access and tertiary roads,
- Drainage of surface runoff/storm water system,
- Refuse management system.

To effectively enforce the above there is need to build capacity to administer tasks mentioned above. It requires further building capacities for some of the following offices and establishing those that are non-existent.

- Plans Office Plans Clerk (2)
- Building Inspection Office (1 per division)
- Assistant Public Health Office (1 per division)
- Draftsman/Cartographer (2)
- Assistant Land Surveyor (1)
- Assistant Physical Planner (1)
- Assistant Community Development Officer (1)

Assistant environment officer (1)

These Officers should be able to fit in the local government staff establishment structures. There will be need for equipment and avail logistics to Officers in order for them to operate efficiently. The equipment and logistics can be acquired gradually depending on the availability of financial resources in the Municipality.

9.4 Planning requirements

Developers applying to construct buildings and infrastructure are required to make formal application to council and applications shall be accompanied by any and not restricted to the following documents: -

- Site plan,
- Block plan,
- Service drawing showing locations of existing and proposed point connection,
- Site drainage plans,
- Structural design details,
- Construction technology specifications,
- Fire protection plan,
- Building material tests and specifications,
- Lighting, heating, and ventilation requirements,
- Environmental safety,
- Gender specifications in case of public buildings,
- Disabled group specifications,

Application for subdivision and change of user shall be made to the PPC for approved or deferred depending on the circumstances and situation that does not contravene this plan. For change of use shall be subject to Council approval. Where the area of concern is too big and or sensitive to District and/or national interest the approval of the National Physical Planning Board shall be sought, with support of other relevant government agencies.

Issues relating to the skyline, building line, orientation, setbacks shall be prescribed at detailed planning level where flexibility shall be prevalent as seen deemed necessary by the Municipal Physical Planner.

Further guidance shall be sought from the National Planning Authority and the secretariat of the National Physical Planning Board on matters related to planning in Kira Municipal Council. It's recommended that Council should acquire information related to land administration and/or management so as to ensure effective management. Such may include updated topographic and cadastral maps, which will expedite effective detailed planning.

This Plan is a framework for future development planning of Kira Municipal Council and therefore it's important to effectively and immediately embark on preparation of lower level zoning plans to help in the preparation of detailed planning schemes. The Municipal Council also needs to mobilize funds to establish a fully-fledged GIS unit and purchase a satellite image for the Municipality to aid surveying and physical planning team in executing their mandate but also to support revenue enhancement.

Part X

10.0 Plan Implementation

10.1 Tasks and Responsibilities

In order to implement the plan effectively, it is important to point out the key activities and the major actors in the implementation process. Table 10.1 gives an overview on roles and responsibilities during the plan implementation. Table 10.2 gives the indicative costs for implementation of the plan and Table 10.3 identifies the implementation phases.

Table 10.1: Tasks and Responsibilities (Work Plan)

	Work plan			ion of Kira	a PDP
No.	Activity	-	Time fram		Key players
		Short term (5Yrs)	Medium term (12 Yrs)	Long term (10Yrs)	
1	Popularization of the Plan	1 year			Kira Municipality, MoLH&UD, CBOs
2	Institution strengthening	1 Year			MoLG, Kira Municipality, Wakiso District Service Commission &MoPS
3	Capacity Building of technical staff	3 Years	1 Year	1 Year	Kira Municipality, MoLG, MoLH&UD, Development partners, NGOs
4	Develop all Division Council PDPs	5 Years			Kira Municipality, MoLH&UD, all Division Councils
5	Development of E-Tax collection system to improve revenue collection	2 Years			Kira Municipality, Division Councils, MoFPED, KCCA, URA
6	Survey and marking of all municipal planned infrastructures	5 Years			Kira Municipality, MoLH&UD, NGOs
7	Develop prototype plans	1 year			Kira Municipality, MoLH&UD
8	Planning of the all the commercial centers	2 Years			Kira Municipality, MoLH&UD
9	Environmental restoration, protection and education programs	4 Year			Kira Municipality, MoLH&UD, NGOs, MoW&E, NEMA, NFA
10	Modern solid waste treatment plant (land and facility)	5 Years			KMC, NMC, MoLH&UD, NGOs, MoWE&NR, NEMA, KTC
11	Acquisition of land, plan and service it to attract investment in low cost housing at Kireka	5 Years	5 Years		Kira Municipality, MoLH&UD, Division Councils, Development partners
12	Develop all neighbourhood (Wards) plans in each Division		12 Years		Kira Municipality, MoLH&UD, Division Councils

13	Plan and develop the artisan industrial park at Kitukutwe in Kira Division	5 Years	3 Years		Kira Municipality, MoW&T, MoLH&UD,Development partners
14	Tarmacking of all Municipal roads		12 Years		Kira Municipality, MoW&T, Development partners
15	Developing all Municipal roads with drainage works		10 Years	10 Years	Kira Municipality, MoW&T, Development partners
16	Repair all the drainage and landscape the main streets in the CBD to improve aesthetics		10 Years	5 Years	Kira Municipality, MoW&T, Development partners
17	Construction of transportation terminal at Bukasa		8 years	10	Kira Municipality, MoW&T, Development partners, Wakiso District
18	Street lighting of all Municipal roads		8 Years	8 Years	Kira Municipality, MoW&T, Development partners
19	Develop a light rail from Nakwero to Bukasa (20.8km)		10 Years	5 Years	Kira Municipality, MoW&T, Development partners
20	Slum upgrading		10 Years	10 Years	Kira Municipality, MoLH&UD, Development partners
21	Development of modern sanitary land fills		5 Years	10 Years	NEMA, Wakiso District, MoWE, Development partners
22	Plan and service the Industrial park at Kazinga-Kireku	2 years	8 years	5 Years	Kira Municipality, UIA, NEMA, Wakiso District, MoLH&UD, MoW&T,
23	Monitoring and evaluation	1 Year	1 Year	1 Year	Kira Municipality ,MoLH&UD

10.2 Investment plan

Table 10.2: Indicative Costs for proposed Project Implementation

Projects/Activity	Implementation Period	Indicative Costs (USD)
Popularization of the plan	Continuous	30,000
Institutional development	1 year	50,000
Phased capacity building of technical staff	5 years	380,000
Strengthen and promote physical planning awareness campaigns	Continuous	40,000
Develop the Kira Bypass road	4 years	67,000,000
Repair all the drainage and landscape the main streets in the CBD to improve aesthetics	15 Years	2,000,000
Planning of the all the commercial centers	2 years	230,000
Develop prototype development plans to encourage the poor to access architectural services to.	1 year	25,000
Prepare Ward detailed schemes	3 years	690,000
Environmental restoration, protection and education programs	4 year	50,000
Develop a light rail from Nakwero to Kireka and Kireka to Bukasa (20.8km)	15 year	280,000,000
Tree planting programme for landscaping for all community roads.	3 years	60,000
Develop a modern transportation terminal at Bukasa (land and facility)	18 years	5,500,000
Municipality to municipality collaboration /Twining.	Continuous	50,000
Developing a computerized register for local revenue enhancement and E-tax collection	3 years	3,700,000
Study to improve on water and sanitation coverage	6 months	50,000

Modern solid waste treatment plant (land and facility)	5 years	165,000
Developing all municipal roads (190 km) with drainage works	20 years	153,000,000,
Acquisition of land, plan and service it to attract investment in low cost housing at Kireka.	10 years	10,000,000
Monitoring and evaluation of plan implementation throughout the implementation period	Continuous	40,000
Plan and develop the artisan industrial park at Kitukutwe in Kira Division	8 Years	150,000,000
Plan and service the Industrial park at Kazinga- Kireku	15 Years	25,000,000
Total		707,993,000

Table 10.3: Specific indicative costs for road construction

Type of Upgrading	Cost (UGX/km)
Track/open bush to earth road	20,000,000/-
Earth road to Gravel road	80,000,000/-
Gravel road to Paved road	485,000,000/-
New Paved road	800,000.000/-

10.3 Schedules for Plan Implementation

Table 10.4: Schedule for plan implementation

Phase	Activity	Duration	Execution office
1	Popularise the plan	Continuous	Kira Municipal Council
2	Surveying infrastructure	12 months	Kira Municipal Council
3	Compensations	8 months	Kira Municipal Council
4	Opening of infrastructure	8 years	Kira Municipal Council

APPENDECIES

Annex1

KIRA MUNICIPAL COUNCIL THE PUBLIC HEALTH (BUILDINGS) RULES, 1951

APPLICATION FOR APPROVAL OF PLANS

(To be submitted in quadruplicate)

TO THE CITY ENGINEER AND SURVEYOR	•••••			
I hereby submit Plans, Section Elevations, Block Plans and Details	s for *New Building			
Alterations, Additions for use as *Domestic Building, Dwelling Ho				
Building of the Warehouse class, in accordance with Building Rule No.6.	_			
Plot NoStreet or Road				
Having a frontage to				
Foundations				
Damp-proof Course				
External Walls				
Mortar in Walls				
Floor (describe all types of floors)				
Roof (covering of)				
Ceilings				
Description of water fittings				
Means of water supply				
Description of machinery to be installed				
Name of Architect				
Address				
Cost of proposed works: Shs				
I certify that the term under lease Nowill be full				
application and the accompanying plans are to the best of my knowledge.				
Signature of Architect				
Date Full Name and Address of owner				
(In Block Le	etters)			
I hereby give am undertaking:				
a) To cleanse and maintain common parts and premises (section I	I of the Public Health			
Building Rules, 1951)				
b) To provide dustbin bays at front of premises or in the backyard to	the satisfaction of the			
Medical Officer of Health.				
c) To construct a footpath along the frontage of Building in	accordance with City			
Engineer's requirement				
Owner's Signature Date				
N.B –Particulars of any proposed drainage must be submitted on the	-			
appendix to the Drainage and sanitation rules, 1950, or any rules amen	nding or replacing the			
same, should accompany this application.				
* Delete description inapplicable.	OFFICIAL USE ONLY			
	File No			
206	Date Received			

206

Annex 2 KIRA MUNICIPAL COUNCIL DEVELOPMENT APPLICATION FOR PERMISSION TOCARRY OUT DEVELOPMENT

1.	(i)Address or location of the proposed development.	
	(ii) Name of Planning area.	
2.	Full names, postal address and telephone number of	
	person responsible for the development. (IN	
	BLOCK LETTERS)	
3.	Full names, postal address and telephone number of	
	person applying on behalf of the developer(if any)	
4.	(i) Particulars of the developer's interest (e.g. free	
	hold, lease, prospective purchaser etc.)	
	(ii) Details of any restrictive covenants likely to	
	affect the proposed development.	
	1. (i) State the zone within which the proposed	
	development falls.	
	(ii) Give a brief description of the proposed	
	development including where appropriate	
	information as to the process involved and	
	machinery to be installed.	
	(iii) State the purpose for which the land/or building	
	era now used and if used for more than one purpose	
	give details	
	2. (i) State whether the proposed development involves	
	the construction of a new, or the alteration of an	
	existing access to or from a road.	
	(ii) State whether provision will be made for a car	
	perking within the plot and if so, for how many cars.	
	(iii) Give details of the intended provision for the	
	loading and unloading vehicles.	
	3. (i) Source of water supply	
	(ii) Means of subsoil drainage	
	(iii) Details of sanitary arrangement.	
	(iv) Means of disposal of any trade refuse or trade	
	effluents.	
	8. Give the area of the plot in square meter	

9. Where the proposed development includes any building or re-building operations the following table where applicable shall be completed.

Floor Level	Use NOTE: of more than one use on any one floor give figures for accommodation	Square	O	Floor Space Square. meter.	Plot Ratio
Lower Ground	allocated to each use.				
or Basement					

Ground			
First			
Second			
Third			
Fourth			
Fifth			
Sixth			
Seventh			
Eighth			

10. Describe briefly the material to be used, together with details of any advertising signs and any other relevant information likely to assist the planning Committee in the assessment of the application.

Note:-This information should also be indicated on the plans.

I/We hereby certify that to the best of my/our knowledge the information contained in this application is correct.
Signed
Date

EXPLANATORY NOTES

- 1) "Land" "building" and "development" have the meaning assigned by the ordinance
- 2) Attendance is drawn to the regulations, particularly Regulation 2.
- 3) This is for planning permission ONLY and does NOT cover any application which may be required under the Building Rules or legislations dealing with the display of advertisements.
- 4) Attention is drawn to the provision of outline or Detail Planning Scheme Operating or in course of preparation.
- 5) Attention is drawn to the advisability of agreeing the external colour scheme for the development with the committee.
- 6) Four copies of this schedule, when completed, together with relevant attachments to be sent to:

 Office of Origin

PLANNING AND LAND MANAGEMENT DEPARTMENT
P.O.BOX KIRA

KIRA MUNICIPAL COUNCIL THE PUBLIC HEALTH ORDINANCE

(The Drainage and sanitation Rules 1962 (20) (1))

APPLICATION FOR APPROVAL OF DRAINAGE PLANS

I	here by m	ake application for
	k shown on the plan annexed here to dr at	
And I undertake and agree to co	onform in the construction of the works	with the law relating to
	PARTICULARS	
	MALE	FEMALE
	ving on premises nployed on premises as application will be made to connect v	
Proposed and existing system o Proposed and existing means of	disposal of soil and waste water	
Proposed and existing means of	rain water	
	or agent doing the work	
(Date)		(Signature)

CCK/CELS 14 (ANNEXTURE TO FORM OF APPLICATION FOR APPROVAL OF DRAINAGE PLANS)

PLAN SHOWING PROPERTY TO BE DRAINED AND THE POSITION OF ADJOINING STREETS OR ROADS

REFERANCE					
A.S. P	_	Anti-siphon	S.	-	Sinks
B.	-	Bath	S.P	-	Soil pipes
C.	-	Cesspool	S.V.P.	-	Soil ventilating pipes
F.A.I.	-	Fresh air inlet	So.	-	Soak way
G.T.	-	Gully Trap	S.T.	-	Septic Tank
I.C.	-	Inspection Chamber	U.	-	Urinals
In.	-	Interceptor	V.P.	-	Ventilated Pipes
L.	-	Lavatory basins	V.W.P	-	Ventilated waste pipes
R.W.P.	-	Rain-water pipes	W.C.	-	Water closers
water dr	ains	give the height above main sea le immediately at the point at which ains to sewers, must be shown.			

Position at which it is proposed to connect with the sewer is to be shown by the distance from the

Approved by	On
Tested and inspected by	On
Any deviation from the above plan to be shown by	lines or notes in GREEN ink.

centre of the cover of manhole next downstream.

Form. P.PA. 2

APPLICATION FOR SUBDIVISION/ CONSOLIDATION OF LANDS AND BUILDINGS

	Application No of
20	
То	
(insert name and address of the	appropriate Planning Office)
	······································
Applicant's name and address	
	owner, lessee, tenant by occupancy, sub leassee, customary
tenant)	
	and street/ road
(c) Acreage	submitted, state the registered number of the application
5. If all application was previously s	submitted, state the registered number of the application
6. The purpose for which land or but the and the date on which they were la	uilding is now used. If not used, the purpose for which and ast used
7. Describe briefly the proposed so buildings are to be used	ubdivision including the purposes for which the land and/
8. Details of any relevant easement	nts affecting the proposed sub-division.
9. State the-	
(a) Area affected	
(u) Theu unested	
(b) Area covered by buildings	
(c) Percentage of the site covered	ed by existing buildings and that covered by proposed
buildings	
	Day of
Signature of applicant or agent	
If signed by the agent, state:	
Address	
Telephone	
E-mail	
	ARRELATER 1 4 P. 1 4 4 1 1 4 1 P.

*Application to be submitted in TRIPLICATE in respect of each transaction and sent to or left at appropriate office of the local physical planning committee

From P.P.A.3

20	
TO:	
Your application No of 20	., for permission to develop parcel
No	red on
(Insert date) and the committee approved/ refused/ deferred the	application for the following
reasons/ subject to the following conditions	
Date this day of	
Signed	

For: Chief Administrative Officer/ Town Clerk/ Sub county chief

THE PYHSICAL PLANNING ACT, 2010 ENFORCEMENT NOTICE

No	
(Insert name of owner, occupier or developer)	
In accordance with section 48 of the Physical planning Act, 2008 the committee is satisfied th	at
you are carrying out an illegal development on plot	
This is therefore to require you to	
Within days from the service of this notice	
Failure to comply with this notice shall result in	
Dated this day of	
Signed	
For: Chief Administrative officer/ Town Clerk/ Sub county Chief	