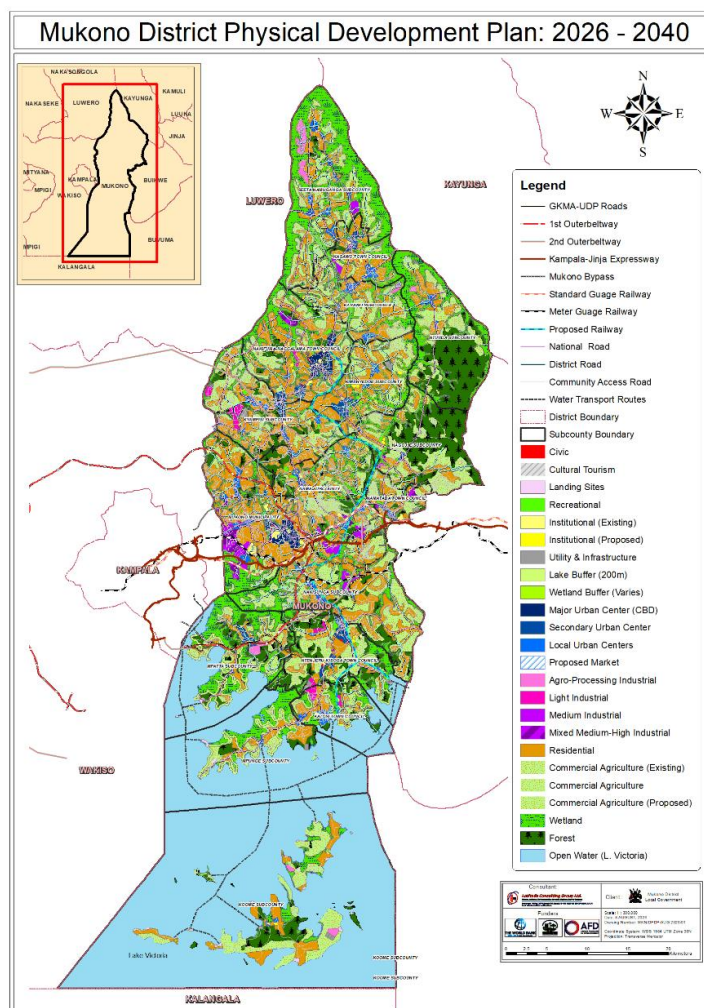




MUKONO DISTRICT PHYSICAL DEVELOPMENT PLAN 2026-2040



FINAL REPORT



Latitude Consulting Group Ltd.

Planners, Architects, Environmentalists, Surveyors, Engineers, Interior Designers

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AUGUST 2026

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(REF: MUKO899/SRVCS/2024-2025/00003)



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FOREWORD

It is with great pride and a deep sense of responsibility that I present the Mukono District Physical Development Plan (DPDP) 2026–2040. This Plan represents a major milestone in the development trajectory of Mukono District, reflecting the collective aspirations and shared vision of our people. It provides a comprehensive spatial framework to guide orderly, coordinated, and sustainable development over the next fifteen years, while ensuring improved livelihoods and enhanced service delivery for all residents.

As Chairperson of Mukono District Local Government, I wish to affirm that this Plan is the outcome of extensive consultations and collaboration among local communities, technical officers, government institutions, development partners, and other key stakeholders. The participatory process undertaken in the preparation of this Plan underscores our commitment to inclusive planning and responsive governance. The Plan therefore embodies the priorities and aspirations of the people of Mukono District while safeguarding our rich cultural, historical, and environmental heritage.

Mukono District continues to experience rapid population growth, increasing urbanization, pressure on land and natural resources, and infrastructure deficits. These challenges, however, also present opportunities for innovation, investment, and sustainable transformation. The Physical Development Plan provides a strategic framework for addressing these emerging issues through planned land use, improved infrastructure development, environmental protection, and promotion of balanced socio-economic growth.

In addition, this Plan is aligned with the Constitution of the Republic of Uganda, the National Physical Development Plan, Uganda Vision 2040, and the successive National Development Plans. It therefore positions Mukono District to contribute effectively to the attainment of national development objectives while responding to local needs and priorities.

The successful implementation of this Plan will require the collective commitment and active participation of all stakeholders, including government agencies, the private sector, civil society organizations, cultural institutions, development partners, and the people of Mukono District. Through coordinated efforts and responsible stewardship, we can realize a district that is prosperous, inclusive, resilient, and environmentally sustainable for both present and future generations.

I therefore call upon all stakeholders to embrace this Plan and work together towards the realization of its goals and strategies. Let us remain united in our shared commitment to building a well-planned, vibrant, and sustainable Mukono District.

.....
Francis Lukooya Mukoome
District Chairperson (LC-5)
Mukono District

ACKNOWLEDGMENT

The Mukono District Physical Development Plan (DPDP) 2026–2040 is a comprehensive framework prepared to guide the orderly spatial growth and sustainable development of Mukono District over the next fifteen (14) years. The Plan articulates the aspirations of the people of Mukono to transform the District into *"a vibrant and inclusive hub of industrial innovation, sustainable tourism, modern infrastructure, productive agriculture, and high-quality services by 2040."* Its strategic focus is anchored on tourism and environmental conservation, industrialization, food security, urban development, and infrastructure improvement.

The preparation of this Plan adopted a participatory, multidisciplinary, and multi-sectoral approach involving extensive consultations with Ministries, Departments and Agencies (MDAs), Lower Local Governments, political leaders, technical officers, development partners, civil society organizations, and communities across the District. The invaluable contributions, views, and recommendations from stakeholders greatly enriched the policies, strategies, and proposals contained in this Plan.

Mukono District Local Government sincerely appreciates the World Bank for the Greater Kampala Metropolitan Area Institutional Strengthening Grant that supported the preparation of this Physical Development Plan and the implementation of physical planning activities within the District. The District further acknowledges the Ministry of Kampala Capital City and Metropolitan Affairs for the technical guidance, supervision, and review provided throughout the planning process. Special recognition is extended to Mr. Awuzu Wilson, Senior Physical Planner, for his invaluable professional support and commitment during the preparation of the Plan.

The District also expresses profound gratitude to the District Council, the District Physical Planning Committee, and the Project Management Committee for their leadership, guidance, and active participation throughout the planning process. Appreciation is equally extended to all political leaders, technical staff, and community members across the District for their support during stakeholder consultations, data collection, and field activities. In particular, special appreciation is extended to the District Physical Planner, Mr. Kamoga, together with staff from the various Lower Local Governments, for their dedication and cooperation during the preparation of this Plan.

Special appreciation is conveyed to the Consultant, M/s Latitude Consulting Group Ltd, for the professionalism, technical expertise, and dedication demonstrated in the preparation of the Mukono District Physical Development Plan.

As Mukono District embarks on the implementation of this Plan, all stakeholders are called upon to continue working together towards the realization of a well-planned, inclusive, resilient, and prosperous District.

For God and My Country.

.....
Mr. Damba Henry
Chief Administrative Officer (CAO)
Mukono District

Executive Summary

This District Physical Development Plan (DPDP) is the first of its kind for Mukono District. The Plan presents a strategic vision that defines the overall direction and pattern of spatial development across the District, encompassing all sub-counties and town councils. The planning horizon spans the period 2026–2040. The preparation of the DPDP is in fulfillment of the requirements of the Physical Planning Act, Cap 142, which designates the entire country as a planning area and mandates all local governments to prepare physical development plans to guide orderly and sustainable development.

The DPDP has been prepared within the prevailing legal and policy frameworks that guide physical planning and development in Uganda. These include the Constitution of the Republic of Uganda (1995), the Physical Planning Act, Cap 142, the Local Government Act, the Land Act, the National Land Use Policy, the National Physical Planning Standards and Guidelines (2011/2025), among other relevant laws and policies. These frameworks have ensured that the proposals contained in this Plan conform to national standards and statutory requirements, while also supporting coordinated implementation and sustainable district development.

The overall goal of the Mukono District Physical Development Plan (2026–2040) is to promote orderly, sustainable, and inclusive growth through the establishment of a comprehensive spatial framework that guides future development and ensures optimal land use across the District. The Plan seeks to enhance connectivity and equitable access to infrastructure and services, particularly in underserved areas, while facilitating decentralized urban development capable of supporting higher-order urban functions, improving mobility, and strengthening public transport systems. Furthermore, the Plan provides a structured spatial framework that promotes efficiency, equity, productivity, and sustainability in land utilization, thereby contributing to broader social, economic, and environmental development objectives.

In addition, the DPDP outlines strategies and policies aimed at addressing key development challenges, including rapid urbanization, regional disparities, rural underdevelopment, environmental degradation, and the underutilization of local resources. The Plan places strong emphasis on ecological conservation, climate change adaptation and mitigation, and the sustainable management of natural resources to ensure long-term resilience and socio-economic transformation.

Key interventions proposed under the DPDP include the opening, upgrading, widening, and tarmacking of major roads such as Ntenjeru–Bule, Kigombya–Setta Nazigo, and Namataba–Kisoga. The Plan also promotes non-motorized transport through the provision of walkways, street trees, and street furniture. To strengthen multimodal transport systems, proposals include the establishment of a bus park in Mukono Municipality, taxi parks in major urban centers, a modern transport terminal in Nakifuma–Nagalama, and the extension of the railway line to Kibanga Port, Katosi, and Nakifuma.

Water transport development is further supported through the proposed development of Kibanga Port and ferry terminals at Katosi, Mpunge, and Mpatta, complemented by waterfront development initiatives along Lake Victoria. Additional proposals include the establishment of solid waste management facilities and transfer centers, rehabilitation of Kyetume Abattoir, construction of a new hospital to serve the Kyampisi–Nama–Nagojje–Kimenyede corridor,

establishment of community resource centers at sub-county level, development of recreational infrastructure such as a district stadium in Mpatta, and designation of cultural festival sites in Kasawo. Collectively, these and other proposed interventions are estimated to require an indicative investment of UGX 869.16 billion, equivalent to approximately USD 228.73 million.

The DPDP is organized into eight parts as follows:

Part One: Introduction and Background to the Project: This section presents the background, goals, objectives, scope, phases, and organization of the planning assignment.

Part Two: Development Potentials, Future Vision, and Overall Development Strategy: This section outlines the District's development opportunities, strategic vision, and long-term development approach.

Part Three: Strategic Spatial Development Scenarios for Mukono District PDP (2026–2040): This section presents alternative development scenarios and the preferred spatial development framework for the District.

Part Four: Linkages with National and Regional Frameworks: This section demonstrates how the DPDP aligns with national, regional, and sectoral development frameworks and policies.

Part Five: Planning Principles for Mukono District PDP, Including the Legal and Institutional Framework: This section outlines the guiding planning principles, legal provisions, and institutional arrangements for implementation.

Part Six: Strategic Planning Interventions: This section presents the key strategic projects, infrastructure proposals, and sectoral interventions envisaged under the Plan.

Part Seven: Plan Implementation Strategy: This section highlights implementation programmes and projects, priority investment areas, the capital investment framework, and the monitoring and evaluation framework.

Part Eight: Conclusions and Recommendations: This section provides the overall conclusions of the Plan and recommendations for implementation and future review.

The successful preparation of this DPDP marks an important milestone in guiding the future growth and transformation of Mukono District. It provides a coordinated framework for sustainable development and serves as a foundation for improving the quality of life, enhancing economic competitiveness, and safeguarding the District's environmental and cultural resources for present and future generations.

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List of Acronyms

CAP	Chapter
DPDP	District Physical Development Plan
FY	Financial year
GKMA	Greater Kampala Metropolitan Area
GKUGA	the Greater Kampala Urban Growth Area
JICA	Japanese International Cooperation Agency
LCG	Latitude Consulting Ltd,
LLG	Lower Local Government
LPDP	Local Physical Development Plans
MDA	Ministry Departments and Agencies
MGR	Meter Gauge Railway
MoLG	Ministry of Local Government
MoLHUD	Ministry of Lands, Housing and Urban Development
NDPIV	National Development Plan IV
NDPP	National physical Development Plan
NEMA	National Environment Management Authority
NPA	National Planning Authority
NPPB	National Physical Planning Board
OPM	Office of the Prime Minister
PCT	Project Coordination Team
PDP	Physical Development Plan
PDPs	Physical Development Plans
PPC	Physical Planning Committees
SGR	Standard Gauge Railway
SQ. KM2	Square Kilometers
TPC	Technical Planning Committee
UBOS	Uganda Bureau of Statistics
UEDCL	Uganda Electricity Distribution Company Limited
UNRA	Uganda National Roads Authority

1 INTRODUCTION AND BACKGROUND

1.1 Introduction and Context

The Mukono District Physical Development Plan (DPDP) 2026–2040 is a tool intended to guide sustainable, socially equitable, economically sound, and orderly land use and development within the District. It is therefore an important policy instrument that provides a long-term vision for the orderly and sustainable growth and development of Mukono District. The Plan establishes guidelines for sectoral development and provides a spatial framework for coordinating physical, social, and economic development.

The District Physical Development Plan (DPDP) 2026–2040 for Mukono operationalizes the program-based approach of the National Development Plan IV (NDP IV) by translating national priorities into integrated and spatially coordinated interventions that cut across sectors and reinforce one another within a defined territorial framework. Rather than treating sectors in isolation, the DPDP aligns land use, infrastructure, and service delivery to support multiple NDP IV programmes simultaneously. For example, agro-industrialization is promoted through the zoning of agricultural land, agro-processing hubs, and logistics corridors; tourism development is facilitated through the protection of waterfronts, designation of eco-tourism sites, and improvement of accessibility; while mineral-based industrial development is supported through designated extraction zones and value-addition areas.

The Plan further integrates sustainable energy development by safeguarding utility corridors and substations, while integrated transport infrastructure and services are enhanced through coordinated road, rail, water, and multimodal transport systems linking production areas to markets.

In addition, sustainable urbanization and housing are addressed through provision of structured settlement hierarchies, growth corridors, and serviced urban centres, while human capital development is supported through the planned provision of health, education, and community facilities. Cross-cutting programmes such as community mobilization and mindset change, innovation and ICT, governance, and security are incorporated through participatory protection of strategic communication infrastructure, and provision of civic and security facilities.

In this regard, the DPDP serves as a framework that spatially integrates NDP IV programmes, thereby ensuring efficiency, complementarity, and optimal allocation of resources. This integrated approach is also aligned with broader national and international frameworks, including the National Physical Development Plan and Uganda Vision 2040, while advancing global and regional commitments such as Sustainable Development Goal 11 under Agenda 2030, Agenda 2063, and the EAC Vision 2050 through the promotion of inclusive, resilient, and well-planned human settlements.

Overall, the Mukono DPDP demonstrates how the NDP IV program-based approach can be effectively localized through integrated spatial planning, making it a critical tool for delivering Uganda’s long-term socio-economic transformation agenda.

1.2 Objectives of Mukono District PDP

The Objectives of district physical development are as follows:

1. **To guide the orderly and sustainable spatial development of Mukono District** by providing a comprehensive framework for land use planning, zoning, infrastructure development, and coordinated growth across all sub-counties and town councils.
2. **To promote inclusive and balanced socio-economic transformation** by expanding and equitably distributing physical infrastructure, enhancing connectivity, and developing integrated transport systems, workplaces, social service facilities, and recreational spaces to improve quality of life.
3. **To support industrialization and local economic development** by designating industrial zones, promoting agro-processing and value addition, strengthening market linkages, and facilitating efficient supply chains through improved infrastructure and logistics networks.
4. **To enhance agricultural productivity and food security** by protecting agricultural land, promoting value addition, establishing market infrastructure, and supporting both rural and urban farming systems.
5. **To promote sustainable tourism development** by protecting and designating tourism zones, improving access to tourist sites, supporting community-based tourism, and integrating environmental conservation measures into tourism planning.
6. **To improve access to quality social services and community facilities** by promoting decentralized service centers, ensuring adequate provision of health, education, sanitation, security, and community infrastructure across the district.
7. **To promote sustainable urbanization and efficient settlement development** by establishing a hierarchy of urban centers, supporting planned housing development, upgrading informal settlements, and ensuring efficient urban mobility.
8. **To safeguard environmental resources and enhance climate resilience** by protecting wetlands and natural ecosystems, establishing buffer zones, promoting green infrastructure, and integrating climate change considerations into all development interventions.
9. **To strengthen governance, participation, and implementation capacity** by fostering stakeholder engagement, supporting the preparation of detailed lower-level physical development plans, and enhancing institutional capacity for effective plan enforcement and service delivery.

1.3 Project Background and Rationale

The Government of Uganda is committed to ensuring orderly, progressive, and sustainable development in both urban and rural areas. In this regard, the Constitution of the Republic of Uganda emphasizes the importance of physical planning as a tool for harmonizing the diverse needs of human settlement, production, and conservation through the adoption of best practices in land utilization. This is intended to promote growth in the agricultural, industrial, and other sectors while taking into account the population trends and safeguarding ecological systems.

The 1995 Constitution of the Republic of Uganda, under Article 237(7), mandates Parliament to enact laws that enable local authorities to plan, implement, and enforce orderly physical

development. Furthermore, Article 242 empowers Local Governments to plan and regulate land use under the decentralized system of governance.

As part of the national development agenda, physical planning is clearly articulated in the Uganda Vision 2040 and the Fourth National Development Plan (NDP IV) (FY 2025/26–2029/30), which is the fourth in a series of six National Development Plans aimed at accelerating the country's socio-economic transformation by 2040.

As was the case in NDP III, planned urbanization, housing, and land management remain fundamental to the realization of the priorities of NDP IV. In addition, planned land use and management in urban areas will address challenges related to infrastructure development, including industrial parks, transport, energy, and housing infrastructure, while promoting inclusive, livable, and well-planned cities and human settlements in line with Agenda 2030 (SDG 11), Agenda 2063 (Goal 1, Aspiration 4), and the EAC Vision 2050.

One of the regions expected to significantly boost Uganda's economic growth is the Greater Kampala Metropolitan Area (GKMA). Investment in the GKMA as a major economic and logistical hub for Uganda will enhance productivity across various sectors of the economy, including Foreign Direct Investment (FDI), tourism, efficient public service delivery, and overall quality of life. The GKMA comprises the administrative areas of Kampala Capital City Authority and the surrounding District Local Governments of Mukono, Wakiso, and Mpigi, as well as the municipalities of Mukono, Kira, Nansana, Entebbe, and Makindye-Ssabagabo. However, the GKMA is experiencing rapid urbanization characterized by increasing urban population growth and expansion into low-lying areas and suburban settlements.

Since its establishment as an administrative unit, Mukono District has not had a Physical Development Plan to guide its spatial development, despite the high rate of urban growth. Rapid and uncoordinated development is occurring across major growth centers, including the municipality, resulting in challenges related to transportation, environmental management, disaster prevention, and landscape preservation. The current spatial structure of Mukono District is characterized by high to low-density residential land use and mixed commercial-residential developments along major arterial roads, particularly the Kampala–Jinja Highway, Mukono–Kalagi–Kayunga Highway, Mukono–Kisoga–Katosi Road, and Kisoga–Nyenga Road.

In recognition of the above challenges, the Government of Uganda, with technical support from the Government of Japan through the Japan International Cooperation Agency (JICA), developed the GKMA Urban Development Master Plan covering the three District Local Governments of Mpigi, Wakiso, and Mukono. The second tier of the plan focuses on the Greater Kampala Urban Growth Area (GKUGA), which includes Mukono District Council, Nama Sub-county, Nakisunga Sub-county, Kyampisi Sub-county, Mpunge Sub-county, Mpatta Sub-county, Namataba Town Council, Katosi Town Council, Ntenjeru–Kisoga Town Council, and other parts of the District located within the GKUGA. Areas outside the GKUGA include the sub-counties of Nagojje, Ntunda, Kasawo, and Seta-Namuganga, as well as Nakifuma-Naggalama Town Council and Kasawo Town Council.

Consequently, to implement the GKMA Urban Development Master Plan at a district level, Mukono District Council secured funding from the World Bank under the Greater Kampala Metropolitan Area Institutional Strengthening Grant to support physical planning activities

within the District. The District Council prioritized the preparation of a district Physical Development Plan to provide comprehensive policy guidelines for the allocation, utilization, and management of the District's land and other physical resources. The Plan is premised on industrial growth, infrastructure development, orderly human settlement, tourism promotion, and sustainable environmental management.

According to the Uganda Bureau of Statistics (UBOS) 2024 Housing and Population Census, the District's population stands at 932,672, with an annual population growth rate of 4.6 percent. This rapid growth is exerting significant pressure on available environmental, social, and economic resources. Consequently, there was a pressing need for a guiding framework in the form of a Physical Development Plan to direct and manage future spatial growth in the District.

Table 1: Population size trends and Growth rate

District	2014			2024			Growth Rate (%)
	Male	Female	Total	Male	Female	Total	2014-2024
Kampala	712,762	794,318	1,507,080	898,918	976,916	1,875,834	2.3
Mpigi	125,404	125,144	250,548	148,790	157,213	306,003	2.1
Mukono	289,757	307,047	596,804	448,776	483,896	932,672	4.6
Wakiso	949,035	1,048,383	1,997,418	1,598,233	1,799,332	3,397,565	5.5

In addition, the District has several fast-growing centres and various capital infrastructure projects such as the Kampala-Jinja expressway, Standard Gauge railway line, mega electricity transmission lines from Jinja to various parts of the country, and industrial zones to mention but a few. These all call for proper spatial Planning to guide both the internal and external growth of the district.

Therefore, the District Physical Development Plan (PDP) is a strategic framework intended to provide a purposeful and integrated approach to spatial development, addressing key elements such as zoning and layout, infrastructure and service provision, density of land uses, and the location and structure of activities across the district. Covering all sub-counties and town councils over the period 2026–2040, the plan defines the overall trend and direction of development while offering a comprehensive spatial framework to guide future growth. It also presents an opportunity to address existing development challenges and mitigate potential adverse impacts through effective planning and implementation, ultimately promoting orderly, sustainable, and inclusive development and ensuring optimal land use within the district.

1.4 The Planning Context of Mukono District

1.4.1 Location of the planning area

Located in the central region of Uganda, Mukono District covers total area of 2,782 km². Of this the land area is about 1,850.52km² (66.5%), while the Water bodies' cover approximately 931.48 km² (33.5%) of the district total area. It shares borders with the District of Buikwe in the east, Kayunga along the Sezibwa River in the north, Luwero in the northwest, Kampala and Wakiso in the southwest, Tanzania, and Lake Victoria in the south, as well as the Islands of Buvuma District in the south. The district headquarters are located along Kampala-Jinja

Table 2: Number of Local Governments and Administrative Units

Counties	Sub-counties/ Divisions	Town Councils	Parishes /Wards	Village
Mukono	6 S/Cs and 2 Divisions	2	55	365
Nakifuma	5	3	42	245
Total	11S/C & 2DIVISIONS	5	97	610

Source: Planning Department

Table 3: Details of Distribution of Parishes and Villages by Lower Local Governments in Mukono District

NO	SUB COUNTY/TOWN COUNCIL	NO OF PARISHES/WARDS	TOTAL NO OF VILLAGES
1	NAKISUNGA SC	8	63
2	NAMA SC	6	46
3	NTUNDA SC	4	15
4	NAGOJJE SC	4	32
5	NTENJERU KISOGA TC	7	33
6	NAMATABA TC	4	21
7	NAKIFUMA NAGALAMA	11	133
8	KASAWO TC	6	21
9	KATOSI TC	5	15
10	SEETA NAMUGANGA SC	5	45
11	MPUNGE SC	4	19
12	KOOME SC	4	29
13	KIMENYEDDE SC	4	27
14	KASAWO SC	4	27
15	KYAMPISI SC	5	56
16	MPATTA SC	7	25
17	GOMA DIVISION	5	38
18	CENTRAL DIVISION	4	41

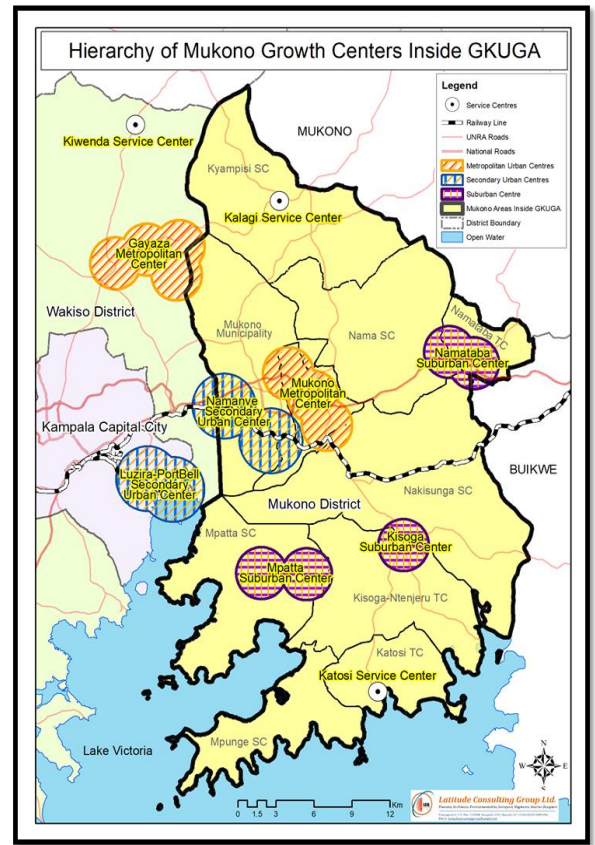
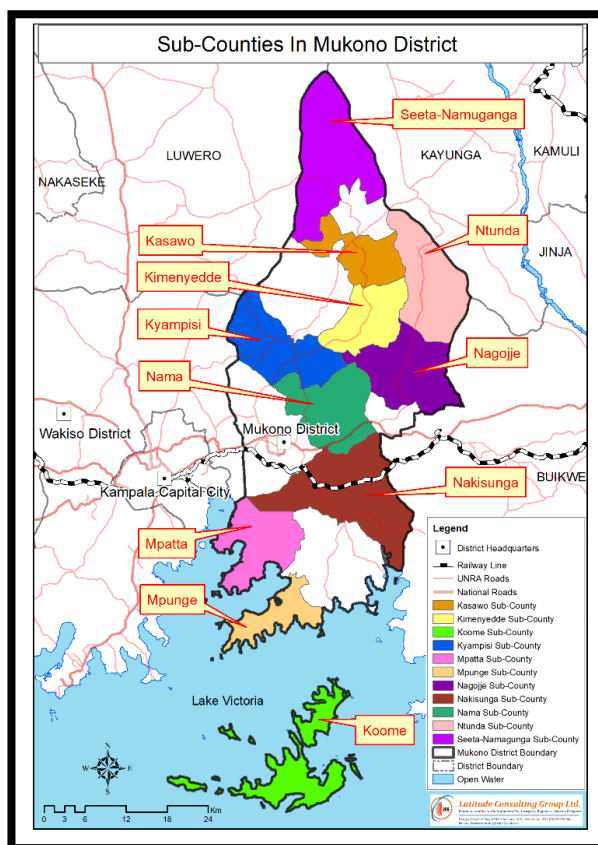
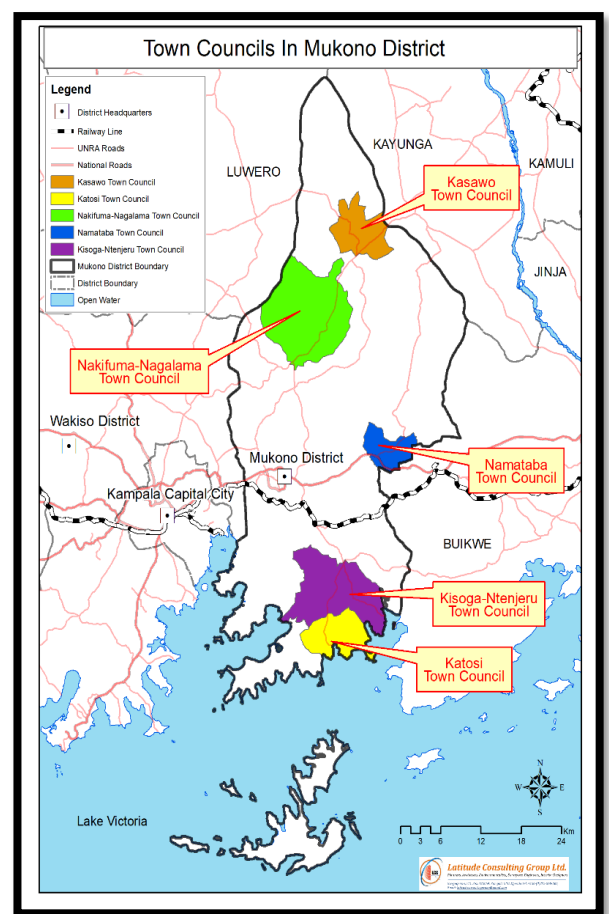
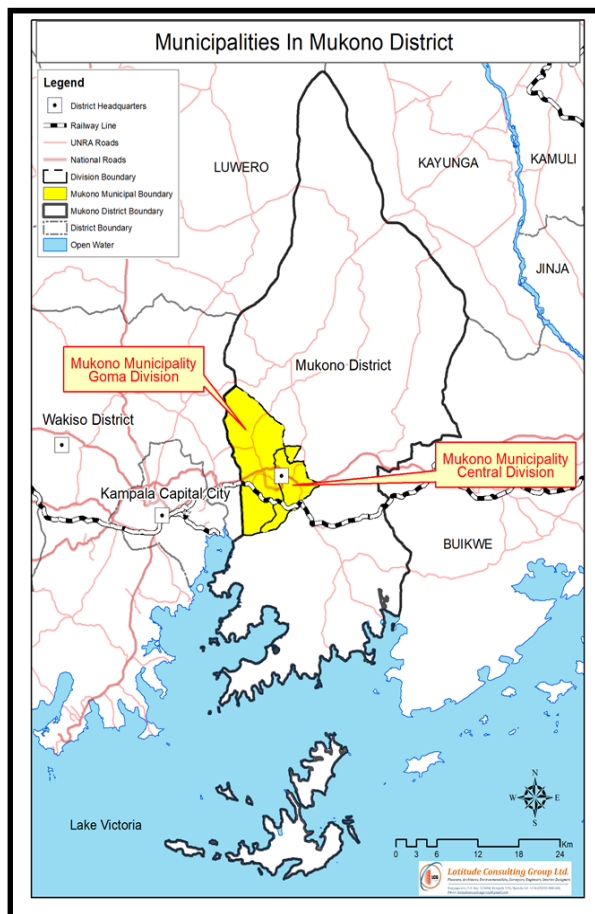
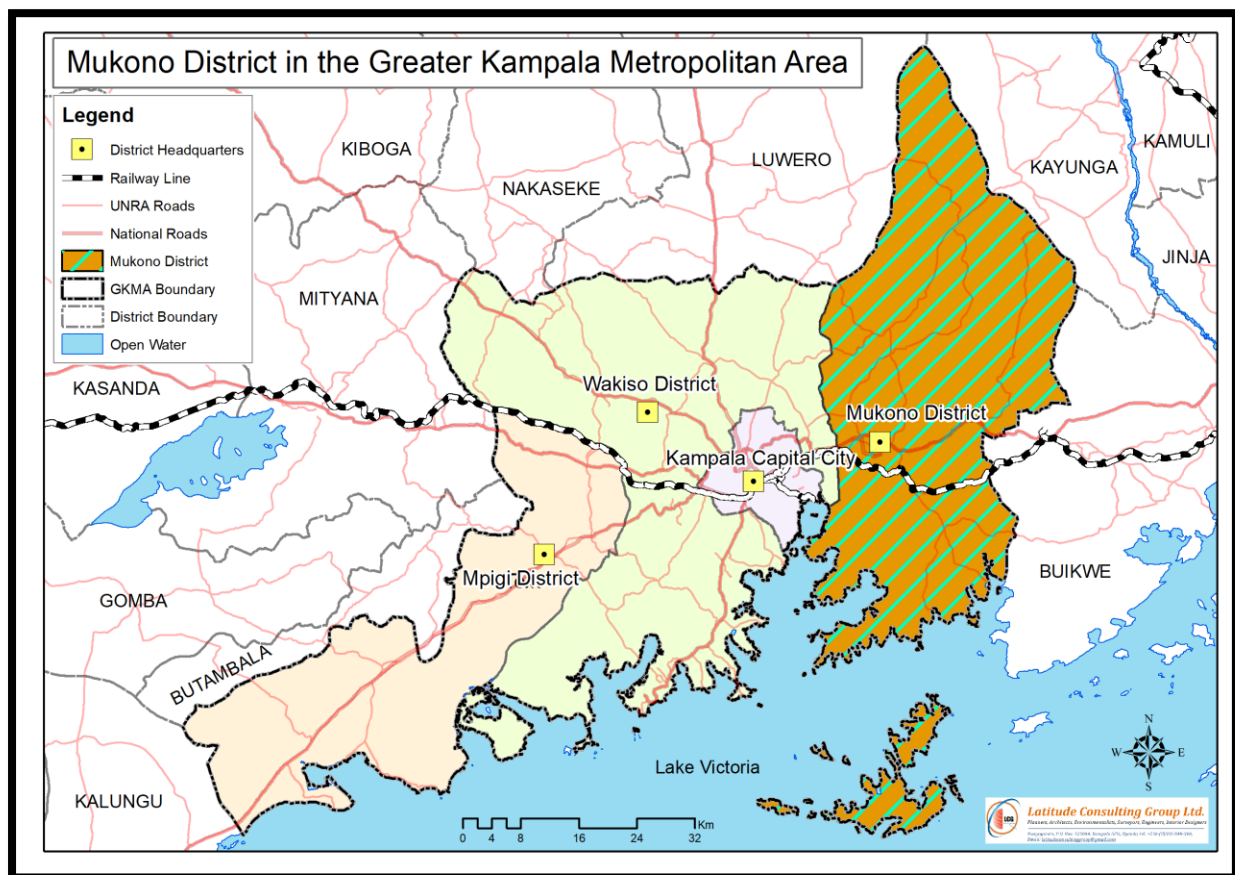


Figure 2: Administrative units in Mukono district

1.4.3 The Greater Kampala Metropolitan Area (GKMA) and the Greater Kampala Urban Growth Area (GKUGA)

Mukono district is part of the Greater Kampala Metropolitan Area (GKMA) and The Greater Kampala Urban Growth Area (GKUGA) as illustrated in figure 3. Mukono is a vital economic hub for Uganda and offers significant opportunities for sustainable development and economic growth. However, it faces challenges related to rapid urbanization and infrastructure needs. The Japan International Cooperation Agency (JICA) developed an Integrated Urban Development Master Plan for this area /GKMA intending to manage urban development sustainably and promote integrated growth. This plan has been integrated into this physical development plan to ease its implementation.



Source: KCCA/JICA 2024

Figure 3: Location of Mukono District in the GKMA

1.4.4 Methodology

The preparation of the DPDP entailed an inclusive, multi-sectoral, and participatory approach involving all the district departments and other key stakeholders through a consultative process. Targeted consultations were made, and consensus was built in line with legal requirements on the participation of stakeholders in the planning process. The preparation of the DPDP was steered by both political and technical heads of departments in the district and sub-counties. Sensitization and public awareness meetings were held across all the sub-counties and Town councils with representations across all the wards/Parishes in the sub-counties.

Stage 1: Inception Stage, and Preliminary Data Collection for District: this included Inception Meetings with the Client; Internal Preparatory Dynamics; Reconnaissance survey of the Planning Areas; Review of relevant literature; Stakeholders analysis and development of engagement schedules; developed and applied a simple, user-friendly strategy for effective popularization of the planning process.

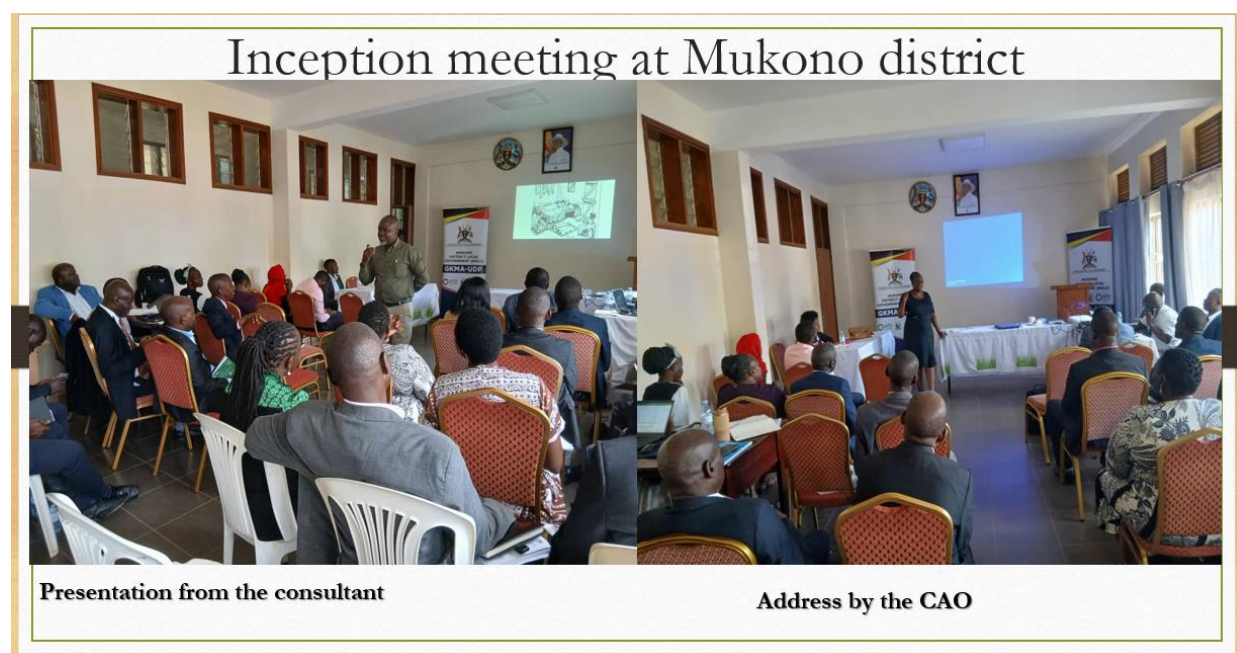


Figure 4: Inception Meeting at Mukono District

- a) Field survey and inventories: Primary data was established on various thematic areas including:
 - i. Confirmation on the ground the administrative boundaries for Mukono District and the Sub-Counties and town councils within the District;
 - ii. Establishing the existence and spatial locations of the following:
 - i. Land use types, pattern, spatial distribution.
 - ii. Settlement pattern and densities
 - iii. Housing and types
 - iv. Physical infrastructure and public utilities, their distribution, and the current

- operational state/condition, and identified mismatches,
- iii. Identification of natural resources, ecological/environment zones, and tourism zones.



Figure 5: Reconnaissance study & Transect Walks at Katosi landing site

- b) Stakeholders' engagement. The specific approaches included:
- i. Interviews of key stakeholders at the District, sub-county, and all the five Town Councils,
 - ii. Focus group discussions.
 - iii. Community mapping was held at the district involving all sub-counties, and Town Councils
 - iv. Household interviews held at the Town Council and the Sub counties selected for detailed planning including; Katosi, Mpatta, Nakifuma, Namataba, Kisoga-Ntenjeru, and Kasawo Town council.



Figure 6: Meeting with the district physical planner at Mukono district

Stage 2: Existing Situation Analysis, stakeholders’ consultations, Data Collection, and Consolidation: This involved detailed stakeholder engagement, field surveys, and studies. Geographic Positioning System (GPS) was used to collect spatial data. The data from GPS was used to generate maps using Arc GIS version 10.8. Remote Sensing was also used to collect geospatial data. Also, socio-economic surveys were conducted and household surveys through the administration of questionnaires, Key Informant Interviews, and Focus Group Discussions formed part of the data collection approaches. Undertook inventory of existing situation - population, land use, administrative boundaries, social-cultural and economic activities, physical infrastructure, natural resources, potentials, and constraints. Site visits to familiarize ourselves with the sites. Photography and observation were used during the site visits as complementary tools for data collection.

Stakeholder Consultations and Participation

Consultative workshops and group discussions were the primary techniques for engaging stakeholders. The focus was on developing a vision, setting planning goals, identifying problems, defining planning area boundaries, establishing objectives, identifying thematic areas for the physical development plan, generating alternative plans, and ultimately selecting preferred options. The goal was to gather input from a broad spectrum of stakeholders while also reaching consensus on the project’s future direction.

At the lower local level, consultations involved Parishes, LC I and II leadership, and communities. Clustered meetings were organized in Mukono District, addressing development challenges, vision, and proposals. These meetings included representatives from the eleven sub-counties in Mukono District. Participants included Parish Chiefs, LC II and I chairpersons, agencies operating in those LLGs, landlords, and property owners. Data collection methods included Stakeholder Consultative Workshops, Interviews, Focus Group Discussions (FGDs), and household surveys.



Figure 7: Meeting with the SACAOS to schedule Stakeholder engagements in Lower Level Local Governments



Figure 8: Meeting with the physical planning and building committee in Katosi TC



Figure 9: Meeting with the Fisheries officer at katosi landing site

Meetings at the Lower Local Governments

The process of implementing the assignment commenced with presentation of the inception report and subsequent reconnaissance and introductory meeting that took place at the respective town councils and sub counties.



Meeting with the technical team of Kimenyedde

Discussion between the technical team and the consultants

Figure 10: Other Consultative meetings at Kimenyedde Subcounty



Figure 11: Consultative meeting with the technical team of Kyampisi Subcounty



Figure 12: Other Consultative meetings at Seeta-Namuganga

Topographic Survey

A topographic Survey of the selected detailed planning areas was carried out by a team of surveyors to establish the actual location of the existing Physical and natural features. A dual frequency GPS (RTK) of 1200 series was used to take accurate measurements both by real-time observation and static observations. The focus was mainly to capture buildings, existing roads, footpaths, water points, cultural sites and the existing institutions, among others. The existing natural and man-made features on the ground guided detailed plan-making while considering the existing situation. The output of this survey was a topographic map which was used to prepare the inventory of existing activity functions and buildings.



Figure 13: Topographic survey by the survey team

Site Visits & Physical Surveys

Physical surveys were carried out to identify several aspects including; the rationale and potential future demands for facilities and services within the district; Identify and map major attractions, existing activity areas/ land uses, and take note of the linkages with the surrounding areas. The Consultant mapped data that illustrates the existing facilities within Mukono District Local Government boundaries using a hand-held GPS and remotely sensed data (satellite imagery).

Spatial mapping and Inventory



Figure 14: Spatial mapping and Inventory



Figure 15: Participatory Mapping Exercise for Koome Islands

Social Economic and Environmental Scoping

The team of consultants carried out socio-economic and environmental scoping studies and subsequently prepared scoping reports to that effect. The baseline environmental assessment adopted a mixed-methods approach to ensure comprehensive data acquisition and to capture all components of the biophysical environment within the planning areas.

The assessment commenced with a review of the project documents to gain a clear understanding of the project scope of work. This was followed by a reconnaissance survey of the proposed project area to obtain a preliminary understanding of the baseline conditions and to identify issues requiring attention during the detailed assessment. Notably, air quality and noise levels were also assessed using the Temtop M2000 and Reed R8080 instruments.



Figure 16: Environmental survey Tools

Qualitative Data Collection Methods

A variety of qualitative methods were employed to gather rich data, including documentary reviews, observations, community needs assessments, and key informant interviews.

a) Document/Literature Review:

Various National Government policy documents, District documents, and other materials related to the subject matter were reviewed.

b) Community Needs Assessment (CNA):

The purpose of the Community Needs Assessment was to examine the current access to infrastructure, facilities, services, and resources as a basis for identifying gaps and providing appropriate interventions. A mixed research design was adopted, incorporating both qualitative and quantitative methods.

c) Observation:

Observation is a systematic data collection approach in which researchers use all their senses to examine a given phenomenon in natural settings or naturally occurring situations. In this case, the consultant conducted a transect drive within Mukono DLG to observe and document the quantity and quality of the existing infrastructure, facilities, services, resources, and activities. Findings from the transect-drive observations informed the planning and implementation of subsequent studies.

d) Community Asset Mapping:

This exercise was undertaken to generate an inventory of assets available within Mukono DLG. Community asset mapping is a systematic process of cataloguing key assets, facilities, resources, services, physical spaces, institutions, associations, organizational resources, individual skills, economic opportunities, and benefits, with the aim of understanding community needs and identifying potential interventions. As an approach, community mapping enabled stakeholders to participate in problem identification, vision formulation, and solution development.

Table 4: Summary of Community Asset Mapping Approach

Aspect	Methodological Steps and Outcomes
Objective of the Community Asset Mapping	1. To systematically document existing resources, services, and human activities within the town councils and sub-counties as a basis of understanding intervention gaps 2. To systematically document the preferred resources, services, and human activities as a basis of informing physical planning process and rural revitalization strategies
Planning Area	Mukono District comprising of all the eleven sub counties and five town councils.
Participants	District heads of departments, Sub-county Leaders, Town Council Leaders, Parish Chiefs, LC II Chairpersons, community leaders, senior citizens, business people, private property owners, environmental organization, neighborhood associations, community organizations, farmers, business community, the clergy, among others.
Tools	Flip chart, masking tape, markers
Facilitation Methods	<u>Session 1: Community Asset Mapping</u> a) Explaining to the FGD participants the purpose of drawing a Community Asset

	Map, that is, to come with a community-driven Physical Development Plan that will facilitate the provision of infrastructure, utilities, services, economic development, and resources. b) Appointing a secretary who led in drawing the map for the selected Town Council, Sub- County, and detailed planning areas. c) Appointing an Assistant to handle the task of completing the KEY for the Map d) Asking the secretary to begin by plotting the following resources, services, human activities, but beginning with administrative boundaries and road network and naming such (<i>See Appendix for the Asset Tool</i>) e) Conducting Focus Group Discussion to discuss the level of resource endowment and/or access to socio-economic services.
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Household and Socio-Economic Surveys

The team conducted a quantitative survey that generated statistical data for the situation analysis. This data was then refined and informed the physical development planning process. The survey aimed to assess the current socio-economic status of Mukono District, including existing economic activities, services, and their physical locations.

- a) Data Collection: An online data collection app called KoboCollect was used, along with a structured questionnaire, to collect the data. The key indicators and variables were already included in the questionnaire (see Appendix 3). As part of capacity building, the consultant closely collaborated with the CDOs (Community Development Officers) and Senior Assistant Secretaries (SAS) in various sub-counties and town councils.



Figure 17: House Hold Survey Exercise



Figure 18: Presentation of Existing Situation Results

Data Analysis and Interpretation:

This involved linking data collected from the field with existing survey information. The main purpose was to produce accurate and up-to-date maps for planning and infrastructure development within the district.

Socio-Economic Data Analysis:

The process involved data cleaning, validation, and verification prior to entry into SPSS for analysis. Subsequently, the data were coded and edited, and tables, charts, and graphs were generated using the SPSS software. These processes facilitated interpretation of the findings and projection of future trends based on the collected data.

The quantitative data, primarily presented in the form of percentages and means, was analyzed using SPSS Version 16. The results were then integrated with qualitative data and shared with the technical team.

Additionally, data obtained from literature reviews, key informant interviews (KIIs), focus group discussions (FGDs), and questionnaires administered during socio-economic surveys were analyzed and corroborated with findings from other sources. The qualitative data from FGDs and KIIs were subjected to content analysis techniques in line with the objectives of the assignment.

Preparation of Mukono District PDPs

This stage involved the production of accurate maps using ArcGIS Version 10.8 and undertaking digital mapping for the entire district. To ensure consistency of spatial datasets, the plans were developed based on the base map.

The plans incorporated community issues and data collected throughout the fieldwork, review stages, and stakeholder meetings, as well as relevant policies and guidelines governing physical planning. The Physical Development Plan illustrates proposed broad land uses, the major road network, key utilities and infrastructure, and major telecommunication networks, among others.

Display of the Physical Development Plan

As a statutory requirement, the plans are to be displayed for 90 days (three months) in designated public places identified by the Ministry of Lands, Housing and Urban Development (MoLHUD) and the district for public review and comments.

The District Physical Planner and any other officer delegated by the Chief Administrative Officer (CAO) were responsible for collecting community representations and comments. This process was intended to ensure that the plan reflects the views, interests, and expectations of the community.

Presentations and Plan Approval

The consultant presented the draft District PDP to the District Physical Planning Committees for input and to the District Council for adoption and recommendation to the Technical Committee of MoLHUD for onward submission to the approving authority.



Figure 19: Speeches during the presentation of the Draft PDP to Stakeholders at Colline Hotel, Aug 30 2025



Figure 20: Presentation of PDP to the Technical Committee of MoLHUD, April 30 2026



Figure 21: Presentation of the PDP to the Technical Committee of NPA, July 22 2026

2 DEVELOPMENT POTENTIALS, FUTURE VISION AND OVERALL DEVELOPMENT STRATEGIES

2.1 Introduction

Aware of the rapid urbanization in the country, Government of Uganda in NDP IV reiterates the need to promote orderly and suitable urbanization, through the formulation of Physical Development Plans as a spatial development framework to guide land utilization and development control.

Mukono has great potential for development; it is endowed with fertile soils, by virtue of its topography and water resources from Lake Victoria as the most prominent. Agriculture and agro based industrial processing are some of the core economic activities undertaken to stimulate development in the district. The existence of commercial agriculture with farmers like SCOUT sugarcane plantations, and the Tea estates will play a significant role in influencing the employability and economic development of the district.

In addition, Mukono district has an economic advantage of being within the GKMA and hosting the major industrial hub on Kampala Jinja highway.

Due to its location and proximity to Kampala, and the numerous industries, the fishing areas of Katosi among others, have attracted an influx of people including Bagishu, Basamya, Japadhola, Lugbra, Basoga to mention a few. The mixed blend of tribes and cultural background of the population is an ideal factor to the development of the area.

The district has an economic advantage of being traversed by the Uganda Meter Gauge railway line that now is seen as route for the forthcoming Standard Gauge railway which will provide high speed links to Kampala and other cities from the neighbouring countries via Mukono district.

In addition, Mukono provides an entry and exit points to Kampala sub region. It is the converging node for major roads like Kampala Jinja highway, Mukono-Kisoga-Katosi road and Kisoga- Nyenga roads as well as the Mukono-Kalagi-Kayunga road that traverses the north eastern flank of the district and a major link to Mpatta subcounty headquarters, Nakifuma-Naggalama town, Kasawo town council, Kasawo subcounty, Kayunga district and Njeru municipality.

The Katosi Water Treatment Plant (with 240M litres/day capacity) serves as a game changer, supplying water to over 4.5 million people. However, outlying areas such as Koome Island remain underserved.

Mukono district has potential to provide a high quality and attractive environment to visitors and investors in many aspects. It is richly surrounded by great tourist attractions like Ssezibwa Falls in Wankoba parish, Kyakiki eco-tourism park and zoo in Namuyenje, Nakozzi village appreciation center in Nakisunga, forests, various water fronts on Lake Victoria and several other sites in Nakifuma-Naggalama, Kasawo town council, among others.

Therefore, Mukono district physical development plan 2026-2040 is a result of a systematic analysis of the internal and external forces including; economic, political, social-cultural and environmental factors that have bearing on the district's development.

2.2 Overall Issues on Spatial Development of Mukono District

1) Overall Issues on Industrial Sector in Mukono District

- i. Insufficient Infrastructure to Support Manufacturing and Logistics Industries in Mukono districts and adjacent areas
- ii. High concentration of industrial related Functions in the Municipality causing Serious Traffic Congestion along the Kampala Jinja highway.

2) Overall Issues on Human Settlements in Mukono District

- i. Incompatibility of functions and unregulated settlements in many growth service centers
- ii. Land fragmentation due to poor regulation of land markets
- iii. Poor road infrastructure and poor connectivity
- iv. Lack of social spaces for leisure and recreation

3) Overall issues on Road infrastructure in Mukono District

- i. High concentration of Urban Functions in the Municipality causing serious traffic congestion
- ii. Traffic Congestion/Jam at the center
- iii. Long Travelling Time
- iv. Poor road infrastructure and poor connectivity

4) Overall Issues on other critical Infrastructure and Services

- i. Large Urban Population having poor access to infrastructure
- ii. Insufficient Piped Water Supply outside the Municipality
- iii. Insufficient Power Supply in the peri urban areas of Mukono
- iv. Poor solid waste management practices and lack of facilities
- v. Insufficient Drainage Facilities and Lack of Drainage for most of the area

5) Tourism, sustainable environmental management and Social Issues

- i. Poor accessibility and connectivity to tourism sites
- ii. Limited development and marketing of the tourism sites
- iii. Wetland degradation
- iv. Pollution of water resources
- v. Noise pollution in Nangwa and Namuyenje resulting from stone quarrying activities
- vi. Poor social facilities in all lower local governments

2.3 SWOT Analysis

To identify issues and constraints on the various sectors of Mukono district, and to formulate possible solutions, a SWOT analysis was conducted paying attention to the following aspects;

- Industrial sector
- Human settlements

- Transport and Traffic
- Utilities and services
- Tourism and Environment
- Social sectors etc

Table 5: SWOT Analysis on Mukono District Sectors

Strengths	Weaknesses
• The strategic location near Kampala Capital City • Government structures are in place • The National / International highway (Kampala – Jinja – highway) that connects to Busia and Malaba to Kenya • Large amount of land that can be used to promote industrial development and the social services sector • The meter gauge railway terminal at Namuyenje • Young energetic population • Fertile soils and favorable climate. • Presence of forests, water bodies among other eco-areas, Proximity to Lake Victoria, • Supportive regulatory frameworks	• The number of formal jobs created is not large enough to keep up with the rapid population growth in Mukono. • Urban areas are disconnected or poorly connected by the poor condition of road networks • Costs of economic production are high due to poor and inadequate infrastructure, including electricity supply, road, drainage, and water supply. • Land grabbing, Land conflicts and insecurity of tenure • High house hold poverty, high levels of unemployment; poor attitude of youth towards work; inadequate skilled human resource capital • Poor management of environmental issues • Low revenue base in all lower local governments • The condition of economic infrastructure development (such as water supply and access roads) is poor. Some roads are impassable during rainy season. As a result, it is difficult to attract investments to economic sectors. • Drainage infrastructure lacks in almost all the lower local governments, where it exists, it is not well maintained resulting in increased flooding and inundation risks in expanding service centers • High illiteracy levels, since some residents do not want to take their children to school, • High levels of wetland degradation due to brick making activities, dumping of wastes, growing of trees and subsistence agriculture. • Residents have limited knowledge about access to financial services, No electronic database for all sectors, • Low levels of staffing at some of the government institutions, • High noise and air pollution levels in some areas • No government aided tertiary institutions • Poor waste management

	• Limited government secondary schools • poor sanitation and Low latrine coverage • Poor electricity and water coverage • Few gazetted and functional markets
Opportunities	Threats
• Proximity to Lake Victoria provides opportunities for water transport, fishing industry and tourism industry, among others. • Mukono district urban centres would become primary urban centres to provide business • Taking advantage of the improved connectivity to Mombasa Port through the prospective construction of Jinja-Kampala Expressway, would provide the opportunity for industrial centres and industrial corridors in which manufacturing sectors would flourish by targeting the local market and the common markets of EAC • The existence of the National Satellite at Mpoma provides an opportunity for investment in telecommunications, • Availability of natural resources such as forests and wetlands, • Water for production facility at Mpunge • Available electricity power • Accessibility to various towns using the already existing roads • Cheap Human capital • Availability of tourism resources	• The national policies for promoting the development of regional towns might not be effectively implemented. Thus, a large influx of population from regional areas to Mukono will continue. This might result in an excessive accumulation of population. • Land fragmentation especially on Kabaka's land (form of tenure) will lead to high levels of informality with associated risks. • Population explosion may lead to creation of informal settlements in many parts of the district, including Mukono Metropolitan Center (Munono Municipal). • Environmental degradation in the region. Extinction of important tree and bird species. • Climatic changes i.e. over flooding and urban heat islands

Source: Latitude Expert Team, based on information from reports (GKMA IUD 2025) and stakeholder engagement of 5th June 2025 at CAOs Boardroom, Mukono District Local Government Headquarters

The above elements are crucial to informing the long-term strategic vision for the development of the district, ensuring sustainable growth and well-planned infrastructure to support future spatial development initiatives, as spelled out in the district physical development plan.

2.4 The Basis for the Formulation of the Planning Vision

Swift development is anticipated in Mukono district up to 2040 and beyond through implementation of the road infrastructure projects, Transport, Water and infrastructure for mechanization and commercialization of agriculture. These shall complement the development of agro-industries and

create an industrial powerhouse. When combined with investment in water transport, tourism and a vibrant service sector in its growing urban areas. The trend towards informal urban development, urban congestion, poor connectivity and access and the degradation of the districts ecosystems will be reversed to create a sustainable and orderly environment.

Vision for GKMA 2050

- A livable and sustainable metropolitan area with a competitive and innovative hub for Uganda and the East African Region, supported by strengthened infrastructure and developed human capital

This GKMA's vision is to guide development and management efforts at the levels of GKUGA. But because GKUGA and Mukono are part of GKMA. However, characteristics of the three planning areas are different from each other as follows:

- GKMA: The Greater Kampala Metropolitan Area (GKMA) is a Capital City Region which is composed of Kampala Capital City, its suburbs and nearby cities, towns and rural areas. Administratively the GKMA is covered by the Kampala Capital City, Wakiso District, Mukono District and Mpigi District.
- GKUGA: The GKUGA is a Metropolis, a continuously urbanizing area from the KCC within the GKMA.

2.5 Vision and Mission for Mukono District

The Vision: A Prosperous, Productive and Healthy population by 2040

The Mission: To provide high quality and coordinated services to the community by focusing on both national and local priorities"

Vision for Mukono District PDP

"Mukono District as a vibrant, inclusive, well-connected, and resilient hub of industrial innovation, sustainable tourism, modern infrastructure, productive agriculture, and high-quality services by 2040."

Notes:

Industrialization: Emphasizes Mukono district as a center for industrial growth, innovation, and job creation, building on agro-based and small to medium-scale industries to drive economic transformation.

Tourism: Highlights sustainable and diversified tourism development that leverages the district's natural, cultural, and historical assets to boost local incomes and cultural preservation.

Infrastructure: Focuses on well-planned, resilient, and accessible infrastructure including roads, utilities, housing, and ICT that supports economic activities and improves connectivity within the district and beyond.

Service Delivery: Commits to efficient, equitable, and inclusive provision of social services such as health, education, water, sanitation, and security, ensuring improved quality of life for all communities.

Agriculture: Enhance agricultural productivity through modern, sustainable practices and value addition especially agro processing, ensuring food security and increased incomes for rural communities.

2.6 Key Sector Specific Physical Planning Objectives for Mukono District PDP

Industrialization

- Promote the development and expansion of agro-based, small-scale and other industries to drive local economic transformation and job creation.
- Establish and support industrial parks and economic zones to attract investment and enhance value chains within priority sectors.
- Build the capacity of the local workforce through proposing vocational training and skills development aligned with emerging industrial opportunities.
- Facilitate access to raw materials and markets by improving connectivity and supply chain infrastructure.
- Designate specific industrial zones or parks within the district to concentrate industrial activities.
- Incorporate environmental buffer zones to minimize pollution and negative impacts on surrounding communities.
- Propose and enhance road networks linking industrial zones to major highways.
- Plan for complementary facilities such as training institutes, and logistics hubs within or near industrial areas to support industrial growth.

Tourism

- Enhance tourism infrastructure and services to improve visitor experience and increase local incomes.
- Promote community-based tourism initiatives that encourage cultural preservation and inclusive economic benefits.
- Designate and protect land for tourism development to prevent encroachment and ensure sustainable use.
- Integrating tourism development areas into the district's physical development plan to support tourism activities.
- Ensuring that tourist sites and attractions within Mukono are connected and easily accessed.
- Proposing markets, and craft centres, to help communities to showcase local culture and products.

- Incorporating environmental protection measures in the PDP such as waste management, green spaces, and conservation buffers to maintain the natural beauty and biodiversity that attract tourists.

Infrastructure

- Enhance accessible, and well-planned infrastructure including roads, utilities (water, electricity), and housing, to support economic activities and improve connectivity.
- Coordinate infrastructure development across sub-counties and town councils to avoid fragmented growth and ensure equitable access.
- Prioritize infrastructure that enhances urban-rural linkages and supports industrial and tourism development
- Incorporate environmentally sustainable practices in infrastructure planning and implementation.
- Ensure proper circulation and connectivity within the district and its growth centres by proposing additional access roads that meet the required planning standards based on their functionality.
- Incorporate greening initiatives to enhance the environment of growth centres and town councils.
- Propose transport terminals and parking spaces strategically proposed in various town councils where necessary to facilitate the efficient movement of goods and people
- Provide decentralized areas for solid waste management
- Identify and designate appropriate sites for sewerage management facilities
-

Service Delivery

- Ensure efficient, equitable, and inclusive provision of social services such as health, education, water, sanitation, and security to improve residents' quality of life
- Promote decentralized service centers to improve accessibility, especially in rapidly urbanizing and rural areas.
- Foster community participation and partnerships to support sustainable service provision and accountability.
- Allocate space for the expansion and upgrading of existing health facilities that currently do not meet space requirements, ensuring compliance with physical planning standards.
- Ensure that all existing and planned health facilities are well-connected through essential infrastructure such as roads, water supply, and electricity.
- Provide designated spaces for cemeteries, decentralized across various sub-counties within the district.

Agriculture

- Enhance Value Addition and Agro-Processing: Support development of agro-based small-scale industries and value chain activities to increase farmers' incomes and reduce post-harvest losses.

- Establish Market infrastructure: Develop farmers market infrastructure and road network systems that connect farmers to local, regional, and international markets, ensuring better prices
- Establishing clear zoning regulations to protect agricultural land from being converted to non-agricultural uses like real estate or industrial development.
- Designate specific areas for agricultural production and farmer's markets.
- Promote urban farming initiatives in urban centres to enhance food security and reduce pressure on rural agricultural land.

Environmental sustainability

- Demarcate the boundaries of all existing wetlands, including both active and seasonal areas
- Establish buffer zones around these wetlands to safeguard their ecological integrity and discourage any incompatible land uses within the wetland zones.
- Ensure that forest reserves and large-scale private plantations are thoroughly documented and incorporated into the plan.

3 STRATEGIC SPATIAL DEVELOPMENT SCENARIOS FOR THE DEVELOPMENT OF MUKONO PDP 2025 - 2040

3.1 Introduction

The rationale for the Mukono physical development plan was partially developed in consideration of different options for the future of the district. It is anticipated that the spatial structure of a Mukono is affected by the natural ecological systems, population distribution patterns; economic activity and employment, its location, geographical characteristics, and the infrastructure available. A change or adjustment in any of the key variables has the potential to affect the others and ultimately the spatial structure of the district and the overall natural environment. These scenarios assess how the different investment options in the economic sectors, agriculture, industry and tourism among others, might shape the spatial structure of Mukono district.

Three development scenarios were formulated, tested, and critically analyzed:

- Scenario 1: Business as Usual
- Scenario 2: Industrialization and Agriculture
- Scenario 3: Infrastructure-Led Development

This chapter explains each scenario's logic, spatial framework, and development dynamics especially how Primary, Secondary, and Suburban Centers function in each. It concludes with a comparative evaluation, culminating in the selection of the best Scenario as the preferred model for the Mukono District PDP 2025 – 2040.

3.2 Understanding the Hierarchy of Urban Centers

In spatial and physical planning, the categorization of urban centers into a hierarchical system is a foundational concept that guides the distribution of infrastructure, services, investments, and population densities. The Mukono District PDP adopts a three-tiered structure of centers (Primary Centers, Secondary Centers, and Suburban Centers) each defined by their scale, function, service catchment, and development potential. This structure is not arbitrary; rather, it reflects both the current functional roles of existing settlements and their projected growth dynamics under various planning scenarios.

(a) Primary Centers (CBDs)

At the apex of the hierarchy are Primary Centers, often referred to as Central Business Districts (CBDs). These are the most developed, economically active, and infrastructurally equipped urban nodes in the district. In the context of Mukono, primary centers like Mukono Town and Wantoni play the role of administrative and commercial anchors. They host government institutions, major retail hubs, transport terminals, banks, educational institutions, and health facilities of regional importance.

Functionally, primary centers act as the command nodes of the district's urban network. They attract inward migration due to employment opportunities and a wide array of services, and they facilitate inter-district economic linkages, especially with Greater Kampala Metropolitan Area. These centers require robust infrastructure (roads, water, electricity), sustainable urban services (waste management, drainage), and vertical spatial planning (high-density development) to absorb projected population growth. Any scenario that aims to promote balanced growth must either decongest these centers or create additional nodes of similar hierarchy, as is proposed in Scenario 2 (dual CBD model).

(b) Secondary Centers

Secondary Centers are urban settlements that serve a complementary role to the Primary Centers. They act as service relays and economic satellites, absorbing excess demand and offering specialized economic or administrative functions. While smaller in scale and investment, secondary centers still offer essential services such as secondary education, health clinics, sub-county offices, trading centers, light industries, and small markets.

Their importance lies in decentralizing development, bringing services and jobs closer to the rural population, and supporting economic sectors like manufacturing, logistics, agro-processing, or tourism depending on local endowments. For example, towns such as Namanve and Seeta may serve industrial functions due to their location along major transport corridors, while Kisoga or Kalagi may serve as agro-processing nodes due to proximity to agricultural zones.

In spatial strategy, strengthening secondary centers is vital for spatial equity and to prevent over-reliance on a singular CBD. Their development requires targeted investment in roads, electricity, training institutions, and market infrastructure to ensure they can fulfill their intermediary function. They are the ideal locations for decentralized administrative offices, regional hospitals, technical schools, and industrial parks.

(c) Suburban Centers

At the base of the hierarchy are Suburban Centers, sometimes referred to as tertiary centers or rural service centers. These settlements generally have a low population base, but they are essential for the delivery of basic social services, food production, local trade, and housing. Most residents engage in agriculture, artisanal work, or informal trade.

Suburban centers play a critical role in rural transformation. They act as the first point of access for villagers to basic amenities such as primary schools, health centers II, cooperative societies, produce markets, and public transport terminals. Moreover, in scenarios that promote agro-industrialization (e.g., Scenario 2), these towns become vital for housing laborers, storing produce, and enabling last-mile services. Without suburban development, rural areas remain disconnected from the national economy and urban cores.

These centers require upgrading of feeder roads, electrification, water supply schemes, and sanitation services. Their development is often cost-effective and has a high return on investment in terms of poverty reduction, food security, and territorial cohesion.

(d) Functional Interdependence in the Hierarchy

Critically, these three levels of centers are not isolated silos but they are interlinked and interdependent. A strong primary center is ineffective without the support of secondary centers that decentralize pressure and distribute services. Similarly, secondary centers rely on well-functioning suburban settlements for raw materials, labor, and sustained demographic growth.

Therefore, in designing a future spatial strategy for Mukono, planners must recognize that each level plays a unique but complementary role in achieving inclusive, balanced, and sustainable development. This hierarchical approach allows for tailored investment planning, supports efficient land use, and facilitates the phased implementation of the PDP.

This analytical understanding of urban center roles sets the stage for a meaningful discussion of how each scenario leverages or undermines this hierarchy, which is explored in the following sections of this chapter.

3.3 Scenario 1: Business as Usual

3.3.1 Conceptual Overview

Scenario 1, termed “Business as Usual” (BAU), assumes the continuation of current development patterns and socio-economic trends without major planning interventions, policy shifts, or catalytic investments. Under this scenario, growth unfolds organically, shaped primarily by market forces, population pressures, and historical settlement patterns rather than strategic direction.

This scenario reflects the status quo, a pattern that is common in many fast-urbanizing districts where uncoordinated urban sprawl, speculative land use, and inequitable development prevail. While some centers experience natural intensification, others stagnate or remain underutilized due to lack of investment.

3.3.2 Spatial Structure and Role of Centers

(a) Primary Center: Mukono-Wantoni CBD

In this scenario, Mukono Town and Wantoni continue to dominate the urban system as the district’s sole primary center. This consolidated CBD remains the heart of administrative, financial, educational, and commercial services, attracting the bulk of economic activity and rural-urban migration.

However, this dominance leads to over-centralization:

- Service congestion becomes a critical challenge, as hospitals, markets, and schools are overwhelmed by rising populations.
- Transport networks become saturated due to increased vehicular flow without corresponding road upgrades.
- Land prices escalate, driving informal settlements and slum expansion at the peripheries (e.g., Kyetume and Nyenje).

Despite its economic vibrancy, Mukono CBD fails to decentralize services across the district, reinforcing spatial inequity.

(b) Secondary Centers: Underutilized Economic Satellites

Several towns such as Seeta, Namanve, Kisoga, Namataba, Nakifuma, Kasawo, and Kalagi begin to take on a secondary role, not by design but by proximity to existing infrastructure or trade routes.

Their emergence is largely reactive:

- Seeta and Namanve grow as spillover zones from Kampala, absorbing affordable residential development and informal commerce. Namanve Industrial Park partially influences growth, but lack of supportive infrastructure hampers its full potential.
- Nakifuma and Kasawo serve expanding populations with basic trade and services but lack specialization.
- These towns develop haphazardly, often without formal planning or zoning, leading to land-use conflict (e.g., industries mixing with residential areas).
- Investment is low and uncoordinated, with most development driven by smallholder entrepreneurs and landowners, not guided by district-wide economic vision.

As a result, these centers fail to perform their strategic role of relieving pressure from the CBD and promoting balanced territorial development.

(c) Suburban Centers: Peri-Urban Sprawl and Lost Potential

Suburban towns such as Kyabazaala, Kabimbiri, Namanoga, Nagojje, Bukerere, Katosi, Koome, Mpatta, and others are neglected under the BAU model. Key features of their growth pattern include:

- Incremental housing growth, driven by land affordability rather than planned residential schemes.
- Minimal service provision, with health centers, schools, and roads underdeveloped.
- Limited economic functionality, as most residents depend on informal trade, subsistence agriculture, or commute to urban centers for employment.

Importantly, the agricultural potential of these areas is undermined by the absence of structured value chains, cooperatives, or rural support infrastructure. Unregulated urban sprawl further threatens arable land, risking food insecurity and fragmented land ownership.

3.3.3 Implications of the Business-as-Usual Scenario

Strengths

- Low implementation cost: Since development follows market demand, the need for public investment is minimal.
- Predictable short-term patterns: Because it reflects current trends, this scenario offers ease in forecasting growth in the immediate term.
- Maintains continuity: Community traditions, informal economies, and existing land ownership patterns remain undisturbed.

Weaknesses

- Overburdened Primary Center: Mukono CBD faces intense pressure, leading to infrastructure decay, environmental degradation, and a rising urban poverty belt.
- Underperforming Secondary Centers: Without state coordination, towns with potential (e.g., Seeta, Namanve) do not evolve into productive economic zones.
- Spatial Inequality: Growth is concentrated around the Mukono–Kampala corridor, marginalizing the district's interior and island areas (Koome, Mpatta).
- Unregulated Urban Sprawl: The lack of planning results in inefficient land use, environmental degradation (especially wetland encroachment), and disorderly growth.
- Infrastructural Deficits: Road congestion, low electrification, and poor waste management become systemic issues.
- Weak Governance and Enforcement: With minimal regulatory oversight, land use conflicts and tenure insecurity increase.

Opportunities Missed

- The agro-economic value chains linking rural production to urban markets remain untapped.
- Tourism potential (especially lakefront towns like Koome and Katosi) is ignored.
- No structured attempt is made to link settlements into a coherent urban network, leading to isolated growth islands.

3.3.4 Suitability of Scenario 1 for Mukono PDP

While Scenario 1 represents a low-risk, low-effort pathway, it fails to align with Uganda's Vision 2040, the National Development Plan III & IV, or the imperative to transform rural-urban linkages into engines of inclusive growth.

The lack of spatial cohesion, weak center hierarchy, and minimal economic transformation under this scenario make it unsuitable for long-term physical development planning in Mukono District. It maintains the status quo rather than solving the systemic challenges that threaten sustainable urbanization.

This conclusion necessitates the exploration of more proactive, investment-driven alternatives such as Scenario 2 and Scenario 3, discussed in the following sections.

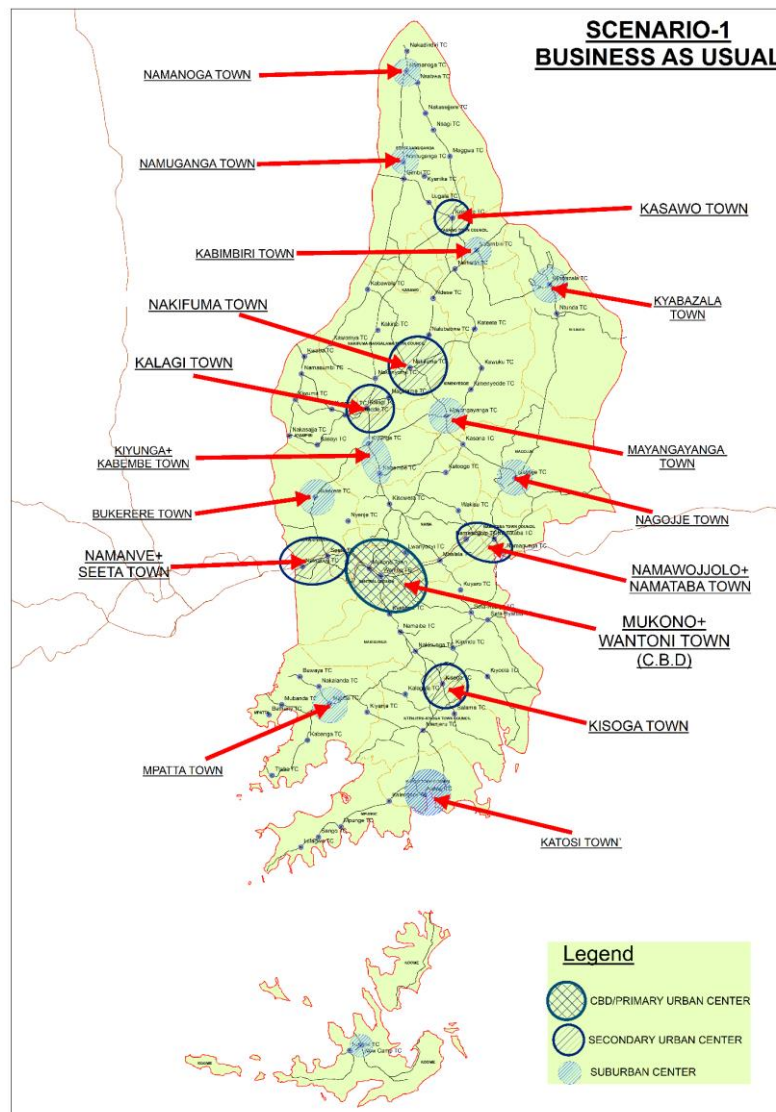


Figure 22: Scenario one – business as usual

3.4 Scenario 2: Industrialization and Agriculture

3.4.1 Conceptual Overview

Scenario 2 is designed around a transformative development agenda that leverages Mukono District's natural resources, strategic location, and agricultural potential to drive structural economic

change. It focuses on the commercialization of agriculture, development of agro-industrial value chains, and the establishment of manufacturing hubs to catalyze local economic development. This scenario aligns strongly with Uganda's forth National Development Plan (NDP IV), which prioritize agro-industrialization, and with the country's Vision 2040 goals of inclusive, sustainable growth.

This approach assumes that rural and peri-urban areas in Mukono have untapped economic potential in agriculture (coffee, tea, sugarcane, cocoa, etc.), but lack the processing infrastructure to transform raw produce into value-added products. By investing in agro-processing, storage, packaging, and logistics, the district can turn its rural economy into a dynamic engine for job creation, food security, and export earnings. The Physical Development Plan (PDP), therefore, spatially aligns these investments through a hierarchically organized urban system, enabling each category of settlement to play a synergistic and complementary role.

3.4.2 Spatial Structure and Role of Centers

(a) Primary Centers (CBDs): Mukono–Wantoni (CBD 1) and Nakifuma–Nagalama (CBD 2)

Unlike the Business-as-Usual model that relies on a single overburdened CBD, this scenario strategically establishes a dual-CBD system. The existing Mukono–Wantoni CBD continues as the traditional administrative and commercial hub (CBD 1), while a new CBD emerges around the Nakifuma–Nagalama axis (CBD 2) in the northern part of the district.

CBD 1 retains its existing dominance in retail trade, government services, banking, and logistics. However, its role is expanded to include coordinating regional trade and industrial planning, especially for the southern and central agricultural zones. Investment is made in vertical expansion, transport interchange nodes, and ICT services to enhance economic complexity.

CBD 2 (Nakifuma–Nagalama) is envisioned as an agro-industrial governance and logistics hub. Located near high-potential agricultural belts, it becomes a regional node for:

- Licensing and regulation of agro-enterprises
- Research centers and technical training for agribusiness
- Hosting district-level commodity exchanges and farmer cooperatives

The two CBDs create a north–south development axis, reducing pressure on the Mukono–Kampala corridor and ensuring more spatially equitable access to services, jobs, and governance.

(b) Secondary Centers: Agro-Industrial and Manufacturing Hubs

Secondary centers under this scenario are deliberately transformed into economic engines, each tailored to a particular aspect of industrial or agro-based production. These include:

- Kasawo, Kalagi–Kiyunga, Mbalala–Namataba, Namanve–Seeta, Kisoga–Ntenjeru.

These towns are strategically selected based on:

- Proximity to agricultural production zones
- Access to national roads or railway lines
- Availability of land for industrial parks

For example:

- Namanve–Seeta, near the Kampala-Jinja highway and railway, becomes a heavy and light manufacturing corridor, with logistics and packaging industries supporting exports.
- Mbalala–Namataba, near sugarcane-growing areas, hosts bio-refineries, ethanol plants, and food processing factories.
- Kalagi–Kiyunga supports horticulture packaging, dairy processing, and floriculture for regional markets.
- Kasowo and Kisoga–Ntenjeru emerge as agricultural extension and training hubs, where government agencies and NGOs collaborate with cooperatives to provide technical support.

These secondary centers are not just market towns but they are nodes of value addition that stimulate upstream productivity and downstream distribution. They also absorb rural migrants and provide semi-urban employment alternatives, reducing pressure on the CBDs.

(c) Suburban Centers: Supportive Labor and Service Settlements

Suburban centers in this scenario are positioned as enablers of the agro-industrial system. While they remain smaller and more residential in character, they are functionally critical as:

- Labor reservoirs for secondary centers and agro-industrial parks
- Distribution points for processed goods into local communities
- Service hubs for housing, education, health, and small-scale trade

Key towns in this category include Namanoga, Kyabazaala, Bukerere, Nagojje, Mayangayanga, Koome, Mpatta, and Katosi.

For instance:

- Namanoga and Kyabazaala, close to Nakifuma CBD, serve as residential suburbs for agro-industrial workers, with upgraded feeder roads and housing schemes.
- Koome and Mpatta, which have unique waterfront potential, are leveraged for fish processing, eco-agriculture, and even tourism-related agriculture, with ferry and bridge connectivity facilitating trade.
- Nagojje and Bukerere become peri-urban housing centers with basic services and markets for local produce.

The strategy is to urbanize rural communities without displacing their agrarian identity, ensuring that services reach the grassroots and agricultural production is tied to functional towns.

3.4.3 Strategic Advantages of Scenario 2

1. Economic Transformation and Job Creation

This scenario unlocks multiple employment avenues from farm-level jobs and factory work to logistics, retail, and agro-tech services. As industrial clusters emerge in secondary centers, they create both skilled and semi-skilled jobs, enhancing local income generation and reducing rural poverty.

2. Spatial Equity and Balanced Development

By introducing a dual-CBD structure and activating secondary centers across the district, Scenario 2 decentralizes growth. This fosters inclusivity by ensuring that no part of the district remains marginalized, including the islands and remote hinterlands.

3. Agricultural Revitalization and Food Security

Agriculture is no longer treated as subsistence but as a commercial economic sector. Farmers are linked to markets, post-harvest infrastructure is developed, and price volatility is reduced through formal value chains. This improves not just food security but farm incomes and resilience.

4. Local Value Addition and Export Orientation

Scenario 2 fosters economic diversification through value chains, like coffee is roasted and packed locally; sugarcane yields ethanol; milk is processed into powder or yogurt. These value additions stimulate both domestic consumption and regional exports, positioning Mukono as an economic hub.

5. Alignment with National and Regional Policy

The scenario directly supports objectives in:

- NDP III (Agro-Industrialization, Job Creation, Value Addition)
- NDP IV (Sustainable Industrialization, full economic monetization, and robust private sector growth)
- Uganda's Industrial Policy
- Vision 2040 (Transformation from a peasant to a modern and prosperous country)

3.4.4 Potential Challenges and Mitigation

Despite its promise, Scenario 2 comes with implementation demands:

- **Environmental Impact:** Agro-industrial activities can generate solid waste, effluents, and emissions. There is a need for environmental safeguards, waste treatment plants, and compliance monitoring.
- **Land Conflicts and Acquisition:** Industrial zones will require land consolidation and tenure regularization, especially where land is under public Mailo ownership. Transparent land banking policies are needed.
- **Workforce Development:** The scenario demands a skilled labor force in processing, agronomy, logistics, and machine operation. Investments in Technical and Vocational Education and Training (TVETs) are crucial.
- **Infrastructure Deficits:** Power supply, feeder roads, and water infrastructure must be scaled up to meet industrial demand.
- **Coordination Requirements:** Successful implementation requires alignment between district governments, central ministries, private investors, and development partners.

3.4.5 Strategic Role of Scenario 2

Scenario 2 represents a well-balanced model for Mukono's development. It is economically transformative, spatially inclusive, and environmentally manageable with proper safeguards. The scenario provides a clear functional logic: Primary centers manage, secondary centers produce, and suburban centers support.

It doesn't replace agriculture with industry; instead, it builds industry on the foundation of agriculture, creating a resilient, self-reinforcing economy. Moreover, it integrates spatial planning with economic policy, making land use a tool for wealth creation and not just settlement.

Scenario 2 is not only the preferred option for Mukono's PDP, it is also the most coherent, implementable, and equitable pathway for guiding the district toward sustainable and inclusive growth.

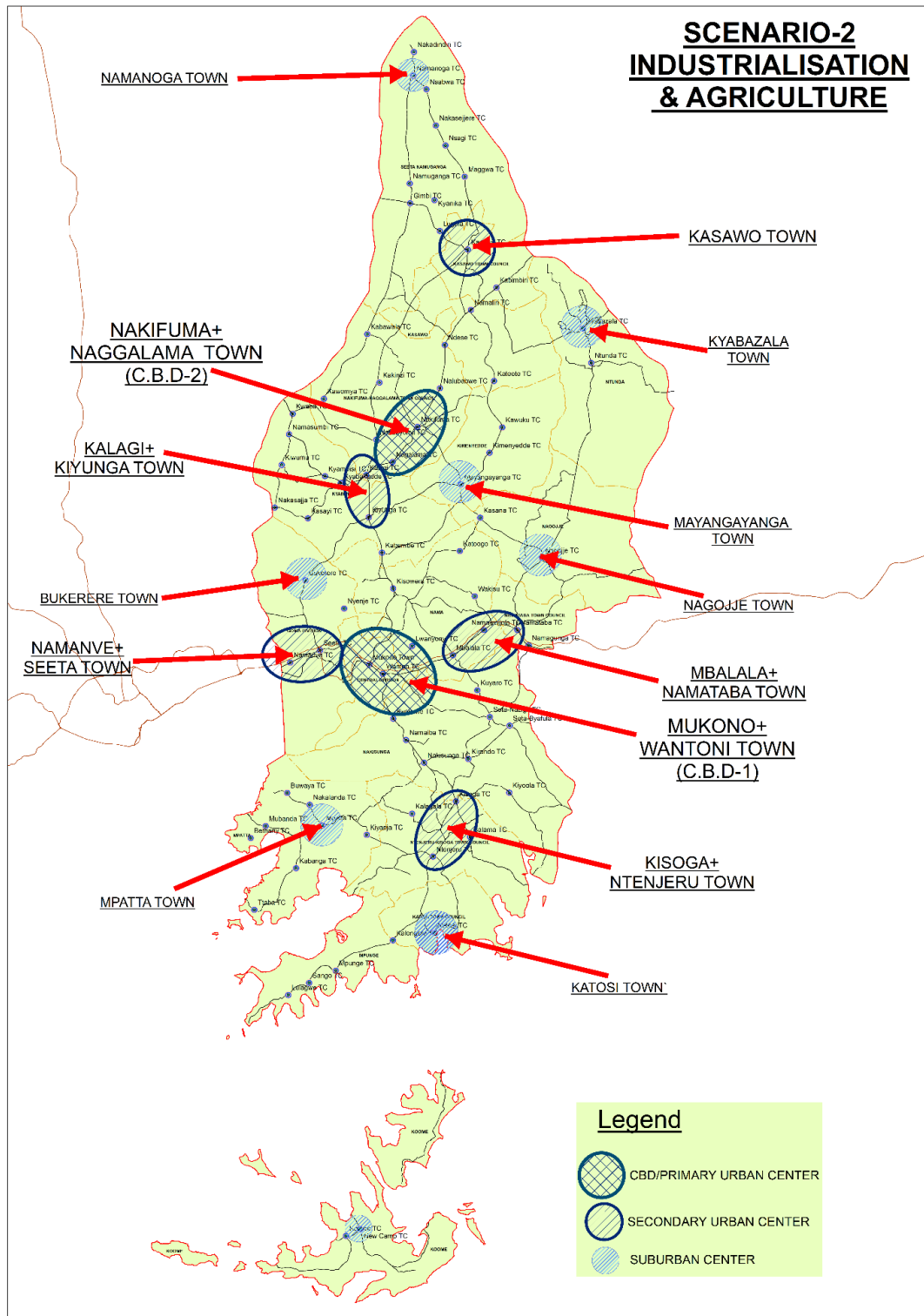


Figure 23: Scenario two – Growth based on industrialization and agricultural economy

3.5 Scenario 3: Infrastructure-Led Development

3.5.1 Conceptual Overview

Scenario 3 proposes a development path for Mukono District anchored on strategic infrastructure investment. This model is built around the premise that transport connectivity, particularly through highways, expressways, rail corridors, and water transport, is the principal driver of urban and economic transformation. Under this scenario, development gravitates around major transit routes, with growth centers emerging where infrastructure intersects or terminates. This reflects the principles of transit-oriented development (TOD), which aim to optimize land use and economic activity around transport nodes.

The scenario is inspired by ongoing and planned national investments in Mukono District such as the Kampala–Jinja Expressway, the Mukono Bypass, the proposed Standard Gauge Railway (SGR) and revitalization of the Meter Gauge Railway (MGR), and water transport improvements including the Luzira–Mpatta bridge and ferry routes connecting Katosi, Koome, and Mpatta. The goal is to turn Mukono into a logistics corridor, supporting trade, mobility, and industrial distribution. However, unlike Scenario 2, this model positions infrastructure as the primary enabler, with agriculture and industry emerging as secondary or reactive outcomes.

3.5.2 Spatial Structure and Role of Centers

(a) Primary Center: Mukono–Wantoni–Kyetume Corridor (Integrated CBD)

This scenario sees the emergence of an integrated, transit-oriented CBD consisting of Mukono Town, Wantoni, and Kyetume. Located along both the Kampala–Jinja Expressway and railway lines, this corridor becomes a high-density urban strip, concentrating administrative, commercial, and logistical functions.

This consolidated CBD benefits from:

- Multimodal connectivity, acting as a central exchange for goods and people via road and rail.
- Development of logistics parks, freight terminals, and distribution centers.
- Attraction of national and regional investors due to improved accessibility.

However, this high concentration of infrastructure also poses risks:

- If unregulated, this strip may experience traffic congestion, increased air/noise pollution, and uncontrolled ribbon development along the expressway.
- The merging of three towns into one CBD may reinforce monocentric urbanism, thereby weakening the role of interior and rural towns.

To be sustainable, this primary corridor must be guided by zoning regulations, urban design codes, and environmental controls.

(b) Secondary Centers: Corridor-Based Growth Nodes

Secondary centers in this scenario emerge along key infrastructure routes, particularly highways, rail junctions, and planned water transport corridors. These include:

- Koome, Katosi, Mpatta (linked by water transport)
- Namataba–Namagunga, Nakifuma, Kasawo (aligned with road and rail networks)

These towns evolve as specialized growth nodes with emphasis on:

- Trade and logistics (e.g., Koome and Katosi as lake ports)
- Warehousing and distribution (e.g., Namataba and Namagunga)
- Multimodal transit stations, acting as urban transit interchanges
- Tourism and eco-economic functions, especially in the waterfront towns

These centers gain their economic roles not because of local production capacity but due to their connectivity advantage. For instance:

- Katosi and Koome can link Uganda to regional trade routes via Lake Victoria (e.g., Tanzania, Kenya).
- Mpatta, once connected via a bridge to Luzira, becomes a gateway into Mukono from Kampala, potentially supporting real estate and high-value retail.

However, this infrastructure-based logic introduces dependency risks. These towns' success is tied to external capital flows, national infrastructure timelines, and regional integration policies, making them vulnerable to delays or budget reallocations.

(c) Suburban Centers: Residential and Mixed-Use Expansion Zones

Suburban centers under this model develop largely in response to:

1. Proximity to infrastructure corridors
2. Availability of land for residential and light commercial development
3. Commuter demand from workers in the primary and secondary centers

Key towns in this category include Kisoga, Kuyaro, Namanve, Nyenje, Nagojje, Kalagi, Kyabazaala, and Namanoga.

These towns evolve into bedroom communities:

- Hosting affordable housing schemes, commuter rail stations, and local markets.
- Providing essential services like primary schools, clinics, and retail centers to support local populations.

However, without direct economic anchors, these centers risk becoming dormitory towns heavily reliant on job markets elsewhere. This makes them socially vulnerable, with risks of poverty, underemployment, and service deficits if infrastructure upgrades slow down.

Therefore, spatial planning in these centers must integrate:

- Mixed-use zoning to support small-scale enterprises
- Community facilities to reduce dependency on CBDs
- Urban-rural linkages to maintain ties with agricultural hinterlands

3.5.3 4 Strategic Advantages of Scenario 3

1. Enhanced Physical Connectivity

The scenario maximizes Mukono's central location within the national and regional transport network, making it a potential logistics and mobility hub. Improved roads, rail, and water routes shorten travel times, reduce transport costs, and integrate the district with both Greater Kampala Metropolitan Area and East African trade corridors.

2. Transit-Oriented Economic Growth

Infrastructure nodes can attract high-value investments in sectors like real estate, manufacturing, logistics, and tourism. These centers become gateways for both exports (e.g., processed goods, fish) and imports (e.g., fuel, industrial inputs).

3. Regional Integration and Market Access

Water transport facilities like Katosi and Koome can support international waterborne trade, especially with ports in Tanzania and Kenya. These nodes may also anchor Special Economic Zones (SEZs) or port-based industries.

4. Urban Form Optimization

The linear growth model promoted by this scenario can reduce random urban sprawl by concentrating development along transit lines, supporting compact growth and potentially lowering infrastructure costs per capita.

3.5.4 Challenges and Risks

1. High Capital Requirements

This scenario is heavily reliant on large-scale infrastructure investment, often from central government, PPPs, or foreign donors. The long gestation period of expressways, railways, and bridges introduces planning uncertainty, potentially leaving some nodes underdeveloped for years.

2. Infrastructure-Led, Not Economy-Led

Unlike Scenario 2, which is grounded in productive sectors (agriculture, industry), this scenario treats infrastructure as the leading driver. Without complementary investment in agro-industrial systems, transport infrastructure alone may not generate the desired economic transformation.

3. Environmental and Social Risks

Infrastructure corridors may trigger displacement, wetland encroachment, and ecosystem fragmentation if not well planned. Towns like Mpatta, Katosi, and Koome rich in biodiversity could face degradation without integrated Environmental Impact Assessments (EIAs).

4. Uneven Development

There is a danger that only towns along the expressway or lake benefit, while interior areas remain excluded. Infrastructure-led development often follows a corridor logic, potentially leaving isolated towns under-resourced.

5. Complex Multi-Actor Governance

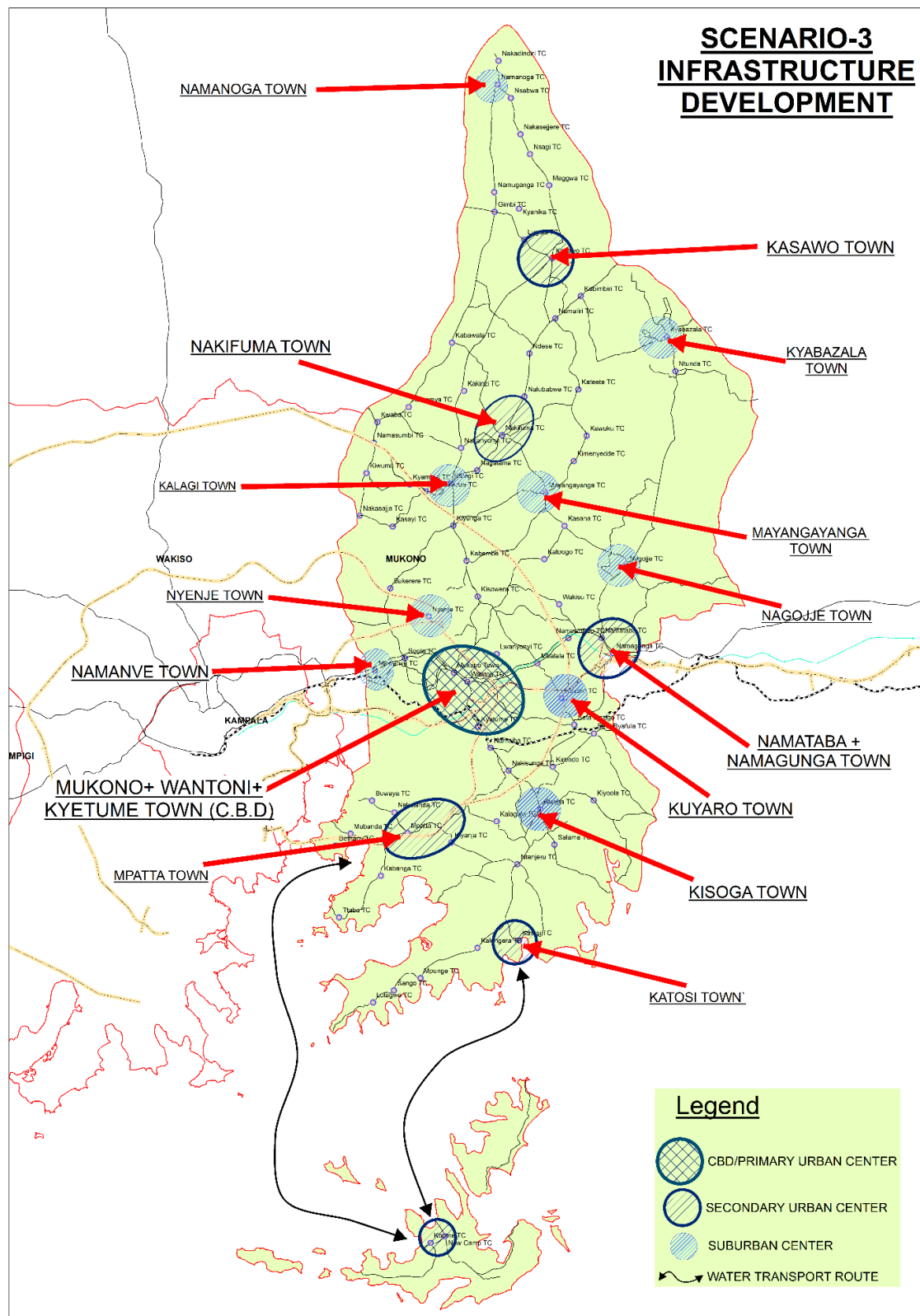
This scenario requires strong coordination between local governments, national ministries (e.g., Works and Transport, Energy, Finance, Lands, NPA), private sector partners, and donors. Weak coordination can lead to duplication, land disputes, and implementation delays.

3.5.5 Strategic Evaluation of Scenario 3

Scenario 3 presents a futuristic and infrastructure-centric vision for Mukono District. It leverages the district's locational advantage, connectivity potential, and regional linkages to catalyze urban and economic growth. Its strongest asset is its ability to transform Mukono into a gateway district linking Greater Kampala Metropolitan Area to the rest of the region through physical infrastructure.

However, infrastructure by itself is not a sufficient driver of inclusive development. Without concurrent investment in agriculture, manufacturing, and social services, infrastructure-led growth risks becoming exclusionary and speculative. While towns along highways and ferry routes may prosper, rural and inland areas may lag behind.

To be viable, Scenario 3 must be layered with sectoral planning, institutional coordination, and long-term financial commitments. As such, it is best viewed as a complementary framework that supports, but does not replace, the production-based logic of Scenario 2.



3.6 Comparative Evaluation of the Scenarios

Having examined each of the three scenarios in detail, it is necessary to evaluate them comparatively to determine their strategic suitability, feasibility, and sustainability in guiding Mukono District's Physical Development Plan (PDP). Each scenario represents a unique pathway toward spatial development, grounded in distinct assumptions and prioritizations whether organic urban growth, economic transformation through agro-industrialization, or infrastructure-led connectivity.

The comparative analysis below draws upon a multi-dimensional lens, evaluating each scenario across key planning criteria: economic viability, spatial equity, employment generation, infrastructure needs, environmental sustainability, governance complexity, and alignment with national policies.

3.6.1 Scenario 1: Business as Usual

Scenario 1 offers the least disruptive and most immediate continuation of current trends, but also the least transformative. It relies on natural urban growth and market forces to guide development, resulting in uneven spatial patterns dominated by Mukono CBD and peripheral dormitory settlements. While it requires minimal financial outlay and low governance complexity, it risks reinforcing existing disparities, overburdening core services, and failing to capitalize on the district's economic potential. Furthermore, it offers no proactive intervention to redirect urban sprawl, integrate rural economies, or build resilience.

This scenario is only defensible in very short-term, transitional contexts or where planning capacity and investment capital are severely limited. Its greatest weakness lies in its passivity; it is a scenario of inaction in the face of increasing developmental pressures.

3.6.2 Scenario 2: Industrialization and Agriculture

Scenario 2 is the most strategically grounded and sectorally integrated of all the options. It aligns well with Uganda's NDP IV and Vision 2040 by leveraging agriculture for industrial development, job creation, and food security. By deliberately developing dual primary centers, and activating agro-processing in targeted secondary towns, this scenario promotes territorial balance, economic diversity, and rural–urban linkages.

It goes beyond spatial planning by offering a developmental model that supports functional specialization of towns, local value chains, and inclusive growth. It also encourages decentralization of services and governance, expanding opportunities beyond the Mukono–Kampala corridor.

While implementation requires substantial institutional coordination, land reforms, and investment in infrastructure, the returns in terms of resilience, sustainability, and local ownership are considerable. Scenario 2 is the only scenario that simultaneously supports economic, spatial, and environmental development through a place-based, production-driven strategy.

3.6.3 Scenario 3: Infrastructure-Led Development

Scenario 3 presents a futuristic and connectivity-centric vision, positioning Mukono as a regional transport and logistics hub. It captures the district's potential to harness ongoing mega-projects like the Kampala–Jinja Expressway, SGR, and water transport corridors. It encourages the emergence of growth centers along transit nodes, which may attract investment in trade, logistics, and port-based industries.

Its greatest strength is in physical accessibility and potential for external investment. However, without integration with local production systems or service delivery planning, it risks producing growth enclaves disconnected from the broader district economy. It may promote speculative development, skewing investments to areas along expressways or ferry terminals while leaving rural towns behind.

Furthermore, the capital cost of implementation is extremely high, and its success is heavily contingent on national-level funding and coordination. While it is a valuable long-term enabler, this scenario should be seen as supportive rather than foundational.

3.6.4 Synthesis of Key Differences

The three scenarios vary not only in spatial patterns but in their planning logic:

- Scenario 1 is reactive (organic growth),
- Scenario 2 is productive (planned transformation),
- Scenario 3 is connective (infrastructure-first).

Only Scenario 2 offers a comprehensive solution to Mukono's development needs addressing economic structure, spatial equity, service delivery, and sustainability in a single integrated model.

Table 6: Summary Comparison Matrix

Criteria	Scenario 1: Business as Usual	Scenario 2: Industrialization & Agriculture	Scenario 3: Infrastructure-Led Development
Economic Growth Potential	Low to Moderate	High – driven by agro-industrial transformation	Moderate to High – reliant on transit and logistics
Job Creation & Local Economy	Limited – mostly informal sector	High – employment across value chains (farming, processing, logistics)	Moderate – potential in logistics, construction, and trade
Spatial Equity	Low – favors Mukono CBD and outskirts	High – dual-CBD model and rural node development	Moderate – favors infrastructure corridors and ports
Infrastructure Demand & Cost	Low – relies on existing systems	Moderate – targeted investment in productive zones	Very High – reliant on mega-infrastructure projects
Environmental Sustainability	Moderate – low industrial footprint	Moderate – requires regulation of industrial emissions	Variable – potential ecological disruption from large-scale transport
Governance & Planning Complexity	Low – limited coordination needed	High – multi-sector coordination (land, industry, environment)	High – national-level collaboration required
Alignment with National Plans (e.g., NDP IV, Vision 2040)	Weak – lacks strategic vision	Strong alignment with agro-industrialization and rural transformation	Moderate – aligns with Vision 2040 infrastructure goals
Time to Implementation	Immediate – continuation of current trends	Moderate – requires mobilization of policy and investment	Long-term – infrastructure projects span years
Resilience & Sustainability	Low – vulnerable to shocks and pressure	High – diversified, integrated economy	Moderate – depends on consistent funding and phased rollout
Inclusiveness & Rural Integration	Low – neglects interior and island towns	High – connects rural farmers to markets and services	Low to Moderate – focus is on transport corridors, not rural interiors

3.6.5 Strategic Recommendation

From the comparative analysis above, it is evident that Scenario 2 (Industrialization and Agriculture) offers the most balanced, inclusive, and realistic model for guiding Mukono District’s future development. It not only addresses spatial disparities and economic stagnation, but also provides a resilient urban hierarchy where each town contributes to and benefits from the district’s transformation.

While Scenario 3 provides essential infrastructure and connectivity, and Scenario 1 reflects prevailing patterns, neither offers the depth of integration, equity, and productivity embedded in Scenario 2.

Therefore, Scenario 2 forms the strategic foundation of the Mukono District PDP, with elements of Scenario 3 (infrastructure) adopted in a supportive role to unlock industrial and agricultural value chains resulting in a hybrid, pragmatic approach to physical development.

3.7 Selection of the Preferred Scenario for the Mukono District PDP

Following a comprehensive evaluation of the three strategic spatial development scenarios, Scenario 2 (Industrialization and Agriculture) has been selected as the most appropriate and sustainable framework for the Mukono District Physical Development Plan (PDP). This decision is based on rigorous spatial, economic, environmental, and institutional criteria, and is aligned with both district-level aspirations and national policy objectives.

3.7.1 Strategic Justification for Scenario 2

Scenario 2 embodies a transformative, balanced, and inclusive development model. Unlike Scenario 1, which perpetuates current inequalities and service disparities, or Scenario 3, which over-prioritizes infrastructure without guaranteeing spatial integration, Scenario 2 offers a production-driven spatial strategy grounded in local economic strengths particularly agriculture and manufacturing.

Mukono District has long been recognized as a high-potential region for commercial agriculture, including coffee, sugarcane, tea, cocoa, and horticultural crops. Yet, under prevailing conditions, much of this potential remains underexploited due to weak value chains, lack of post-harvest infrastructure, and limited access to processing facilities. Scenario 2 directly addresses this gap by placing agro-industrial development at the core of the district's spatial and economic strategy.

3.7.2 Spatial Transformation Logic

The scenario introduces a functional urban hierarchy that strengthens the linkages between rural areas and urban centers. It proposes a dual-CBD system, with the traditional Mukono–Wantoni area continuing to serve as the primary administrative and service core (CBD 1), while a new industrial and agricultural coordination center (CBD 2) is developed around the Nakifuma–Nagalama corridor in the northern sub-counties.

Secondary centers such as Namanve, Seeta, Kasawo, Kalagi–Kiyunga, and Mbalala–Namataba are restructured to serve as value-addition hubs, specializing in agro-processing, packaging, storage, and manufacturing. These towns are strategically located to absorb economic spillovers from both the production hinterlands and the CBDs.

Suburban towns including Nagojje, Kyabazaala, Katosi, Koome, and Bukerere are not left behind. Instead, they are repositioned as supportive labor and service settlements, complete with housing schemes, rural service centers, and feeder infrastructure. This creates an integrated urban–rural network in which each tier supports the others, avoiding over-concentration and maximizing local comparative advantages.

3.7.3 Alignment with National Development Objectives

Scenario 2 is closely aligned with the following national policy frameworks:

- Uganda Vision 2040, which aims to transform the country from a predominantly peasant society into a modern and prosperous nation through industrialization.
- Forth National Development Plan (NDP IV), which emphasizes sustainable industrialization, full economic monetization, and robust private sector growth.
- Parish Development Model (PDM), which aims to boost household incomes by linking smallholder farmers to the market economy through coordinated service delivery.
- National Urban Policy (2017), which promotes the development of well-planned, economically productive, and environmentally resilient towns.

This scenario also enables the Mukono PDP to integrate well with regional strategies, particularly Greater Kampala Metropolitan planning efforts and East African transport and trade corridors.

3.7.4 Economic and Social Gains

Scenario 2 provides a triple dividend:

- Economic: By creating agro-industrial clusters and structured markets, it improves productivity, attracts investment, and expands the tax base.
- Social: It generates employment, especially for youth and women, and brings services closer to rural communities.
- Spatial: It promotes decongestion, equitable growth, and the development of secondary cities that support balanced urbanization.

In contrast to scenarios focused solely on infrastructure or spontaneous growth, Scenario 2 addresses the "productive use of space" where land is not only settled but economically activated. It offers pathways for food security, export development, and regional competitiveness.

3.7.5 Environmental and Implementation Considerations

While Scenario 2 involves some environmental risks due to industrialization, it also offers the tools to manage them through proper spatial zoning, Environmental Impact Assessments (EIAs), and sustainable urban infrastructure (e.g., eco-industrial parks, green buffer zones). Strategic land use planning ensures that wetlands, forests, and agricultural lands are preserved or optimized, not compromised.

Implementation will require:

- Zoning regulations and land-use enforcement to protect industrial and agricultural zones.
- Investment in infrastructure, including roads, electricity, and water supply to industrial parks and farm-gate communities.
- Capacity building, particularly in technical skills for agro-processing and manufacturing.
- Institutional coordination across district departments, private investors, cooperatives, and development partners.

Importantly, elements of Scenario 3 (Infrastructure) are incorporated as supportive tools in this framework for example, enhancing transport corridors that link production zones to processing centers and markets.

Scenario 2 has been adopted as the preferred spatial development strategy to guide the Mukono District Physical Development Plan. It is not only a spatial model but a development philosophy that places people, productivity, and place-based potential at the center of planning. With its integrated focus on economic transformation, spatial equity, and rural–urban linkages, Scenario 2 provides the most robust and future-proof foundation for achieving Mukono District’s vision of inclusive and sustainable development.

The subsequent chapters of the PDP will detail the proposed land use structure, infrastructure investments, and implementation roadmap based on the strategic pillars of this selected scenario.

4 LINKAGE WITH NATIONAL AND REGIONAL LEVEL FRAMEWORKS

4.1 The National Integrated Transport Master Plan (NITMP) 2021-2040

This is a comprehensive framework designed to develop a seamless, safe, inclusive, and sustainable multi-modal transport system aligned with Uganda's Vision 2040 and other regional and international development agendas such as the East African Community Vision 2050 and the African Union Agenda 2063. The plan aims to reduce average travel time, lower freight transportation costs, increase the stock and lifespan of transport infrastructure, and reduce fatalities and casualties from transport accidents by 2040. The specific objectives include optimizing transport infrastructure and services investment across all modes, prioritizing asset management, promoting integrated land use and transport planning, reducing costs of infrastructure and services, strengthening policy and institutional frameworks, and enhancing transport interconnectivity to promote intraregional trade and reduce poverty.

Key NITMP 2021–2040 Proposals that affect the development of Mukono District include:

Construction and upgrading of strategic transport infrastructure in Mukono, including roads, rail, and public transport facilities, to improve connectivity within the district and to the Greater Kampala Metropolitan Area (GKMA) and other regions. Integration of Mukono's transport infrastructure with regional and national corridors to promote intraregional trade and reduce transport costs. Promote Coordinated planning between land use and transport sectors to support transit-oriented developments and reduce urban congestion in Mukono. Promotion of non-motorized transport (NMT) infrastructure such as pedestrian and cycling paths to provide affordable and sustainable mobility options. Enhance transport safety and for all population groups, including vulnerable and minority communities.

4.2 Multi Modal Urban Transport Master Plan for GKMA

The Multi-Modal Urban Transport Master Plan for the Greater Kampala Metropolitan Area (GKMA), including Mukono District, outlines a comprehensive strategy to modernize and integrate transport systems across the metropolitan region. It borrows and details many of its proposals from the National Integrated Transport Master Plan (NITMP) 2021-2040. The plan identifies the following proposals for Mukono District:

Integration into Mass Transit Systems; It proposes a suburban passenger rail network. The eastern suburban rail route will run from Mukono to Kampala, providing a vital link for commuters and helping to alleviate the enduring congestion on the Kampala-Mukono road. The plan also includes a Bus Rapid Transit (BRT) line stretching from Mukono to the Central Business District (CBD) of Kampala (22.2 Km), further enhancing public transport options for Mukono residents.

Railway Upgrades; The recently completed rehabilitation of the Kampala-Mukono meter gauge railway line is part of the broader master plan. This refurbished line now offers faster, more reliable service, with improve railway infrastructure supporting speeds and a capacity of 650 passengers per

trip. This has tried to reduce road congestion, cut travel times, and lower emissions along the corridor though a lot has to be done.

Light rail passenger train from Mukono town to Ntenjeru about 12.9Km long)

The LRT is envisioned as a medium-capacity urban rail system running on dedicated tracks, designed to alleviate traffic congestion by providing efficient, reliable, and environmentally friendly mass transit. The proposed LRT network will have multiple routes, such as from Busega to Port Bell, Kira to Ggaba, and Ggaba to Namboole, connecting key urban and suburban areas. It complements other mass transit modes like Bus Rapid Transit (BRT) and suburban rail, forming an integrated multi-modal transport system.

4.3 The Kampala Jinja Express way

The Kampala-Jinja Expressway (KJE) is part of a larger infrastructure project to develop a limited-access tolled expressway in the central and eastern region of Uganda in East Africa. The expressway is planned to have a reserve width of 100 meters and will consist of four-lane dual carriageway toll highway connecting Nakawa in eastern Kampala to the New Jinja Bridge in Njeru.

The expressway passes through Namanve and Mukono town within Mukono District, running generally south of the existing Kampala–Jinja Highway. The section within Mukono includes an 8-lane divided road over the first 4 km, transitioning to a 6-lane road up to Mukono town, and then a 4-lane road from Mukono to Jinja. The expressway features limited access, with major interchanges, flyovers, viaducts, bridges, underpasses, pedestrian crossings, and toll plazas planned along the route. The current Kampala –Jinja road is characterized by slow speeds, a distance that should take 1 ½ hrs takes between 2 ½ hrs and 4hrs. Therefore, the district is blessed to be one of the beneficiaries of this project whose designs were accomplished although not yet implemented on the ground. The expressway is designed to significantly reduce congestion on the existing Kampala–Jinja Highway, which is the busiest and most critical transport corridor for Uganda and neighboring landlocked countries. It will improve travel times, safety, and freight movement efficiency between Kampala, Mukono, and Jinja. The project is expected to generate jobs during construction and during operation, benefiting local economies including Mukono. The expressway aligns with regional development plan, integrating Mukono into a broader transport and economic growth framework.



Figure 25: Scenario one – business as usual

4.4 Standard Gauge Railway line (SGR)

The Standard Gauge Railway (SGR) Project is a Government Project established by Cabinet Minute 107 (CT 2015) to develop a modern, integrated, and efficient railway transport system to address both the freight and passenger transportation needs of the country. The district is located in the infrastructure corridor accommodating the Standard Gauge Railway line which will flow freight and passenger traffic from the Kenya border, to the central region of Uganda. The SGR alignment in Mukono is a new corridor involving new construction to accommodate the wider standard gauge track (1.435 meters) compared to the older meter gauge (1.000 meter). This requires additional land and infrastructure adjustments. The SGR will pass through key urban and peri-urban areas in Mukono, including the Mukono Municipality, Goma and parts of Nakisunga with a major station in Mukono Municipality located in Degeya, Kitale, and Katikolo cells. The SGR project is expected to further enhance rail transport efficiency, allowing heavier and faster trains, reducing road congestion, and lowering transport costs. The railway upgrade is part of a broader regional plan to improve the Northern Corridor transport network, linking Uganda to Kenya and beyond.

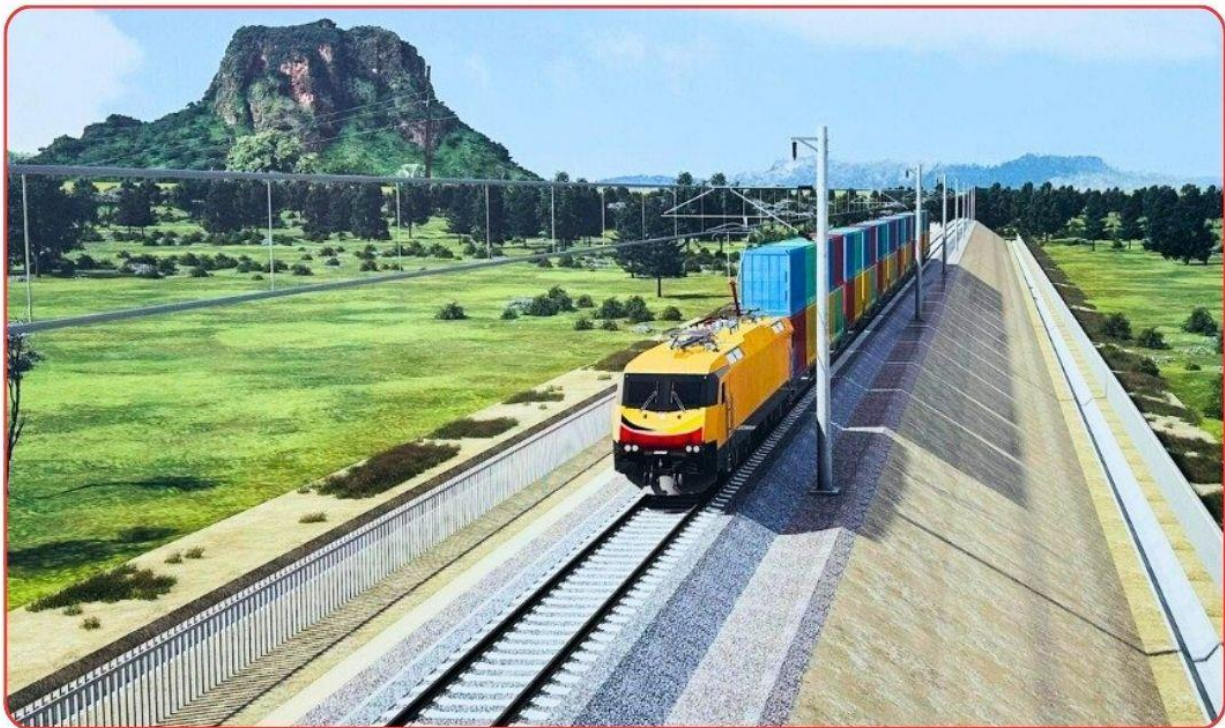


Figure 26: An impression of standard gauge railway

4.5 Kampala Second Outer Beltway

The Kampala Outer Beltway (KOB) is a strategic infrastructure project highlighted in the Multi Modal Urban Transport Master Plan for GKMA. It is designed as an outer ring road encircling Kampala to improve traffic flow, reduce congestion in the city center, and enhance regional connectivity. The Kampala Outer Beltway connects multiple key urban nodes and suburbs around Kampala, including

Ggaba, Mukono, Seeta, Namugongo, Kiira, Kasangati, Matugga, Wakiso, Buloba, and Nsangi. It forms a larger ring outside the existing inner ring roads (Northern and Southern Bypasses), acting as a “greater outer ring road” to divert long-distance and freight traffic away from Kampala’s congested core. The beltway runs through Mukono District, integrating the district into the broader metropolitan transport network and it has been incorporated in the district physical development plan.

The Multi Modal Urban Transport Master Plan for GKMA also emphasizes the upgrading of Nambole Namilyango Setta Mukono Link to paved. This will improve accessibility but also reduce on traffic and travel time between Nambole and Mukono.

4.6 The Kampala Inner beltway (First Ring)

The proposed Kampala Inner Beltway is a strategic transport link designed to enhance connectivity within the Greater Kampala Metropolitan Area (GKMA). This link starts from the Entebbe Expressway at Nsangi in Wakiso District, passing through key urban centers Nabweru, Nangabo, and Kira, extends through Mukono Municipality including Nakisunga, Ntenjeru, and Mpatta, then reaches Bule and finally connects to the Gabba area in Kampala via a water transport link. This road has been incorporated in the Mukono District physical development Plan to Link major growth nodes Mukono district with Kampala’s core via a modern, multimodal corridor. This integration will promote sustainable transport modes, including integration points for pedestrian, cycling infrastructure, and public transport interchanges along the beltway.

4.7 High Priority for Non-Motorized Transport (NMT)

The Multi-Modal Urban Transport Master Plan for the Greater Kampala Metropolitan Area (GKMA) places significant emphasis on Non-Motorized Transport (NMT) primarily walking and cycling recognizing it as a key component for sustainable, inclusive, and efficient urban mobility. The plan advocates for dedicated, safe, and accessible infrastructure such as pedestrian walkways, sidewalks, and cycling lanes throughout the metropolitan area, including central Kampala and satellite towns. Plans include expanding NMT corridors, such as a 15 km pedestrian and cycling corridor along the Kampala-Namanve railway reserve, connecting to pedestrianized streets in the central business district to enhance safe and convenient active transport. NMT access is also emphasized for integration with other transport modes, especially Bus Rapid Transit (BRT) and mass transit systems, by providing pedestrian-friendly access to transit stops and adequate bicycle parking.

4.8 The Jinja-Kampala-Mpigi (JKM) Corridor Physical Development Plan

The Jinja-Kampala-Mpigi (JKM) Corridor PDP includes Mukono District as a key part of a highly urbanized and economically dynamic region spanning approximately 2,200 km². The corridor covers Kampala City, Mukono, Mpigi, Wakiso, Buikwe, and Jinja districts, forming the core of Uganda’s social, political, and economic activity, producing over 50% of the country’s GDP.

JKM Corridor Plan Proposes the integration of Mukono district within the corridor's spatial framework that follows the major transport routes from Mpigi through Kampala to Jinja, including the Kampala-Mpigi Expressway (under construction), the Kampala-Northern Bypass Highway, and the Kampala-Jinja Expressway (under development). The plan emphasizes coordinated development across the corridor, including Mukono, to attract, manage, and coordinate public and private investments over the long term. Mukono benefits from the corridor's focus on transport infrastructure, particularly the enhancement of road and expressway connectivity linking it to Kampala and other key urban centers. The corridor plan supports the construction of the Kampala-Jinja Expressway, SGR, and rehabilitation of MGR which will improve access and reduce travel times for Mukono residents and businesses. The plan recognizes Mukono as part of Uganda's most urbanized region, and proposes 3rd tier cities including Kisoga, Nkokonjeru, Mpuge, Nakifuma, Kasawo and Nama-Namataba as an industrial growth zone. It aims to harness Mukono's development potential by guiding investments that promote sustainable urban growth and development.

Figure 27: Jinja-Kampala-Mpigi Corridor Physical Development Plan

4.9 Integration with key National and Regional Development Planning Framework

a) National Vision 2040

The National Vision **"A transformed Ugandan society from a peasant to a modern and prosperous country within 30 years"**. The efforts are geared towards harnessing strategic opportunities among Others the geographical location and trade, water resources, industrialization, and agriculture. Under **Vision 2040**, which emphasizes industrialization, infrastructure development, and urbanization, the Mukono PDP directly contributes by designating industrial zones in areas such as Namanve–Seeta, Mbalala–Namataba, and Kimenyede, and by promoting agro-industrial value chains through agro-processing hubs in Kasawo, Kisoga–Ntenjeru, and Kalagi–Kiyunga. These interventions support the transformation from a peasant to a modern industrial economy. Mukono District is therefore positioned to contribute greatly to the national vision through the strategic opportunities in Industrialization and Commercialized agriculture for value addition.

b) National Development Plan IV (NDP-IV)

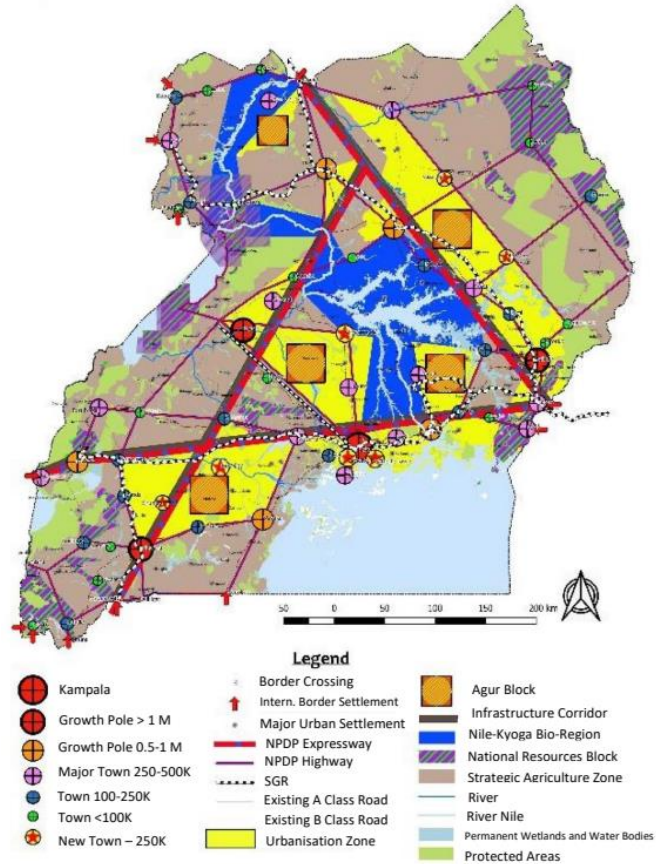
The Fourth National Development Plan (NDP-IV) streamlines the direction of the Nation for the next five (5) years 2025/6-2029/30. Among others, it prioritizes the Greater Kampala Metropolitan Area (GKMA) to be positioned as Uganda's major logistical hub, a catalyst and springboard for increasing productivity in all aspects of the economy including Foreign Direct Investments (FDI), tourism, efficient public services, and highly improved quality of life.

In alignment with NDP IV's program-based approach, the PDP integrates multiple programs spatially; for example, the development of Kibanga Port, ferry terminals at Katosi, Mpunge, and Mpatta, and the proposed railway extension to Nakifuma simultaneously advance the Integrated Transport Infrastructure, Agro-Industrialisation, and Tourism Development programs by improving market access, logistics efficiency, and tourism mobility. Similarly, the designation of agricultural zones, farmer markets, and irrigation along Lake Victoria, Sezibwa, and Lwajjali rivers supports the Agro-Industrialization program, while eco-tourism initiatives such as the Kasuulo Forest eco-tourism center and Makusu Island resort directly contribute to the Tourism Development program.

c) National Physical Development Plan (NPDP) 2022

The National Physical Development Plan 2022, provides the spatial framework for guiding investment direction in the country. It's the largest physical planning framework in the country, where all physical development plan must draw their attention and conforms, for orderly and sustainable development.

The Mukono physical development plan therefore is a lower-level plan with key attributes of achieving the national Objectives and aspiration. It provides among others for integration of transport system of Rail lines and expressway for traffic within the country, urban settlement growth poles of various categories with Agglomeration around Kampala the Capital



Source: National Physical Development Plan, chapter-7, Integrated scheme

The PDP strongly reflects the spatial principles of the National Physical Development Plan (NPDP) by promoting a hierarchical urban system and growth corridors such as Namanve–Namataba, Wantoni–Kisoga–Ntenjeru–Katosi, and Nakifuma–Namaliri–Kambimbiri. These corridors integrate transport networks,

industrial zones, residential areas, and service centers, ensuring efficient land use and reducing unplanned sprawl. The plan's emphasis on decentralization through multimodal transport terminals in Nakifuma–Nagalama, taxi parks across major town councils, and waste management facilities in Kimenyede, Katosi, and Koome; supports balanced regional development, a key NPDP objective.

d) Greater Kampala Metropolitan Area Integrated Urban Development Plan (GKMA-IUDMP)

The Greater Kampala Metropolitan Area Integrated Urban development plan, promotes the integrated urban development of GKMA in three-Layers of GKMA, GKUGA and KCCA. it streamlines infrastructure and future spatial Urban development, distribution of Metropolitan centres, secondary centres, Suburban centres, and service centre tied to an integrated Transport Oriented Development Approach /Modal for public transportation (ToD) to secure short medium- and long-term land

acquisition challenges while achieving efficient urban mobility and growth; the general land use distribution in the Greater Kampala Urban growth Area (GKUGA). It also gives future development strategies for GKMA (areas outside the urbanizing areas of Kampala), Greater Kampala Urban Growth Area, and defines the future land use for GKMA.

The PDP aligns with the **GKMA Integrated Urban Master Plan** by strengthening Mukono's role within the Greater Kampala Metropolitan Area as a key **industrial, recreational, logistics, and residential satellite district**. The development of the Namanve industrial corridor, integration with the Mukono Inland Container Depot (ICD), and improved connectivity via Kampala–Jinja highway, railway, and lake transport position Mukono as a critical node supporting metropolitan decongestion and economic expansion. The proposal for a multimodal transport hub in Nakifuma and improved commuter systems (bus parks, NMT infrastructure) complements GKMA's vision for integrated urban mobility.

5 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORKS

5.1 Introduction

Physical Planning in Uganda has a sound legal and institutional framework. These simultaneously operate to create livable spaces that are sustainable in the long run. The legal framework stipulates the laws that govern the operations of physical planning in the country and consequently, guide the operations of the institutions. Similarly, the institutional framework establishes a set of institutional capital that ensures the operationalization of these policies and laws in the planning process toward the achievement of the most optimum results. The amended Physical Planning Act 2020 declares the entire country a planning area and in an attempt to realize a planned country, a set of institutions and laws have been established to guide such technical operations.

The hierarchy of administrative and Local Government Structures in Uganda provides for the National Government: Ministries, Departments, and Agencies (MDAs) at the top followed by the District Local Government, City Council and Divisions, District council and Divisions, Sub-County Council, and Town Board. The District, Sub-County, City, City Division, Municipality, Municipal Divisions, and Town Councils Are Local Governments. Below the City Division and Municipal Division Are Wards which are equivalent to parishes in rural Sub-Counties and lower than the wards/ parishes are cells/ villages as the lowest administrative units.

5.2 Conventions

African Convention on the Conservation of Nature and Natural Resources, 1982

The African Convention on the Conservation of Nature and Natural Resources (Organization of African Unity - OAU) notes that soil, water, flora and fauna constitute valuable capital, and that these are currently under threat. The main principle of the convention is that measures necessary to ensure conservation, utilization and development of these resources are undertaken in accordance with scientific principles and with due regard to the best interests of the people. It is of great importance therefore that physical development planning integrates these conservation principals to realize maximum gains (in conserving nature).

The United Nations Framework Convention on Climate Change (UNFCCC), 1992

The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty negotiated at the Earth Summit in Rio de Janeiro from 3 to 14 June 1992, then entered into force on 21 March 1994. UNFCCC has 197 parties as of December 2015 of which Uganda is a member. Its sister Rio Conventions are the UN Convention on Biological Diversity and the Convention to Combat Desertification. Preventing “dangerous” human interference with the climate system is the ultimate aim of the UNFCCC. Therefore, all planned activities should maintain the ecological integrity of the habitat by avoiding activities that could enhance climate change; especially massive tree cutting.

Sustainable Development Goals 2015(Agenda 2030).

The United Nations Sustainable Development Goals (SDGs) to which Uganda as a country subscribes, emphasizes 17 major Goals and 169 targets for improved global sustainable growth and development. Physical Development Planning takes into consideration these very vital global goals. It is quite important to point out that all the 17 Goals in one way or another may be achieved through proper physical planning; however, Scenario 2 supports Uganda's obligations under the 2030 Agenda for Sustainable Development, particularly:

- SDG 2 – Zero Hunger (through agricultural value chains)
- SDG 9 – Industry, Innovation, and Infrastructure
- SDG 11 – Sustainable Cities and Communities
- SDG 13 – Climate Action

The PDP ensures that Mukono's spatial growth is guided by sustainable land management, economic inclusion, and environmental resilience, contributing to global development goals through localized actions. The planning principles embedded in the Mukono District PDP are legally supported, policy-aligned, and globally relevant. From Uganda's legal statutes like the Physical Planning Act and Land Act, to strategic policies such as the NDP IV and Vision 2040, Scenario 2 finds its foundation in a strong, multidimensional governance framework. This ensures that the PDP is not only visionary in intent but also implementable, fundable, and enforceable in practice.

5.3 Policy Framework

The policy framework that guides physical planning in Uganda is embedded in a number of various legislation and policies. This District Physical Development plans (PDP) was prepared within a solid umbrella policy context including the Vision 2040, the Fourth National Development Plan and Key Government Policies. Direction provided by all of these policies guided the preparation of PDP as the first supporting physical planning framework.

The Uganda's Vision 2040

Vision 2040 gives the country a strategic direction, with a clear vision of transforming Uganda into a modern and prosperous nation by the year 2040. Physical development planning of Mukono District is therefore in line with the country's strategic vision of pursuing a planned urban system that is aimed at enhancing productivity, livability and sustainability of communities, which is also in agreement with the SDGs (especially Goal 11). The Vision identifies urbanization, industrialization, infrastructure, and human capital development as key drivers of transformation.

Scenario 2 operationalizes Vision 2040 in Mukono District by:

- Supporting urban transformation through a structured urban hierarchy (CBDs, secondary, suburban centers)
- Promoting value chains and industrial zones to transform the rural economy
- Proposing infrastructure that links markets, farms, ports, and production centers
- Protecting natural resources while leveraging them for economic productivity

The scenario thus embodies the spatial implementation of Vision 2040's core transformation agenda.

The Fourth National Development Plan (NDP IV) - 2025-2030

The Fourth National Development Plan (NDP IV) is Uganda's most current mid-term strategic blueprint (following NDP III), aimed at delivering socio-economic transformation through industrialization, human capital development, and regional development.

NDP IV introduces five key thematic areas:

1. Private Sector-led Industrialization
2. Agro-industrial Development
3. Export-Oriented Growth
4. Regional Equity
5. Climate-Resilient Development

Scenario 2 is in direct alignment with these goals:

- It promotes agro-industrial clusters and value addition across the district.
- It supports private sector engagement through industrial zoning and logistical infrastructure.
- It fosters inclusive regional development by activating rural growth nodes like Nakifuma, Kasawo, and Kalagi.
- It embeds resilience and environmental safeguards through ecological zoning and green buffer systems.

Therefore, the Mukono PDP contributes to NDP IV targets by spatializing national policy objectives at the district level and creating localized mechanisms for their implementation.

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 Mukono District PDP deliberately provided a spatial framework that will enable the provision and access to decent and affordable housing to the urban dwellers within the District.

The National Urban Policy, 2017.

The National Urban Policy (2017) aims to guide urban growth toward well-managed, productive, and inclusive cities and towns. It encourages:

- Spatial planning for balanced regional development
- Compact growth and densification
- Local economic development

- Environmental protection

Scenario 2 fulfills these objectives through:

- Creation of planned secondary and tertiary centers
- Promotion of mixed-use, compact development in urbanizing towns
- Integration of agriculture and industry into the urban economy

Enforcement of zoning and land-use controls that respect ecological limits

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 and 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 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, Town Council and local levels, with participation of the people. The District PDP takes into consideration environmental concerns as sustainability is one of the key principles of the plan.

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 District PDP intends to address.

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 District PDP 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 PDP.

5.4 Legal Framework

The legal basis provides a framework under which physical planning activities are conducted. The laws provide a mechanism for the enforcement of physical plans, monitoring, implementation, supervision, evaluation, and coordination of physical planning activities. The major laws guiding physical planning in Uganda include but are not limited to;

The 1995 Constitution of the Republic of Uganda (as amended)

This is the supreme law from which other laws and policies drain their powers and is the most fundamental legal basis of physical planning including issues of land management.

Article 179 sections 1 and 2 (a) and (b) provide for the preparation of comprehensive and integrated plans ensuring people's participation in decision-making. It further establishes the roles of District councils in land management and conservation of environmentally fragile zones, especially in the preparation of the local development plans and implementation of such plans. For example; forests, wetlands, lakes, tourism zones, and other natural and manmade features. This was observed in Mukono district Physical Development Plan through the conservation of environmental zones like wetlands, buffering of wetlands, lagoons, landfill, and industrial zones with tree planting, and provision of recreational spaces thereby making the District functional, livable, and sustainable.

National Planning Authority Act (2002)

This provides operational linkages between the National Planning Authority and other bodies charged with planning functions including the Physical Planning Board. The Act further envisages a wide-scope planning body anchored in the Ministry responsible for Finance and Economic Planning.

The Physical Planning Act, CAP 142

The Physical Planning Act CAP 142 is the primary legal framework governing physical development in Uganda. It mandates the preparation of physical development plans at national, regional, district, urban, and local levels. The Act provides for:

- The creation of District Physical Planning Committees
- Development control through zoning, building permits, and land use regulation
- Enforcement mechanisms for illegal developments
- Community participation in plan formulation

Scenario 2 aligns with the Act by proposing a zoned, multi-level spatial structure that is technically rational and legally enforceable. It empowers Mukono's local planning institutions to regulate growth in accordance with approved land use plans.

The Land Act, Cap 227

The Land Act (cap 227) provides the legal framework for land tenure, ownership, acquisition, and use. It recognizes various tenure systems (customary, freehold, leasehold, mailo) and allows landowners to engage in development within the limits of the law.

Scenario 2 relies on:

- Land regularization to enable development of agro-industrial zones
- Land banking for strategic infrastructure and industrial hubs
- Customary tenure conversion in rural areas for cooperative-led development

This ensures that land use changes proposed in the PDP are supported by legal processes that respect both private rights and public planning interests.

The Land Acquisition Act, 1965

This Act makes provision for the procedures and methods of compulsory acquisition of land for public purposes whether for temporary or permanent use. The Act requires that adequate, fair and prompt compensation is paid before taking possession of land and property. Dispute arising from the compensation to be paid should be referred to the court for decision if the Land Tribunal cannot handle. Sections 2 to 7 of the land acquisition act clearly describe the steps that government should follow in order to acquire land in public interest.

Local Government Act, Cap 243

This Act Mandates Local Governments to prepare or cause to prepare planning schemes for the lower local governments. This Act also outlines the mandate of urban councils in respect of the services they are supposed to deliver to the population including road opening and maintenance, street lighting, and other services. This Act is the basis on which local authorities carry out planning in their area of jurisdiction.

Part IV of the Local Government Act sections 31(3) and 36(1 and 3) gives Urban Councils planning autonomy and further defines the planning authority in the District as the District Council and how it shall carry out planning concerning guidelines of the National Planning Authority which provides: for example, section 31 (3) Urban Councils shall have autonomy over their planning and financial management when carrying out the functions and services specified under part 3 of the second schedule and section 36(3) the District Council shall prepare comprehensive and integrated development plans incorporating plans for lower local governments for submission to the National Planning Authority and lower local governments shall prepare plans incorporating plans of lower councils in their respective areas of jurisdiction.

Scenario 2 leverages this framework by:

- Assigning critical planning functions (e.g., zoning enforcement, permit approvals) to district and town councils
- Involving parish and sub-county structures in implementing rural service nodes, agro-cooperatives, and markets

This creates an enabling environment for bottom-up planning and accountability, in line with the principles of participatory governance.

Public Health Act, Cap 296

The Public Health Act CAP 296 (section 13), specifies the rules and regulations regarding public health issues such as drainage and sanitation, and housing conditions among others. The Act specifies the details of the building standards under section 296, which applies to Mukono district as a planning area. All developers are by this law, required to erect a building in compliance with the requirements of the building rules. The Act also specifies the fees payable for obtaining building permission under section 7(8). Therefore, this Act, by law, forms the basis for enforcing building regulations in Mukono district.

National Environment Statute, Cap 153

The National Environmental Statute regulates environmental issues in Uganda. Schedule III of the statute provides a list of projects that require an environmental impact assessment to be undertaken before project implementation. Urban developments, including the establishment of industrial estates, are among the projects listed in the Schedule (page 80, Section 2).

The Statute defines an environmental impact assessment as '*a systematic examination conducted to determine whether or not a project will have any adverse impacts on the environment*'. In addition, the National Environmental Management Authority (NEMA) established under the Statute is the principal agency responsible for the management of the environment and was created as a result of the National Environmental Action Plan (NEAP) of 1994. According to this statute, part 6 sections 34-55, all the relevant environmental management issues are vested in NEMA. One of the important functions of NEMA, in addition to reviewing policies and environmental impact statements, is to establish national environmental standards in consultation with various lead agencies.

More especially, sections 49 and 46 concern land-use planning and forest resource management. Section 7(b) under part III specifies that NEMA shall ensure the integration of environmental concerns in overall national planning through coordination with relevant Ministries, Departments, and Agencies of Government.

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 the protection, management, and utilization of any village forest reserve within its area of jurisdiction.

Parish Development Model (PDM)

The Parish Development Model is Uganda's flagship strategy to move subsistence households into the money economy. It targets agricultural productivity, market access, and cooperative-based value chains at the parish level.

Scenario 2 integrates the PDM by:

- Planning for aggregation centers, feeder roads, and agro-processing nodes at parish scale
- Locating extension services and community markets in suburban towns and rural centers
- Ensuring spatial planning supports PDM investment targeting and service coverage

This spatial alignment ensures that planning does not occur in isolation but supports micro-level economic transformation.

National Physical Development Plan (NPDP) 2022

The National Physical Development Plan 2022, provides the spatial framework for guiding investment direction in the country. It's the largest physical planning framework on the country, where all physical development plan must draw their attention and conforms, for orderly and sustainable development.

The Mukono physical development plan therefore is a lower-level plan with key attributes of achieving the national Objectives and aspiration. It provides among others for integration of transport system of Rail lines and expressway for traffic within the country, urban settlement growth poles of various categories with Agglomeration around Kampala the Capital

5.5 Regulations

The Physical Planning Regulations.

The Physical Planning Regulations give full effect to the Physical Planning Act CAP 142. Without them, the Act would not be fully implementable.

The National Physical Planning Standards and Guidelines 2025.

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 Mukono District has been carried with guidance and reference to the National Physical Planning Standards and Guidelines 2022.

The National Environment (Noise, Standards, Control) Regulations

These Regulations guide the maintenance of a healthy environment for all people in Uganda, the tranquility of their surroundings, and their psychological well-being by regulating noise levels and generally elevating the standards of living of the people by prescribing acceptable noise levels for different facilities and activities.

National Environment Impact Assessment Regulations, 1998

These provide processes for Environmental Impact Assessment including project briefs and environmental impact studies. The Regulation provides for environmental impact assessment review processes including the invitation of general public comments and public hearings and the decision of the Executive Director of the National Environment Management Authority in respect of the grant, rejection, or cancellation of the environmental impact assessment certificate.

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 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.

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 District and the entire metropolitan area are at crossroads with regard to effluent or waste management. The local urban and local government entities within the district 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.

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.

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.

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 place 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.

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 district is permitted to make bye laws for the protection of mountainous and hilly areas which are at risk of environmental degradation.

5.6 Institutional Framework

This stipulates the various institutions that guide physical planning in Uganda. The institutions help to operationalize the legal framework. The institutions work simultaneously to achieve a sustainable community for Mukono district. The Physical Planning Act, CAP 142 stipulates a clear hierarchy of planning institutions and institutional context for the preparation of Urban Physical Development Plans. These bodies include National Physical Planning Board, District Physical Planning Committees, and Urban Physical Planning Committees as stated below;

Directorate of Physical Planning and Urban Development

The Directorate of Physical Planning and Urban Development in the mold. This comprises three departments; the Department of Physical Planning; Urban Development and Land Use Regulations and Compliance. The primary concern of the directorate is ensuring orderly, sustainable, and

organized urban development as part of the national agenda clearly articulated in Uganda's Vision 2040 and the National Development Plan (NDP). The directorate is a pinnacle in the process of formulating a socio-economic framework to guide the process of transforming Uganda from a peasantry society into a middle-class society and articulation of a strategy for long-term economic and social development, formulation of a framework for industrialization, provision of social and physical infrastructure, agricultural modernization and poverty eradication. The Planning Directorate in the MoLHUD is supposed to set the platform for good planning and plan implementation and ensure that enabling policies, laws and national and regional plans are in place. It is supposed to set planning standards and ensure that they are adhered to. The Directorate is also charged with the duty to help the local authorities develop their capacities to carry out their day-to-day planning functions.

The National Physical Planning Board(Currently under NPA)

The board is responsible for overseeing and coordinating the execution of the physical planning mandate at the national, regional, urban, and local levels and responsible for the approval of urban physical development plans at the respective levels of governance. The Board, is now under the National Planning Authority.

The District Physical Planning Committee

The primary functions of the committee include; causing to be prepared local physical development plans, through its officers, agents, or any qualified physical planners; ensuring the integration of physical planning into the Five-Year Integrated Development Plan of the district; exercising supervisory powers over all lower planning committees and to ensure integration of social, economic and environmental plans into the physical development plans.

The Urban Physical Planning Committee

The urban physical planning committee is responsible for urban orderly development and performs functions that include; causing to be prepared urban and local physical development plans and detailed plans; recommending development applications to the Board for change of land use; recommending to the urban council sub-division of land which may have a significant impact on contiguous land or be in breach in any condition registered against a deed in respect of such land; determine development applications relating to industrial locations, dumping sites or sewage treatment which may have an injurious impact on the environment as well as applications in respect of land adjoining or within a reasonable vicinity or safeguarding areas and hearing and determining appeals made against decisions of the urban physical planner or subordinate local authorities. The committee constitutes the technical staff of the urban authority including; Town Clerk as the Chairperson, the Physical Planner as the Secretary, Engineer, Environment Officer, Land Surveyor, Architect, and a Physical Planner in private practice. However, on close analysis of the Mukono district, it is established that the committee is fully constituted hence, effective in the performance of its duties and is productive.

6 STRATEGIC SPATIAL PLANNING INTERVENTIONS

6.2 Introduction

The plan provides the district's spatial framework, which defines how space will be utilized to ensure optimal and sustainable use of land and land-based resources. This will facilitate the attainment of social, economic, and environmental goals, while also helping to achieve the principles of efficiency, equity, sustainability, and productivity. Additionally, the plan offers strategies to address environmental degradation and inefficient transportation. The Physical Development Plan for Mukono district is an important policy instrument and a core component of the district's spatial, social, economic, institutional, and environmental vision. In other words, it is a tool to achieve the desired spatial form of the district.

Therefore, Mukono district PDP is aimed at a coordinated development pattern regarding the provision of services for a friendly, safe, and sustainable environment. The Physical Development Plan is a comprehensive and systematically developed framework aimed at streamlining development direction, purposefully guiding future development, and consolidating the urban fabric by creating new development and redevelopment opportunities best serviced by and with both municipal and social infrastructures among others. The plan also sets strategic actions to enable and enhance development initiatives that promote attractive places to live, work, and spend time for leisure.

Thus, the PDP provides broad proposals for various uses such as infrastructure, civic, residential, commercial, mixed-use, recreational, institutional, and ecological areas, among others. It proposes a network of new road alignments to have better traffic circulation systems for present and future transportation needs in the district and emphasizes zoning regulations to control development within the Mukono.

6.3 Principles Guiding the PDP Preparation

Planning principles form the foundational guidelines and value system upon which the Physical Development Plan (PDP) is developed, implemented, and monitored. These principles ensure that spatial and physical development is systematic, equitable, efficient, and sustainable. For Mukono District, which faces diverse development pressures ranging from urban expansion, agricultural transformation, infrastructure growth, and ecological sensitivity adhering to robust planning principles is essential.

This chapter outlines the key planning principles adopted in the preparation of the Mukono District PDP. They reflect national policy directives, global sustainable development goals, and the unique spatial and socio-economic characteristics of the district.

6.4 The Guiding Principles

No matter the scale of the planning exercise, good planning principles should guide the process. The best principles for planning are those that both professional planners and the community agree on and those that embody the larger development vision for the locality.

6.4.1 Spatial Equity and Balanced Development

The plan promotes a balanced distribution of infrastructure, services, and economic opportunities across the district. This principle seeks to reverse historical patterns of over-concentration around Mukono–Kampala corridor and extend growth and services to underserved towns and rural areas such as Nakifuma, Koome, Mpatta, and Kasawo.

6.4.2 Economic Functionality and Productivity

Land use planning must enhance local economic development, particularly by enabling value addition in agriculture, industrial clustering, and market integration. This principle supports the transformation of Mukono from a supply zone for raw materials to a district with productive and competitive urban and rural economies.

6.4.3 Environmental Sustainability

Planning in Mukono prioritizes the protection of sensitive ecosystems including wetlands, forests, and lakeshores while promoting land uses that are resilient to climate change. The principle calls for integrated environmental planning, application of EIAs, and enforcement of ecological buffers around Lake Victoria, rivers, and protected areas.

6.4.4 Efficient and Compact Urban Growth

The PDP discourages sprawling and fragmented development by advocating for compact, walkable, and transit-supportive urban forms. Growth is to be focused along defined nodes and corridors, especially around existing infrastructure and planned industrial zones, minimizing the cost-of-service delivery.

6.4.5 Connectivity and Integration

Planning ensures that land uses are integrated through multi-modal transport networks (roads, rail, water), rural–urban linkages, and economic value chains. This includes connecting production areas to markets and labor to job centers, thereby enhancing both mobility and access to opportunity.

6.4.6 Participatory and Inclusive Development

The planning process and its outcomes must be people-centered, ensuring that women, youth, farmers, the private sector, and vulnerable groups have a voice in decisions and benefit from outcomes. The PDP integrates local knowledge, customary tenure considerations, and gender-sensitive approaches.

6.4.7 Legal and Institutional Accountability

All planning proposals align with the Physical Planning Act, 2010, and other relevant laws, ensuring enforceability. The principle also emphasizes clear mandates for institutions (district councils, town councils, physical planning committees) and promotes accountability and transparency in land-use decision-making.

6.4.8 Resilience and Risk Reduction

The PDP considers disaster risk management, especially in flood-prone and unstable terrain areas, and integrates climate adaptation measures. Resilience planning also includes redundancy in infrastructure systems and ensuring that land use does not compromise public safety.

6.4.9 Neighborhood Principle

The main concept is based on the neighborhood aspect as the fundamental planning unit; where all needs of residents are within walking distance of their homes, or easily accessible by a comfortable, efficient and affordable transportation system. The idea is to design neighborhoods that are self-contained and that encourage such qualities as diversity, interaction, easy access to services and amenities, less automobile use, pleasant and low-stress environment, safety and security, and high quality of life regardless of residents' income levels.

6.4.10 Enrich the existing situation

New developments should enhance and add value to the quality of existing urban areas by fostering a unique response that respects and complements the surrounding context. Planning decisions in this PDP have been grounded in a thorough understanding of the current conditions on the ground. For instance, existing business centers were preserved and thoughtfully expanded to accommodate increased demand, ensuring that growth builds upon and strengthens the established urban fabric rather than disrupting it. This approach ensures that new proposals harmonize with and enrich the character and functionality of the existing environment.

6.4.11 Compatibility of Land Uses

The PDP planning process was guided by the principle of land use compatibility, ensuring that proposed land uses coexist harmoniously without causing conflicts when situated near each other. The plan prioritized placing complementary uses in proximity for example, locating high-density residential areas adjacent to commercial zones to promote functional integration and enhance the overall urban environment. This approach helps to optimize land utilization, reduce potential nuisances, and create vibrant, well-balanced communities.

6.4.12 Threshold and Range Analysis

This principle involved assessing the catchment population and the typical travel distances people undertake to access various facilities. In developing land-use proposals, careful consideration was given to these factors, recognizing that different land uses have varying service areas and population

thresholds. For instance, facilities with a larger catchment area, such as major commercial centers, were strategically placed to serve broader populations, while neighborhood services were located closer to residential zones to minimize travel distances. Applying this principle ensures that services are accessible, efficient, and appropriately scaled to meet the needs of the community.

6.4.13 The principle of centrality

The principle of centrality is fundamental in physical planning. Centrality promotes the development of well-defined centers such as town centers, business districts, or community hubs where essential services, markets, offices, and social amenities are concentrated. Central places are strategically located to be easily accessible from surrounding neighborhoods and regions, often connected by efficient transport networks. This reduces travel time and encourages the use of public spaces. By concentrating activities and services in central locations, the principle helps optimize land use, reduce urban sprawl, and support sustainable development. Central areas provide spaces for social interaction, cultural events, and community engagement, fostering a sense of identity and belonging. This principle was very key while proposing land use in the district and it relates to Equitable and balanced spatial distribution of development to avoid disparities.

The principle of centrality guided the planning team to:

- Design and reinforce hierarchical centers (primary, secondary, tertiary) based on population size and function.
- Locate essential services and commercial activities in accessible central zones.
- Enhance public transport and pedestrian networks to connect peripheral areas to central hubs.
- Encourage mixed-use development in central areas to create vibrant, multifunctional spaces.

6.4.14 The principle of integration of rural and urban settlement

The principle of integration of rural and urban settlement functions emphasizes the need to view rural and urban areas not as separate or isolated entities but as interconnected parts of a broader territorial system. This approach promotes balanced and inclusive development by recognizing and leveraging the flows of people, goods, services, resources, and information between rural, peri-urban, and urban areas. This was used to enhance local economic development in the district.

6.4.15 The principle of optimum use of land

The principle of optimum use of land guided the planning team to strategically allocate land resources to balance and accommodate various competing uses such as agriculture, forestry, industry, human settlements, infrastructure, and other activities in a way that maximizes overall benefits and sustainability.

6.5 Linkage Between Planning Principles and Scenario 2 (Industrialization and Agriculture)

Scenario 2 (Industrialization and Agriculture) was not selected arbitrarily. It emerged as the most coherent response to Mukono District's spatial, economic, and environmental challenges because it directly translates the planning principles outlined in Section 5.2 into actionable strategies. This section highlights how each principle is applied through the scenario's spatial structure, land-use proposals, and implementation approach.

6.5.1 Spatial Equity through a Dual-CBD Structure

The principle of spatial equity and balanced development is operationalized in Scenario 2 through the establishment of a dual-CBD framework. While Mukono–Wantoni continues as the primary commercial and administrative center (CBD 1), a second CBD is developed at Nakifuma–Nagalama (CBD 2) to serve the northern region. This model decongests the southern urban corridor and decentralizes growth, investment, and service delivery. Additionally, by upgrading rural towns such as Kasawo and Kalagi into functional economic nodes, Scenario 2 addresses long-standing disparities between urban and rural areas, ensuring more balanced territorial development.

6.5.2 Economic Productivity through Agro-Industrial Zoning

Scenario 2 embodies the principle of economic functionality and productivity by allocating land for agro-industrial parks, value addition centers, and logistics hubs. These are strategically located near agricultural belts to shorten supply chains, reduce post-harvest losses, and improve rural incomes. Towns such as Namanve, Mbalala, and Seeta are designated as Medium-Heavy industrial zones, while Mpatta and Kisoga integrate processing with fishing and tourism. This focused land use strategy ensures that spatial planning becomes an enabler of economic transformation, rather than just a mechanism for controlling development.

6.5.3 Environmental Sustainability via Ecological Buffers

Scenario 2's commitment to environmental sustainability is visible in its land use strategy. Ecological conservation zones are designated around wetlands, rivers, forests, and the Lake Victoria shoreline. For example, Koome Island and the Katosi–Mpatta lakefront areas are shielded from industrial encroachment through buffer zoning and restricted development controls. Additionally, industrial zones are required to include pollution control infrastructure such as effluent treatment plants and green buffers. These planning decisions ensure that economic development does not compromise the district's ecological health.

6.5.4 Compact and Efficient Urban Growth Patterns

To adhere to the principle of efficient and compact growth, Scenario 2 promotes planned urban densification rather than unregulated sprawl. Development is concentrated around transit nodes and designated urban centers such as Namataba, Seeta, and Nakifuma. Residential expansion is guided by zoning that favors medium to high-density settlements, supported by infrastructure for water,

waste, energy, and mobility. This reduces service delivery costs, increases land-use efficiency, and promotes walkable, mixed-use neighborhoods.

6.5.5 Integrated Connectivity through Strategic Infrastructure

Scenario 2 supports the principle of connectivity and integration by aligning development zones with major infrastructure corridors. Agro-industrial towns are connected to markets via the Kampala–Jinja Expressway, railway lines, and feeder roads. Lake-based transport nodes such as Koome and Katosi are linked to inland markets through ferry systems and road terminals. This enables smooth movement of raw materials, labor, and finished goods thus reinforcing Mukono’s role as a regional agro-industrial and logistics hub.

6.5.6 Participatory and Inclusive Planning Mechanisms

The principle of participatory and inclusive development is deeply embedded in Scenario 2. The scenario emphasizes local ownership of agro-industrial value chains, with smallholder farmers, youth, and women’s groups participating in cooperatives, training programs, and land-use planning. Suburban and rural towns are equipped with community markets, health centers, and extension services, making them more livable and economically productive. Scenario 2 thus ensures that the benefits of development are widely shared across socio-economic groups.

6.5.7 Legal and Institutional Accountability in Land Use Implementation

Scenario 2 adheres to the principle of legal and institutional accountability by using enforceable instruments such as the Physical Planning Act (2010) and Land Act (1998). The zoning regulations proposed under this scenario will be enforced by district physical planning committees and local authorities. Development permits will be tied to approved land use plans, ensuring that landowners and developers comply with environmental and spatial guidelines. This builds trust in institutions and reduces land-use conflicts.

6.5.8 Resilience and Risk Reduction by Design

Scenario 2 incorporates the principle of resilience and disaster risk reduction through proactive spatial choices. Industrial and residential development is prohibited in flood-prone areas, while steep slopes and fragile ecosystems are zoned for conservation. Additionally, climate-smart agriculture, eco-industrial parks, and green infrastructure are promoted to enhance the district’s long-term resilience. These interventions ensure that Mukono’s development is robust in the face of climate change and environmental shocks.

In conclusion, Scenario 2 is not simply a spatial configuration but it is a direct application of core planning principles. It provides a framework that is not only economically transformative and spatially inclusive but also ecologically balanced and socially just. Its close alignment with the planning principles ensures that the Mukono District PDP is both strategically grounded and practically implementable. These principles will continue to guide zoning decisions, investment prioritization, and monitoring frameworks throughout the lifecycle of the PDP.

Table 7: Practical alignment of core planning principles with Scenario 2 implementation

Planning Principle	Application in Scenario 2: Industrialization and Agriculture
Spatial Equity and Balanced Development	Dual-CBD structure (Mukono–Wantoni and Nakifuma–Nagalama) promotes equitable distribution of services and investment across north and south Mukono.
Economic Functionality and Productivity	Agro-industrial zones (e.g., Namanve, Mbalala, Kasawo) support value addition; zoning prioritizes productive land use and integration of rural economies.
Environmental Sustainability	Ecological buffer zones around Lake Victoria, wetlands, and forests; green infrastructure and EIA requirements for industrial areas.
Efficient and Compact Urban Growth	Compact, mixed-use development focused around designated centers; zoning avoids ribbon development and informal sprawl.
Connectivity and Integration	Strategic alignment of industrial areas with roads, rail, and ferry terminals; enables rural–urban linkages and efficient supply chains.
Participatory and Inclusive Development	Integration of smallholders, women, and youth in cooperatives and agro-enterprises; spatial planning includes community-level service nodes.
Legal and Institutional Accountability	Land use plans enforceable under the Physical Planning Act CAP 142; development controls implemented by district and town councils.
Resilience and Risk Reduction	Avoids development in disaster-prone areas (floodplains, steep slopes); promotes climate-smart agriculture and resilient land use.

6.6 Overall objectives for the spatial development of Mukono district

To achieve sustainable spatial development of Mukono district, as well as the vision of GKMA, the following overall objectives are set:

- To develop competitive and vibrant economic sectors including not only commercial, services, and government administration, but also manufacturing sector and business sectors that will provide residents of Mukono with enough employment opportunities in both formal and informal sectors by transforming the monocentric, congested, inefficient and fragmented spatial structure of Mukono into a polycentric spatial structure, but also a strongly integrated spatial structure within GKMA as a whole, but also with the Jinja Kampala Mpigi Corridor
- To enhance the healthy and resilient residential environment and urban amenity for enjoyable lives of people by providing basic infrastructure and developing urban centres within Mukono district.
- To promote environmental sustainability of Mukono district in harmony with ecologically sensitive zones.
- To promote social sustainability and attain healthy working environments and residential areas

6.7 Strategies for Urban Development of Mukono district

To make progress towards the overall objectives for urban development in Mukono district, the following overall strategies are formulated for urban development in Mukono.

- To strengthen a multi-modal public transportation network for supporting the development and operation of the Polycentric Spatial Structure
- To promote utility and social services distribution and location in the district to ease access to all residents
- To discourage scattered development of Industrial Areas in Mukono by designating Industrial Growth zones and Corridors but also by providing necessary infrastructure for industrial operation
- To promote green growth by encouraging conservation of Wetland and forest resources
- To promote infrastructure development to support urban development of Metropolitan Centres and the local service centers in Mukono district and surrounding areas.
- To promote urban development by following a Transit-Oriented Development (TOD) policy, paying attention to existing railway lines, and expressways integrated with other multimodal transport systems.
- To provide linkage between Mukono district and the neighbouring secondary centers such as Luzira – Portbell.
- To provide for systems and facilities for sustainable waste management in the district.
- To promote economic development, leisure and hospitality through tourism by identifying and earmarking relevant and feasible zones and infrastructure.
- To promote equity through the allocation of a good level of educational and health facilities in Mukono district for attracting middle-income populations outside Mukono.

Table 8: Summary of Proposed Area land use coverage in Mukono District

Landuse	Area_Ha	Area_SqKM	Area_Perce
Wetland Buffer	10822.33	108.22	3.89
Wetland	35741.77	357.42	12.85
Utility & Infrastructure	726.53	7.27	0.26
Residential	50546.29	505.46	18.17
Recreational	1025.53	10.26	0.37
Open Water	94191.85	941.92	33.86
Landing Site	383.39	3.83	0.14
Lake Buffer	4517.35	45.17	1.62
Institutional	2311.19	23.11	0.83
Industrial	4546.36	45.46	1.63
Forest	23872.35	238.72	8.58
Cultural Tourism	99.60	1.00	0.04
Commercial Agriculture	41013.75	410.14	14.74
Commercial	8264.08	82.64	2.97
Civic	113.91	1.14	0.04

Mukono District Physical Development Plan: 2026 - 2040

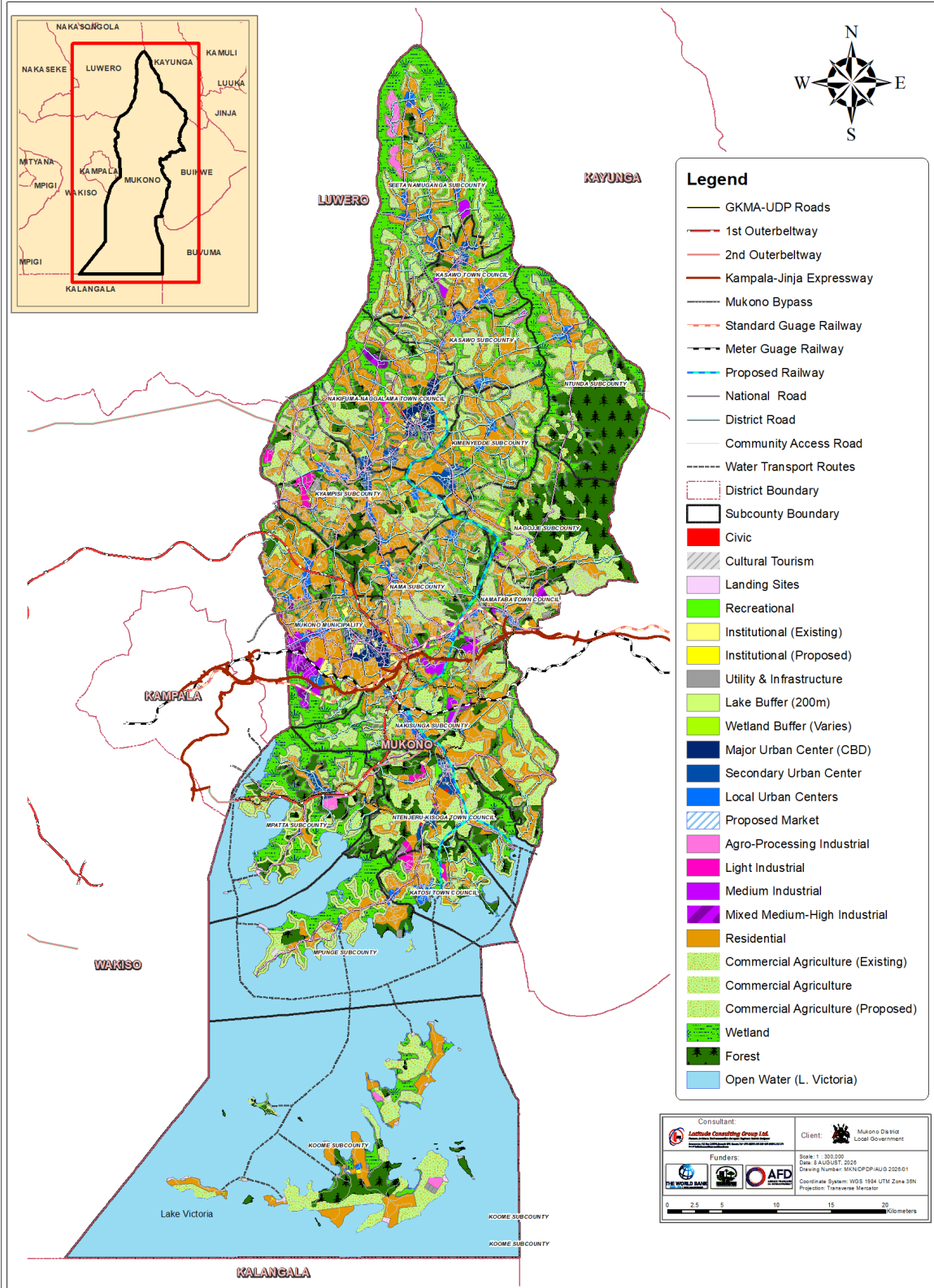


Figure 28: Mukono District Proposed Physical Development Plan 2026-2040

6.8 Strategic interventions / Land use proposals

6.8.1 Integrated Transport Infrastructure and Services

6.8.2 Proposed Road infrastructure

Uganda Vision 2040 underscores the critical need for a comprehensive and integrated transport infrastructure network as a foundation for economic growth, national integration, and the facilitation of both domestic and international trade. The Vision recognizes that efficient transport infrastructure and services are essential to easing trade and improving connectivity across the country. In Uganda, road transport is particularly dominant, accounting for over 90% of cargo freight and passenger movement, and is a principal driver of economic growth.

Mukono District has an extensive road network that plays a vital role in enhancing accessibility and mobility across its urban and rural areas. The district boasts a total of 956 kilometres of roads and 514 kilometres of community access roads, which are distributed across its lower local governments. The district is traversed by 15 roads managed by the Ministry of Works and Transport including Mukono-Jinja Highway, Kayunga Road-connecting Mukono to Kayunga District, it supports agricultural trade and access to rural communities and Mukono-Kyetume-Katosi-Nyenga Road, this road connects Mukono to Katosi on Lake Victoria's northern shores and extends eastward to Nyenga in Buikwe District. In addition to these major roads, the district maintains smaller roads to improve access within trading centres and rural areas. All the National roads are illustrated in the table below:

Table 9: Road Classification

Class	Link ID	Road Name	Surface_Type	Length/ KM
B	B101_Link02	Kalagi - Bukoloto - Kayunga	Bituminous	25.05
C	C046_Link01	Zirobwe - Lwajjali - Kasawo - Kabimbiri	Unsealed	15.25
B	B100_Link02	Gayaza - Kalagi	Bituminous	10.76
C	C037_Link01	Mukono Railway access off Mukono - Kyetu	Unsealed	2.20
C	C329_Link01	Kayindu-Kalagala-Kyabakadde	Unsealed	9.92
C	C152_Link01	Kireka-Namugongo-Misindye-Seeta	Bituminous	6.79
C	C024_Link01	Mukono-Kyetume-Kisoga-Katosi	Unsealed	26.63
B	B101_Link01	Mukono - Kalagi	Bituminous	17.95
C	C038_Link01	Kisoga - Kibanga Port	Unsealed	10.63
C	C045_Link01	Kabimbiri - Misindye	Unsealed	38.45
C	C025_Link01	Kisoga - Lugasa	Unsealed	11.83
A	A001_Link02	Mukono - Lugazi	Bituminous	18.03
A	A001_Link01	Kampala - Mukono	Bituminous	8.49
C	C036_Link01	Nambole - Kampala Industrial Park - Mukono	Unsealed	10.95
C	C041_Link01	Namataba - Kyampisi	Unsealed	34.28

Other secondary roads that require improvement as recommended below with in the district include

Table 10: Secondary roads in need of improvement

Road Name	Location
Kojja- Penisula -Luyobyoby	Connects Ntenjeru to Mpunge
Mubanda-Ntenjeru	Connects Ntenjeru-Mpatta
Mukono-Sugu-Lugala	Connects Nakisunga to Mpatta
Setta-Kasenge	Connects Nakisunga to Nama
Katwe-Busimbe	Nakisunga
Muko-Setta-Kisubi	Nakisunga
Mirembe -Madu	Nakisunga
Setta-Lugazi	Nakisunga
Nangwa-Kasenge	Connects Nakisunga-Nama
Kasenge-Kibooba	Nama
Bulika-Walusubi	Nama
Lukojjo-Katoogo	Nama
Takajunge-Kivuvu	Nama
Namataba-Seta	Nagojje
Nagalama-Nakifuma	Connects Kyampisi to Kimenyede
Kigogola-Kisoga	Connects Kasawo to Ntunda
Kasawo-Kibamba	Kasawo
Kasawo-Kakukulu	Connects Kasawo to Namunganga
Kiyagi-Luguje	Kasawo
Kasawo-Kasala	Kasawo
Kayini -Namanoga	Namunganga
Kakukulu-Nakyeke	Namunganga
Nakyeke-Kayini	Namunganga
Kabumba-Nsagyi	Namunganga
Lugala-Kabumba	Namunganga
Ntonto -Kabawala	Nabaale
Kabawala Nakifuma	Connects Kyampisi to Namunganga
Nagula -Bugereka	Kyampisi
Kalungu-Kwamba-Nakasaja	Kyampisi

Greater Kampala Metropolitan Area –Urban Development Program Roads

Mukono District has prioritized the tarmacking of several key roads to improve connectivity, economic activity, and access to services within the district and to Kampala. These roads are part of the Greater Kampala Metropolitan Area Urban Development Programme (GKMA-UDP) funded by the World Bank.

Ntenjeru-Bule Road

This road runs from the Ntenjeru Kisoga road, passing through Kiyanga, Bujjuji, Mpatta, Mubanda, and ends at Bule landing site, and connects to the Ggaba. The road covers about 18.5 kilometers earmarked for construction. The tarmacking project is executed by China Railway No. 5 Engineering Group and includes not just pavement but also improved drainage, street lighting, and pedestrian walkways. This road is a critical corridor for linking inland communities and rural areas to the Bule landing and further to Kampala, thereby enhancing transport efficiency, reducing travel time, supporting fishermen and traders, and stimulating local markets and social services access.

Kigombya to Setta Nazigo Road via Namuyenje Trading Center

This is another significant route identified for upgrading within Mukono District under the same GKMA-UDP framework. It covers 8.96 km and links Kigombya to Setta Nazigo via Namuyenje trading center, improving interconnectivity for these growing communities. The upgrade of this road will facilitate the movement of goods and people, improve access to trading centers, and foster local economic development.

Namataba to Kisoga Road from Namagunga Trading Center, Setta Nazigo, Kironde to Kisoga Trading Center

This corridor covers 16.76 km and connects major trading centers including Namagunga, Setta Nazigo, and Kironde to Kisoga trading center. Tarmacking this route will significantly ease transportation challenges, promote trade between these areas, and enhance accessibility to social amenities and markets.

Overall, these projects are part of a broader infrastructure initiative by Mukono District to modernize road networks. The outcomes expected include improved traffic flow, economic growth through easier market access, reduced vehicle operating costs, and enhanced social service delivery. The project also supports the district's integration into the Greater Kampala Metropolitan Area, facilitating regional growth and connectivity.

Key Recommendations for the roads in the District Physical Development Plan (PDP)

1. Road Hierarchy and Reserves

The district plan establishes a hierarchy of roads with varying road reserve widths to accommodate different scales of movement and land use needs. This approach is designed to:

- Promote connectivity and accessibility
- Add value to land
- Reduce traffic congestion, especially in urban and peri-urban areas
- Guide the allocation of land uses such as residential, industrial, and commercial zones

2. Inclusive Road Design

The PDP emphasizes the need for proper road design that provides safe and efficient spaces for all users, including automobiles, cyclists, and pedestrians. Provisions must be made for the movement of the disabled and children, ensuring universal accessibility.

3. Upgrading and Beautification

Access routes within urban and peri-urban areas should be upgraded to at least class B gravel roads to improve durability and usability. Beautification, particularly in urban centers, is prioritized through the recommendation of Tree Line Avenues, which not only enhance aesthetics but also help reduce carbon emissions.

4. Roadside Drainage and Safety

Proper management and covering of roadside drainage channels are necessary to prevent accidents and the blockage of drains by solid waste, such as plastic bottles and polythene bags.

5. Road Furniture and Pedestrian Provisions

The plan calls for the installation of road furniture that supports, rather than inhibits, pedestrian movement within the carriageway.

6. Integrated Network Mapping

All existing roads in the planning area were mapped, aligned, and integrated into the proposed physical development plan to ensure a coherent and connected network.

Road Hierarchy

The plan defines a clear road hierarchy to protect the diverse road reserve widths as per the recommendations by the Uganda Roads Act, 2006 and Amendment Bill, 2019 as indicated in Table below

Table 11: Classification of Roads in Uganda

Class of Road	Type of road	Description
National Road	Expressway	Heavy traffic roads, high speed, and limited access with dual carriage way with grade separated junctions and considered the highest grade of road. It may qualify for development using private sector financing.
National Road	A	Strategic roads of national importance linking ports, airports, and border posts to each other and to the Capital City. They serve long distance transport, with a relatively high proportion of heavy trucks
National Road	B	Roads linking District Headquarters to each other or to a class A road. They also connect major regional commercial, population and administrative centres to Class A road network, serving as collectors for Class C roads and local roads. Trips are a mixture of long distance and local traffic.
National Road	C	Roads linking small towns to District Headquarters, to Class A and B roads and to each other. They are local in nature and connect local roads to Class B Road network. Traffic using these roads is predominantly local, covering short distances.
National Road	Other	Other national roads, maintained by UNRA
District Road	I	Link District centres to each other and the national road network.

District Road	II	Provide a connection to the national road network or Class I District network. Interconnect district headquarters and Sub-county administrative centres
District Road	III	Connectors to and between Class II District Road Network
Urban Road	U (Town council)	Road within a Town Council, not being a national road.
Community Access Road	CAR	Road, path, or track linking communities and villages to other classified roads. Roads also provides access to administrative, social, and economic services.

Table 12: Cross-sectional Elements of the roads

Type of road	Road reserve (m)	Carriageway (m)	Walkway (m)	Reserve for utility (m)
Primary	40	20	2m on sides	3
Secondary	30	10	2.5	2.5
Tertiary	25	8	1	2.5
Access in residential zones	15	7	0.5	1
Access in industrial zones	20	10	2	2.5
Access in commercial zones	20	10	2	2.5
Service lane	5	5		

Source: Physical Planning Standards and Guidelines 2025

Table 13: Urban Road Standards

Class of Road	Ultimate form	Design Speed	Reserve width	Minimum junction spacing	Individual plot access	Visibility splay at junctions	Tree belt
Trunk roads (Arterials/ freeways including town by-passes)	Dual 11m carriageways+ cycleways+footways	70km/h (100km/h)	60m	500m	Not Permitted	125m x 9m (165m)	Desirable
Primary Distributor	Dual 7.3m carriageways+ Cycleways+footways	70km/h	40m	200m	Not Permitted	125m x 9m	Desirable
Secondary/ District Distributors	Single 7m carriageways+ Cycleways+footways	60km/h	30m	100m	Not Permitted	95m x 6m	Desirable
Tertiary/ Local Distributor	Single 7m carriageways+ Footways	50km/h	18m	60m	Permitted	70m x 4.5m	Desirable
Access road							

- Primary Residential Street	5.5m carriageway+1 footway	-	15m	-	Permitted	45m x 4.5m	Desirable
- Secondary Residential Street	4.1m or 5.5m carriageway	-	12m	-	Permitted	45m x 4.5m	Desirable
- Primary shopping street (Heavy commercial)	7.3m carriage way+kerb side parking areas(optional)+footways	-	20 m	-	Permitted	45m x 4.5m	-
- Secondary Shopping Street (Average commercial)	6.75m carriage way+kerb sided parking areas(optional)+footways	-	-	-	Permitted	-	-
- Service Road	5.5m carriageway for two-way flow, 4m for one-way flow	-	5 m	-	Permitted	-	-
- Industrial Areas	6m carriageway	-	30 m	-	Permitted	45 m x 4.5 m	Desirable
Cycleways	-	-	3 m	-	-	-	-
Foot ways	-	-	2 m	-	-	-	-

Source: Physical Planning Standards and Guidelines 2025

6.8.3 Non-Motorized Transport

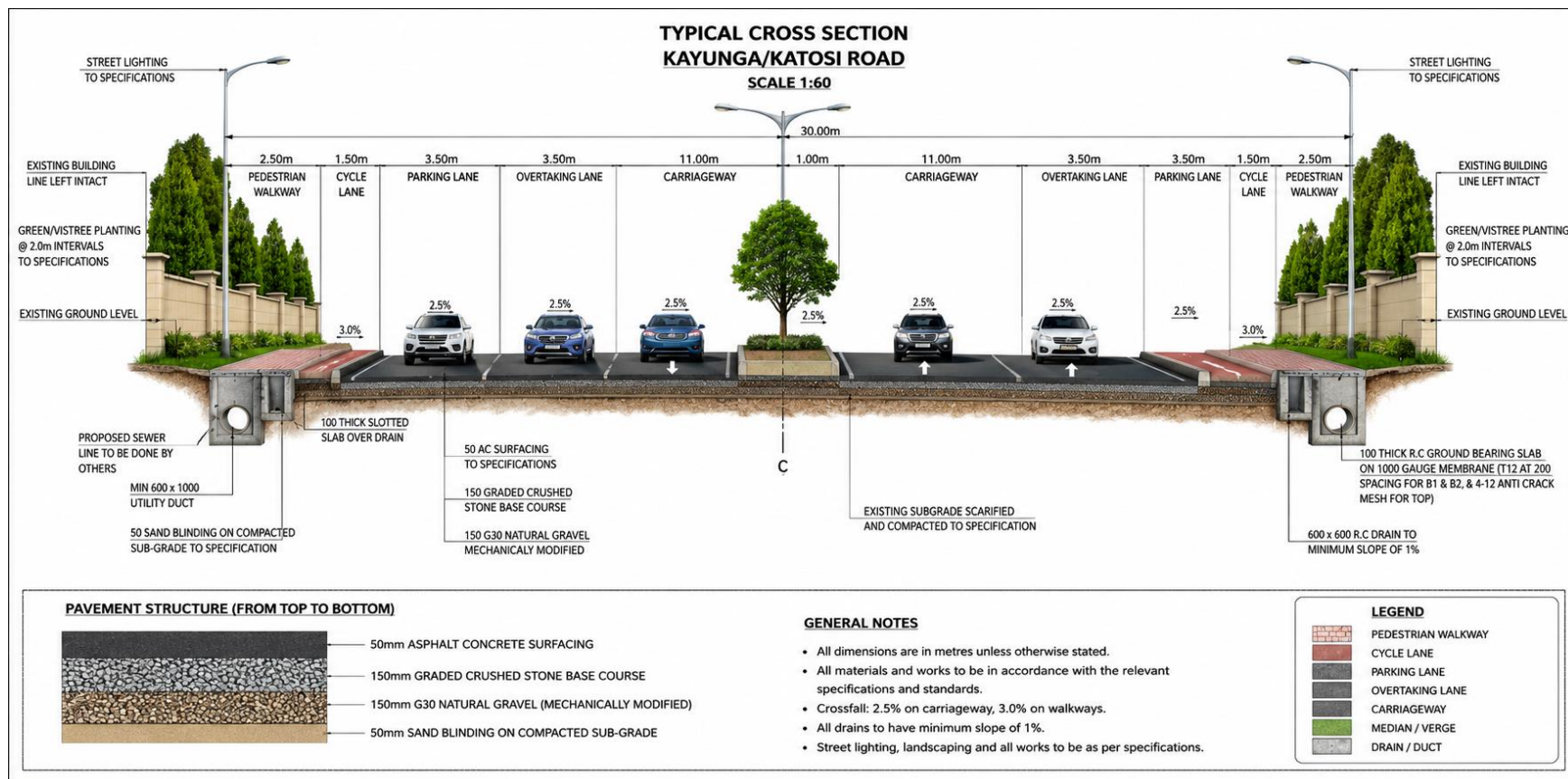
With increasing attention towards low-carbon societies, planning and designing walkable and livable neighborhoods is, therefore, an important facet of a low-carbon society. Its main purpose is to induce a voluntary modal shift from motorized means to walking and cycling for short-to medium-distance trips especially in the main centres while creating sustainable environments to live, work, learn and play in. To achieve this, the following interrelated sub-actions and measures are key for Mukono District:

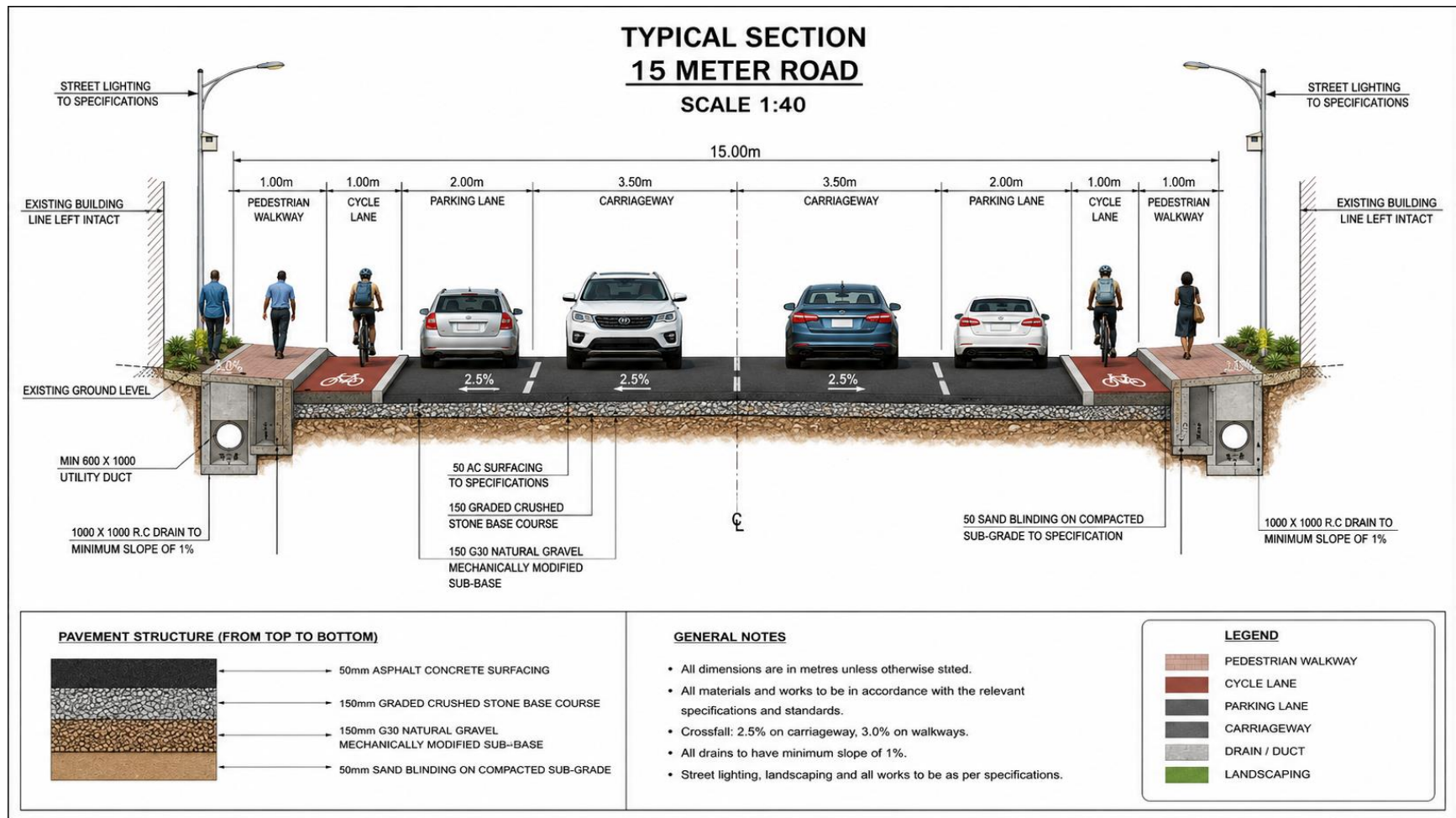
- **Providing comfortable walkways;** intensive efforts to design pedestrian walkways in the entire district with emphasis on urban centers. The preferred minimum width for sidewalks is 1.5 m'. When obstructions do not allow a width of 1.5 m' for a short distance, a clear sidewalk width of a least 1.2 m' is allowed. Sidewalks that are wider than 1.5 m' may be considered, where there are high pedestrian volumes, or where there is no buffer between high-speed and high-volume roadways.
- **Street tree planting for shade,** and providing shade along walkways is an important element to encourage residents to walk. Trees provide natural shades while at the same time increasing the aesthetic value of the surroundings.
- **Appropriate street furniture,** in the form of street names and signs, Benches along walkways, Bollards at crossings to prevent illegal entrance, Street lamps provide illumination to the surrounding area at night, Waste containers or litter bins in properly placed locations, providing safe and comfortable cycling network

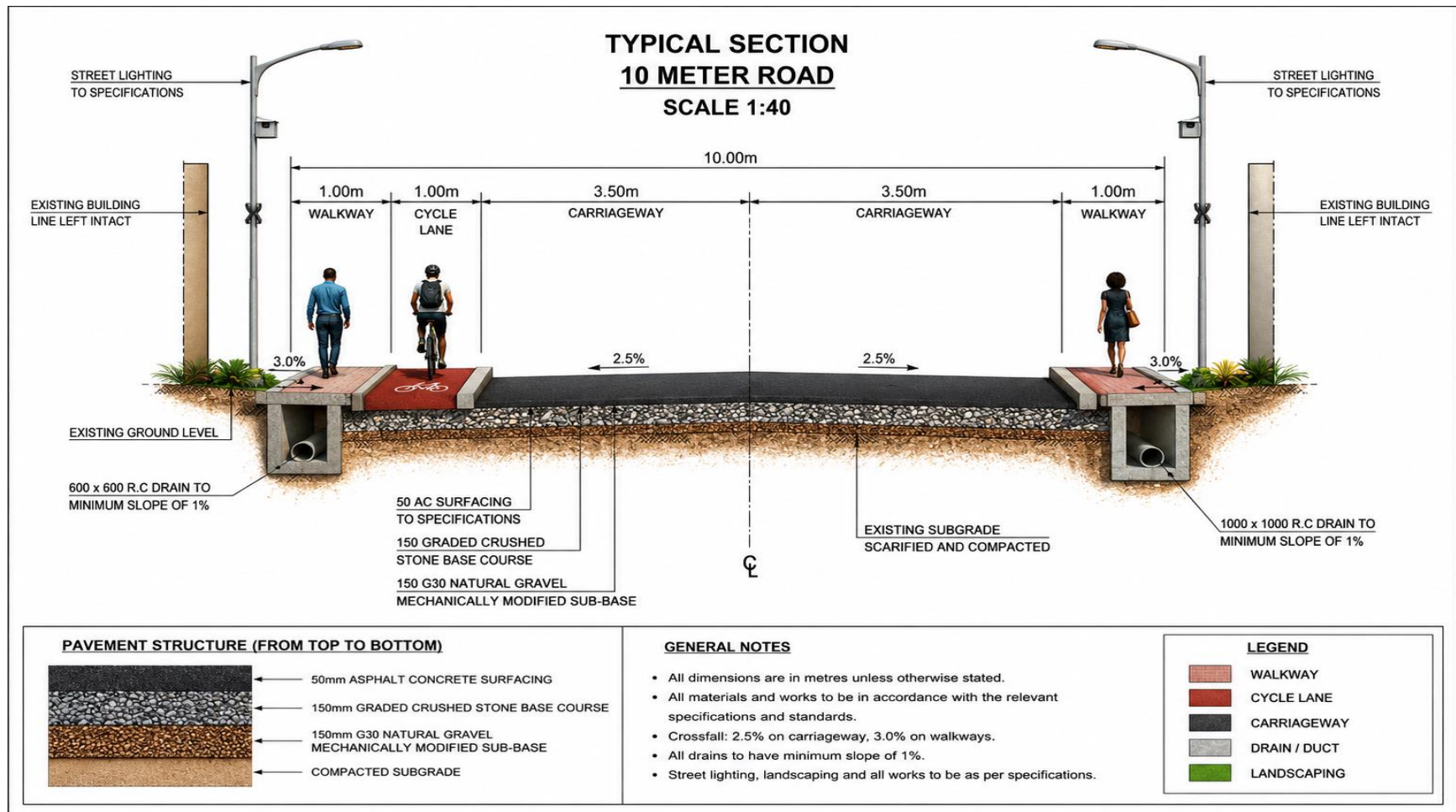
- **Facilities** for marginalized groups of people like the disabled and elderly should be incorporated into the pedestrian walkways.

In areas where there is motorized and non-motorized transport, traffic measures should be in place to reduce vehicle speeds to control accidents.

Provision of cycle lanes. The PDPs recommends three types of bicycle facilities that may be considered: paved shoulders (both continuous and intermittent), bike lanes, and bike paths. The first two are accommodated within the roadway, whereas the third is separate from the roadway (sometimes parallel to a roadway, sometimes unrelated to a roadway).







6.9 Transport infrastructure

6.9.1 Inland port and ferry terminals

6.9.2 Inland port

Mukono hosts an Inland Container Depot (ICD) at Kyetume, built in 2015, with a capacity of 1,400 TEU, handling about 90% of Uganda's rail imports. While Mukono ICD is a key freight terminal connected to the rail network, the district's lakeshore ports are not developed compared to major hubs like Port Bell or Jinja and yet this would reduce on the costs and time spent transporting goods. Therefore, the plan proposes Kibanga port at Ntenjeru landing site to take care of the freight goods from Mukono district to Jinja, Kampala, Entebbe and beyond along Lake Victoria. The coordinates of the site are approximately 0° 11' 23" N latitude and 32° 52' 4" E longitude, with an elevation ranging from 1,133 to 1,151 meters above sea level. Kibanga Port is expected to function as a major commercial port. Mukono District is an area of strategic interest for regional development, including infrastructure, agriculture, and service delivery thus the port is a major node which could play a supporting role in local economic development. Additionally, the port will serve as a minor landing site or community hub for local residents. The site will facilitate small-scale fishing, local trade, and transport for nearby villages, contributing to the livelihoods of residents. Kibanga Port is located near other notable settlements and towns, such as Katosi and Kisoga, which are more prominent centers of activity in the district. Its proximity to these areas suggests it may serve as a local access point or minor transit node for residents moving between villages or accessing Lake Victoria.



Figure 29: Kisumu Port in Kenya

Source: <https://images.app.goo.gl/vFprsc77FazAT3BW8>

6.9.3 Ferry terminals

Mukono District, located along the northern shores of Lake Victoria, is part of a broader regional initiative to improve water transport infrastructure on the lake, which is shared by Uganda, Kenya, and Tanzania. Lake Victoria ferries have historically provided passenger, vehicle, and freight transport. Thus, the district PDP has proposed ferry terminals at Katosi, Mpunge, and Mpatta aimed at handling passengers, including tourists to various destinations such as Koome island, port bell, Bwerenga and Gabba. This will enhance both passenger and cargo transport along lake victoria. These terminals will serve as local hubs connecting Mukono communities to other lakeside towns and islands, improving access to markets, schools, health services, and cross-border trade. This initiative aligns with Uganda's The National Integrated Transport Master Plan (NITMP) 2021-2040, aiming to reduce travel times and freight costs by improving multimodal transport, including water transport on Lake Victoria. The terminals need to have raised structures in a body of water, supported by well-spaced piles, pillars, and a bridge with docking facilities. These transport infrastructures must be developed with better access roads, parking spaces, loading yards, dry docks for repairs, warehouses, offices (URA, Police, immigration), marine workshops, and social spaces among other requirements. For the terminals to operate the following recommendations are key;

- Establishment of modern ferry terminals with adequate docking, passenger facilities, and cargo handling capacity.
- Integration with existing rail and road infrastructure, notably linking with Mukono ICD to Katosi and Kibanga for efficient intermodal transport.
- Introduction of safer, regulated ferry services to replace small, unsafe boats, such as modern water buses.
- Support for economic activities such as fishing, trade, and tourism by providing reliable and affordable transport options.
- Enhancement of emergency response and social service access for lakeshore communities.

Mukono's ferry terminals and port would complement the larger ports of Port Bell and Jinja, which handle international and large-scale freight and passenger traffic. They would serve as feeder points, improving regional connectivity within Uganda and with neighboring countries.



Figure 30: Ferry at Wanseko

Source: <https://images.app.goo.gl/kszYyjkndL9vCBUr7>

6.9.4 Transport terminal (Bus and taxi parks)

Mukono District including the municipality is experiencing urban growth and increasing transport demand. Other notable urban centers include Katosi, Kasawo, Mpatta, Mayangayanga, Namataba, Kisoga, Mpunge, Ntenjeru and Nakifuma urban centers. The district is located along the important Kampala-Jinja corridor, making it a strategic location for transport infrastructure development.

Justification for Transport Terminals

- Rapid population growth and urbanization in Mukono's growth centers have increased the need for organized transport facilities.
- Existing informal taxi parks often lack adequate infrastructure, leading to congestion, safety concerns, and inefficient transport services.
- Properly planned terminals are essential to improve traffic flow, passenger comfort, and integration with other modes of transport.

The plan proposes a bus park in Mukono Municipality and taxi parks in Katosi, Kasawo, Mpatta, Mayangayanga, Namataba, Kisoga, Mpunge, Ntenjeru and Nakifuma urban centers. These are planned to handle the increasing public transport traffic volumes in the district but should be properly designed and developed to maximize their potential.

These terminals will provide designated spaces for vehicle parking, passenger waiting areas, and commercial kiosks. The facilities must include shelters, sanitation, lighting, security, and traffic

management systems. There must be integration with road networks and potential linkage with other transport modes like ferry terminals along Lake Victoria and rail connections. The terminals are aimed at formalizing and regulating public transport operations, enhancing safety and service reliability in the district. These terminals also align with the broader Greater Kampala Metropolitan Area (GKMA) master plan, which includes Mukono, aiming to foster coordinated urban development and infrastructure modernization.

Social and Economic Impact

Effective parking management is beneficial in delivering sustainable urban mobility in urban areas. Good parking management can help free up valuable public space, making our towns more attractive; support the local economy; reduce vehicle traffic; improve congestion, and road safety, and generate revenues for the authorities. Additionally; the terminals will offer

- Improved transport terminals will reduce travel time and transport costs for commuters and traders.
- Enhanced safety and comfort for passengers, including vulnerable groups such as women, children, and the elderly.
- Creation of employment opportunities in terminal management, security, and commercial activities.
- Support for local businesses by providing better access to markets and services.

In terms of implementation, the PDP emphasizes collaboration between Mukono District Local Government, national government agencies, and private sector stakeholders. Potential funding and technical support can be sourced from development partners and programs focused on urban infrastructure and transport.



Figure 31: Case study of Arua city transport terminal –

6.9.5 Multimodal transport terminal

The District Physical Development Plan proposes establishing a state-of-the-art multimodal transport terminal in Nakifuma-Nagalama Town Council. This terminal is designed to integrate Bus Rapid Transit (BRT), cargo, and passenger railway transport, reflecting Nakifuma's designation as the second Central Business District (CBD) within Mukono District. The terminal is envisioned as a critical catalyst for unlocking the growth potential of this emerging CBD by providing efficient transport infrastructure to support economic activities.

Strategically positioned, the Nakifuma terminal will serve as a pivotal hub facilitating the seamless movement of goods and passengers between the Nakifuma growth corridor and key logistics points such as the Kyetume container depot. This link enhances connectivity to broader domestic and regional markets, vital for the corridor's numerous industrial development proposals which require reliable transportation networks for the effective distribution of products.

The terminal's connection to the proposed railway extension is a foundational feature, enabling a continuous and integrated flow of cargo and passengers. This rail linkage will reduce transport bottlenecks, lower freight costs, and improve access to Mukono's economic hubs and beyond. It also aligns with the broader multimodal transport vision for the region, promoting efficient modal interchange and supporting the district's industrialization and urbanization objectives.

6.9.6 Railway Line extension

The PDP proposes to an integrated, and efficient railway transport system to address both the freight and passenger transportation needs of the district. There is a proposal to extend a railway line to Kibanga port and to Nakifuma. The railway line aid in flowing freight and passenger traffic from the Kibanga port and from Nakifuma, to the central region of Uganda and beyond. The key railway facilities and installations will include: Main lines Railway sidings, Workshops, Head Office and related offices and departments, CXR Structures among others. The proposal to extend the railway line from Mukono to Kibanga Port, Katosi Landing Site and Nakifuma aims to further integrate multimodal transport both on land and on Lake Victoria, enhancing cargo and passenger movement between inland rail networks and lake ports.

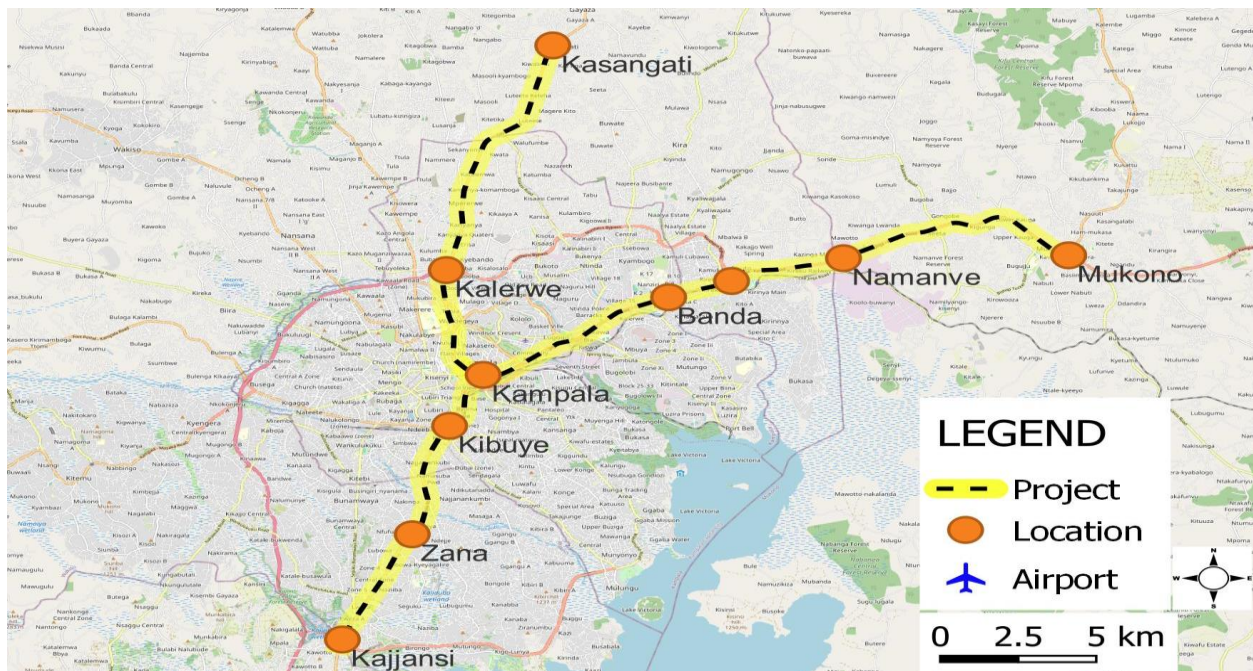
6.9.7 Transport infrastructure projects adopted from GKMA-Plan

The Project for Upgrading of Jokas-Namanve Road. This project aims to transform the existing road into a modern, efficient, and safe transportation artery, providing a strategic alternative route to the Mukono/Jinja-Kampala Highway. The total length of the target road is 14km.



Figure 32: Jokas-Namanve Road

The plan also includes a **Bus Rapid Transit (BRT)** line stretching from Mukono to the Central Business District (CBD) of Kampala (22.2 Km), further enhancing public transport options for Mukono residents.



The Plan has considered **The Kampala–Jinja Expressway (KJE)** a limited-access, tolled highway connecting Nakawa (Kampala) to the New Jinja Bridge (Njeru). It has a 100-meter reserve and a four-lane dual carriageway, expanding to 8 lanes near Kampala, 6 lanes to Mukono, and 4 lanes toward Jinja. The route passes through Namanve and Mukono town, running south

of the existing Kampala–Jinja Highway. Key features include interchanges, flyovers, bridges, underpasses, pedestrian crossings, and toll plazas. It will support economic growth and better integrate Mukono District into regional development frameworks.

Kampala Second Outer Beltway

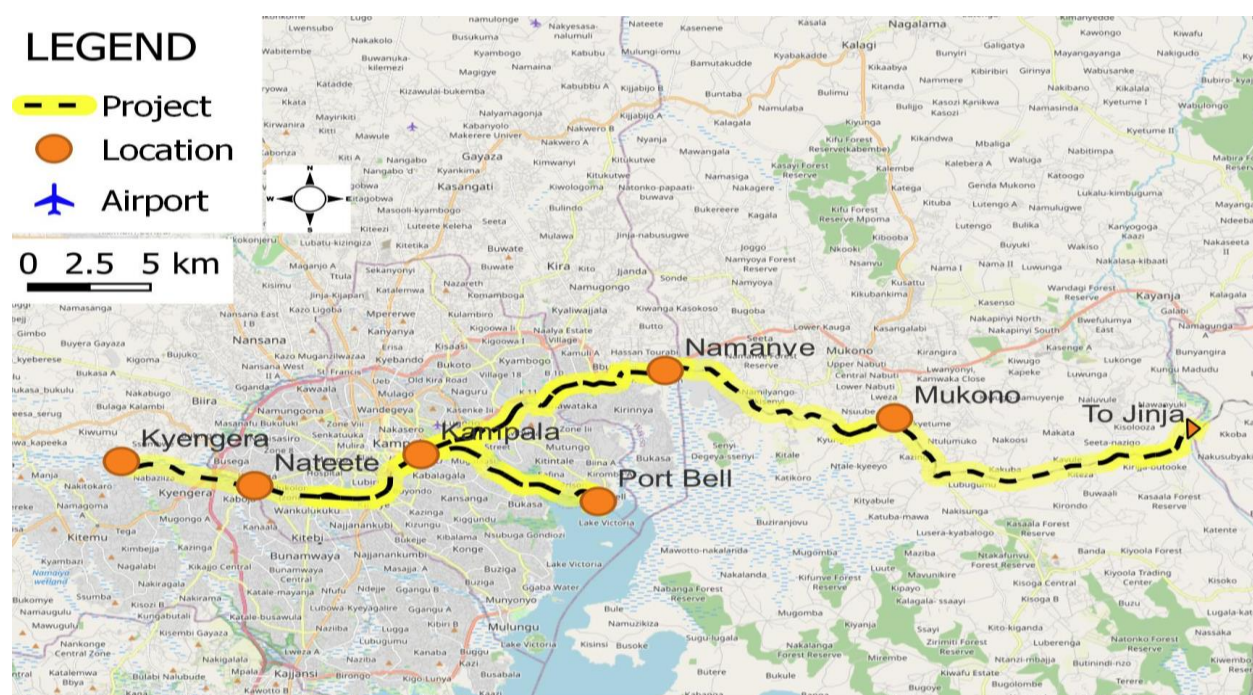
The Kampala Outer Beltway connects multiple key urban nodes and suburbs around Kampala, including Ggaba, Mukono, Seeta, Namugongo, Kiira, Kasangati, Matugga, Wakiso, Buloba, and Nsangi. The beltway runs through Mukono District, integrating the district into the broader metropolitan transport network and it has been incorporated in the district physical development plan.

The Kampala Inner beltway (First Ring)

This link starts from the Entebbe Expressway at Nsangi in Wakiso District, passing through key urban centers Nabweru, Nangabo, and Kira, extends through Mukono Municipality including Nakisunga, Ntenjeru, and Mpatta, then reaches Bule and finally connects to the Gabba area in Kampala via a water transport link.

Railway projects adopted from GKMA-Plan

The refurbishment of the Namanve - Kampala, Namanve – Tororo, Kampala - Port Bell and Kampala – Kyengera Railway line. The total length is 92km. The plan incorporates a suburban passenger rail network running from Mukono to Kampala. Light rail passenger train from Mukono town to Ntenjeru about 12.9Km long).



6.9.8 Strategies for Mitigating Urban Heat Challenges Arising from Traffic Congestion in Mukono District

The Physical Development Plan has incorporated integrated transport, land use, and environmental planning strategies aimed at mitigating urban heat challenges associated with traffic congestion, increasing motorization, within Mukono District. In alignment with the Greater Kampala Metropolitan Area (GKMA) transport framework, the PDP integrates sustainable mobility systems such as the Standard Gauge Railway (SGR), Meter Gauge Railway (MGR), Bus Rapid Transit (BRT), Light Rail Transit (LRT), and Non-Motorized Transport (NMT) infrastructure to reduce congestion, vehicular emissions, and heat accumulation within the district.

Some of the key strategies are recommended and detailed in the table blow

Table 14: Proposed Urban Heat Mitigation Strategies in the PDP

Proposed Strategy in the PDP	Key Intervention / Focus Area	Contribution to Urban Heat Mitigation
Integration of SGR, MGR, BRT and LRT Systems	Mass public transport infrastructure and corridor protection	Reduces traffic congestion, vehicle emissions, and heat generated from excessive motorized transport
Promotion of Transit-Oriented Development (TOD)	Compact mixed-use development around transport hubs	Reduces travel distances, dependency on private vehicles, and urban sprawl
Development of Non-Motorized Transport (NMT) Networks	Pedestrian walkways, cycling lanes, and shaded sidewalks	Encourages low-carbon mobility and improves urban thermal comfort
Urban Green Corridors Along Transport Routes	Avenue tree planting, landscaped medians, and green buffers	Reduces surface temperatures and improves air quality
Improvement of Traffic Management Systems	Junction upgrades, bypasses, ring roads, and integrated transport terminals	Minimizes vehicle idling and traffic-related heat emissions
Climate-Sensitive Road Infrastructure	Permeable paving, reflective materials, shaded bus stops, and drainage systems	Reduces heat retention and improves climate resilience
Decentralization of Urban Services and Employment Nodes	Development of secondary urban centers and industrial nodes	Reduces commuter pressure and congestion within major urban areas
Integration of Green Infrastructure in Urban Development	Urban parks, roadside landscaping, and wetland protection	Enhances urban cooling and ecological sustainability
Promotion of Low-Emission Mobility Systems	Clean public transport and electric mobility infrastructure	Reduces greenhouse gas emissions and urban heat generation
Protection of Future Transport Corridors	Reservation of strategic transport routes Including GKMA proposals	Supports long-term sustainable mobility and prevents unplanned development

6.10 Sustainable urbanisation and housing

6.10.1 Sustainable Housing, Settlements and Urban Development

Mukono is experiencing rapid urbanization, leading to increased demand for housing estimated to be 20,000 to 30,000 units annually. However, the supply of affordable housing remains limited, with most developments targeting middle to high-income earners. Residential construction is on the rise, especially in Mukono Municipality and peri-urban zones of Nakifuma, Kasawo, Kimenyede, Katosi, Kisoga, Ntenjeru, Nama, Nakisunga and Kyampisi among others. The demand is driven by people working in Kampala and seeking more affordable or spacious housing nearby. This has led to the development of new estates and neighbourhoods, often with a mix of formal planned housing and informal settlements. Despite the growth, Mukono continues to face housing challenges, including a housing deficit and affordability issues. Many residents still live in informal or substandard housing, especially in rural and peri-urban areas. There are neighbourhoods with limited accessibility to electricity, water, and poor road networks such as Seta-Namuganga, and Kimeyede among others.

The District's Physical Development Plan 2026–2040 has laid strategies to ensure sustainable housing, and inclusive urban development through residential zoning that focuses on living spaces, ranging from single-family homes to high-density apartment buildings across the district both in rural and urban areas. At a detailed level especially in town councils and in the municipality three categories including Low density, Medium, and High-density residential are recommended.

For residential high density it is recommended to cater for areas of dense settlements in terms of residents' population and housing stock. This is planned near commercial developments to enable the occupants to easily access their places of work and or take advantage of public transport mode in Areas like Nakifuma, Kalagi, Namataba, Katosi, Kasawo, Mpatta, Mayangayanga, Namataba, Kisoga, Mpunge, Ntenjeru and other urban centers. The land area requirement shall range from 400 – 600Sqm. The development standards shall be 40 - 70% plot Coverage; Semi-detached, Terraced, apartments and some Tenements shall be allowed with thorough building materials.

Medium-Density Residential is proposed in Nama, Nakisunga, Kasawo, Kimenyede, and Kyapisi among others. This is planned to house relatively medium-income residents with land area requirements between 600-1000Sqm. The development standards in Medium density locations shall be 20–40% plot Coverage; Detached and Semi-detached Bungalows and flats preferably with brown coated iron sheets.

Low-density residential is planned in Setta Namuganaga, Nabbale, Ntunda, Kyampisi, Nagojje, Parts of Nakisunga, Mpatta, Mpunge, and Kome. Their land area requirements shall be 1,000M–1,500Sqm. These areas will have sparse development mixed with agriculture. The development standards will be 15 – 20% plot Coverage; preferably Detached Bungalows with versatile or tiled roofs.

Overall in the above stated residential zones, the developers should practice urban agriculture practices such as backyard gardens, rooftop gardens, edible landscapes, edible walls, and urban

vegetable gardens. This can help to fight Food insecurity in urban areas but also promote sustainable use of limited spaces. The plan also recommends tree planting at the plot level to reduce urban heat islands. The plot coverage regulation should be applied to avoid water runoff caused by paved surfaces. The boundary walls should be constructed respecting the prescribed road reserves and beautification outside the boundary wall is a must for every developer.

Key considerations in residential zoning include the minimum lot size, building heights, parking requirements, and whether certain businesses (like home offices or bed-and-breakfasts) can operate within residential premises.

General recommendations to achieve sustainable housing, settlements and urban development in the District.

- There is need for structured urban expansion to ensure orderly growth, prioritizing mixed-use zoning to balance residential, commercial, and industrial spaces in the District.
- The PDP emphasizes the need to develop low-cost housing units in rapidly urbanizing areas like Namanve, Katosi, Kisoga, Kasawo, Ntenjeru, Mayangayanga and Nakifuma, using climate-resilient materials and energy-efficient designs.
- The PDP has ensured linking new settlements in the district to upgraded road networks, ferry terminals (e.g., Katosi), and public transit systems to reduce congestion and improve accessibility.
- The PDP emphasizes green building standards ie Enforcing energy-efficient construction codes, rainwater harvesting systems, and solar energy integration in new developments.
- Implement urban greening initiatives especially expanding green spaces, tree-planting initiatives and wetland restoration to mitigate flooding and heat islands.
- Upgrading Informal Settlements especially improving access to water, sanitation, and healthcare in underserved areas like Nakifuma, Kalagi, Namataba, Katosi, Kasawo, Mpatta, Mayangayanga, Namataba, Kisoga, Mpunge, Ntenjeru and other urban centers.
- The district needs to develop and implement an investment plan for adequate and affordable housing
- There is need to develop an inclusive housing finance mechanism including capitalisation of the Housing
- Constitute and empower operational Physical Planning Committees at divisional and sub-county levels to monitor, inspect, and enforce compliance with approved plans and building standards.
- Identify and regularize or demolish illegal developments to prevent slum proliferation and ensure safety and sanitation standards are met especially where fragmented land brokers are active for example in Kimenyede-Mayangayanga, Nama, Nakifuma and Kasawo with several real estate dealers including Century, Mukisa, Jollo, Sozzo and Jomal.
- Ensure housing designs and developments cater to vulnerable groups, including the elderly, children, and persons with disabilities, by disseminating prototype plans that address their needs

Targeted Interventions for Slum Prevention in Mukono District

The Physical Development Plan has proposed targeted interventions aimed at improving and progressively upgrading informal settlements and slum areas within Mukono District. These interventions are designed to enhance living conditions, improve access to basic services, promote social inclusion, and integrate informal settlements into the formal urban structure through structured upgrading rather than displacement. The approach emphasizes in-situ upgrading, infrastructure provision, tenure regularisation, and participatory planning to ensure inclusive and sustainable urban development.

Table 15: Proposed Interventions for Slum Prevention

Proposed Intervention in the PDP	Key Focus Area	Expected Outcome
In-Situ Slum Upgrading	Improvement of existing settlements without displacement	Minimizes disruption while improving living conditions
Provision of Basic Physical Infrastructure	Roads, drainage, water supply, sanitation, and electricity networks	Enhances access to essential urban services
Regularisation of Land Tenure	Land adjudication, documentation, and tenure security measures	Reduces insecurity and promotes investment in housing improvements
Preparation of Detailed Local Area Plans	Structured planning and re-blocking of informal settlements	Improves spatial organization and service delivery
Improvement of Access and Circulation Networks	Upgrading of internal pathways and emergency access routes	Enhances mobility, safety, and service access
Development of Community Facilities	Provision of schools, health centres, sanitation facilities, and public spaces	Improves social welfare and quality of life
Waste Management Systems Improvement	Introduction of waste collection points and sanitation services	Improves hygiene and environmental conditions
Incremental Housing Improvement Support	Support for phased housing upgrading and construction standards	Enhances housing quality over time
Integration into Urban Growth Framework	Inclusion of informal settlements in formal urban planning zones	Promotes inclusive urban development
Livelihood Support and Economic Integration	Support for local markets, small enterprises, and employment opportunities	Strengthens household incomes and resilience
Community Participation and Engagement	Involvement of residents in planning and implementation processes	Ensures ownership and sustainability of upgrading efforts
Provision of Social Services Infrastructure	Schools, health facilities, and community centres	Improves access to essential social services
Environmental Improvement Measures	Greening, sanitation improvement, and pollution control	Enhances environmental quality and public health

Proposed recommendations for Rural Settlements/Sub counties

Transformation of the rural sector requires policy reforms in several key areas including housing. Discussed below are strategies for the development of rural areas of Mukono District in relation to housing development.

- a) **Rural Connectivity:** Rural Roads accelerate economic growth and poverty alleviation in the villages. Therefore, Rural Road connectivity programme should be taken to provide connectivity by means of properly laid all-weather surfaced roads.
- b) **Housing:** The lack of affordable housing is one of the most critical issues facing rural communities. This plan proposes an integrated approach to rural housing and improvement. Some of the approaches include: A scheme to provide shelter for the rural poor living below poverty line (BPL); and a scheme for provision of basic minimum services i.e. primary health, primary education, rural shelter, rural drinking water, rural electrification and nutrition.
- c) **Employment:** Provision of employment opportunities in the rural areas slows rural-urban migrations. The following strategies are proposed to strengthen rural economies: Establishment of Micro-Enterprises in Rural Areas; and promotion of formation of housing Co-operatives.

6.10.2 Urbanization, trade and commerce

Urbanization is one of the critical global trends shaping the future of humanity. At the same time, it has been argued that full development requires an urbanized environment. The population of any locality is the most important asset of that area. However most of the growth centers are growing organically and are not responding to demands for expansion of housing, education, and employment, causing a general devolvement of the services' quality. In this direction, the drafting of the district's PDP must rationally and functionally plan for these growth centers by assigning them functionalities, while establishing a sustainable growth strategy for the next 14 years. This implies the need for:

- Maximum protection of land by densifying existing housing areas and new housing spaces should be assigned only when this is impossible.
- Protection of agricultural land by concentrating human settlements in the specified growth corridors and urban areas.
- Provision of technical and social infrastructure, and sufficient services depending on the specific urban functionality and growth corridor.
- Promoting equitable distribution, providing unique living conditions for the urban growth centers and corridors, offering subsidies for accelerated economic development in underdeveloped areas, and thus creating an attractive and sufficing environment.
- Ensuring access to quality infrastructure and services to the inhabitants.

- **The growth centres/Urban centres**

Mukono District has 80 growth centers including 5 town councils which are not well planned, over 18 daily and weekly food markets. The trading centers have upcoming commercial buildings, markets, social services (health, education), places of worship, administration facilities (SC headquarters, police posts), recreation facilities, and public amenities (road, boreholes, and electricity). The growth centers form the fabric of the commerce and trade activities in the Mukono district; they include. Kiyoola TC, Kironde TC, Seta-Byafula TC, Seta-Nazigo TC, Kuyaro TC, Mbalala TC, Namawojjolo TC, Namataba TC, Namagunga TC, Wakisu TC, Katoogo TC, Kisowera TC, Lwanyonyi TC, Kabembe TC, Kiyunga TC, Kyabakadde TC, Kyampisi TC, Namasumbi TC, Kiwumu TC, Kwaba TC, Nakanyonyi TC, Kawomya TC, Kakinzi TC, Kabawala TC, Nalubabwe TC, Ndese TC, Namaliri TC, Kabimbiri TC, Kasawo TC, Lugala TC, Gimbi TC, Kyanika TC, Namuganga TC, Namanoga TC, Nakadindiri TC, Nsabwa TC, Nakasejjere TC, Nsagi TC, Kalagi TC, Nagalama TC, Nakifuma TC, Nakasajja TC, Kasayi TC, Maggwa TC, Ntunda TC, Kyabazala TC, Kasana TC, Nagojje TC, Kimenyedde TC, Kawuku TC, Kateete TC, Mayangayanga TC, Seeta TC, Namanve TC, Mukono Town, Bukerere TC, Nyenje TC, Wanton TC, Kyetume TC, Namaiba TC, Nakisunga TC, Kisoga TC, Ntenjeru TC, Katosi TC, Kalengera TC, Mpunge TC, Lulagwe TC, Sango TC, Kalagala TC, Salama TC, Ttaba TC, Kabanga TC, Mpatta TC, Nakalanda TC, Mubanda TC, Bethany TC, Buwaya TC, Kiyanja TC, New Camp TC and Koome TC.

Commerce is a key employment sector, and it is directly related to the growth of the other main sectors such as tourism, retail, wholesale trade, and manufacturing. Surprisingly Majority of the enumerated businesses in the district are in the informal sector as compared to the formal. The activities in the growth centers are comprised of wholesale and retail; smuggling, cross border trade, mobile banking and finance, hotel and logging, construction, barber saloons, Hawking, collecting scrap, metal and wood workshops, Boda-boda, sale of charcoal hairdressing, mechanical, and repair garages chapatti burning, restaurants, kiosks, sale of oil and gas among others.

The growth Centres and functionalities

These include urban centers, small towns, and local centers. The existing local centers are sufficient to serve the district however these need to be planned and well serviced.

Core functions of selected Urban centers

Ntenjeru-Kisoga TC, Kasawo TC, Nakifuma Nagalama TC, Namataba TC, Katosi TC.

These should be developed as hubs for Governance, Commerce, Education, health, Sports, Transportation, and cultural tourism. These towns are planned to decentralize service delivery and developments in the district. This will enhance the development of these towns concerning the district, creating a functional and efficient transport system, and improved infrastructure for educational, industry, and ecotourism development.

Spatial requirements for Urban Centres

These urban centres shall be entitled to the following spatial requirements: Planning and development control, parking, water and sanitation, street lighting, outdoor advertising, cemeteries, public transport, libraries, storm drainage, health facilities, disaster management, sports and cultural activities, electricity and gas reticulation, abattoirs, refuse collection, solid waste management, child care facilities, pre-primary education, local distributor roads, community Centres, hotel, guest houses, tertiary training institution, community museum, management of markets among others.

Small towns and Local centres

Over 75 of the above list will serve as intermediary centers which shall play the role of promoting rural development to achieve a balanced distribution of growth and development. These shall provide functional linkages between the urban centres and the local centers. To promote an equitable share of resources and development, each parish shall have a local centre. Therefore, these small towns shall be provided with basic infrastructure and services such as street lighting, health facility, abattoirs, sports/cultural centres, refuse collection, solid waste management, childcare facilities, pre-primary education, community centre, community access roads, cemetery, recreational parks, and markets. These centres shall also cater for the rural hinterland as agro service centres in the collection and distribution of agricultural goods and services with processing, marketing, warehousing, and storage facilities.

The Local centers will support village settlements which are predominantly agricultural with a lowest threshold shopping centre. Such as Kiyoola, Kirondo, Kiyung, Nsabwa, Kasejjere, Kateete among others. These centres shall be provided with services such as nursery schools, community centers, religious institutions, stall markets, access roads, and electricity among others.

The District is witnessing an increase in mixed-use developments, where retail and residential components coexist. This approach is encouraged in the PDP because it often creates thriving, walkable neighborhoods that reduce commutes and enhance local economies. Some of the key aspects in business zoning typically include: Floor Area Ratios (FARs): Limitations on how large buildings can be relative to the size of the plot, Permissible business types: Some zones should allow only retail shops and offices, while others may accommodate entertainment venues or restaurants. Parking and traffic flow: Ensuring there's adequate parking and that commercial activities don't create insurmountable traffic congestion.

Development Control Measures to Address Illegal Subdivisions and Prevent Creation of Substandard Plots

The Physical Development Plan has proposed development control measures aimed at addressing illegal land subdivisions, uncontrolled fragmentation of land, and the creation of substandard plots that undermine orderly urban development, infrastructure provision, environmental sustainability, and land use compatibility within Mukono District.

The proposed interventions seek to strengthen land management, enforce planning standards, guide urban growth, and promote sustainable settlement development in both urban and rural growth areas.

Table 16: Proposed Development Control Measures in the PDP

Proposed Development Control Measure	Key Intervention / Focus Area	Expected Outcome
Enforcement of Minimum Plot Size Standards	Regulation of subdivision approvals based on approved planning standards and zoning requirements	Prevents creation of undersized and unserviceable plots
Strengthening Development Approval Processes	Mandatory review and approval of subdivisions by relevant planning authorities	Promotes compliance with the Physical Development Plan
Preparation and Enforcement of Local Physical Development Plans	Development of detailed local area and layout plans before subdivision	Guides orderly and coordinated land development
Regulation of Ribbon Development	Control of unplanned roadside subdivisions and linear developments along major roads	Prevents traffic conflicts, congestion, and unplanned urban sprawl
Integration of Infrastructure Requirements in Subdivision Approvals	Requirement for road reserves, drainage, utility corridors, and public open spaces in subdivision schemes	Ensures serviced and accessible developments
Protection of Environmentally Sensitive Areas	Restriction of subdivisions within wetlands, forests, flood-prone areas, and lake shores	Prevents environmental degradation and disaster risks
Strengthening Land Use Zoning Enforcement	Enforcement of approved land use zones and development densities	Promotes compatible and sustainable land use patterns
Community Sensitization and Public Awareness	Public education on planning standards, subdivision regulations, and land management	Improves compliance and reduces informal land practices
Multi-Agency Enforcement and Compliance Monitoring	Coordination between physical planning authorities, land boards, real estate developers and enforcement agencies	Strengthens implementation of development control measures
Regular Development Inspections	Monitoring of ongoing developments and subdivisions	Detects and prevents illegal land fragmentation
Reservation of Land for Public Utilities and Social Infrastructure	Protection of land for roads, schools, health facilities, and open spaces during subdivision	Supports sustainable and inclusive urban development
Promotion of Planned High-Density Development in Urban Areas	Encouragement of compact urban growth and mixed-use developments	Reduces pressure for excessive land fragmentation

6.10.3 Market Centres

A market is usually located at a critical point in the overall marketing, transport, and passenger movement system. In the case of rural areas markets form the main link between agricultural producers and consumers. In Mukono District there a variety of markets that play a critical role in supporting local trade and agriculture. These include: Daily Markets located across the district, these markets specialize in fresh agricultural produce such as vegetables, fruits, and other staples, catering to the immediate needs of residents. Weekly Markets spread across various sub-counties, these markets provide platforms for farmers and traders to sell their goods in bulk, including agroforestry products like coffee and cocoa. Roadside Markets positioned along busy roads and trading centres, these markets serve travelers and locals with convenient access to fresh produce and artisanal goods. Some of the markets in the district include Kasawo Market, Namawojjolo Roadside Market, Kisoga Market, Ntenjeru Weekly Market, Takajunge Market, Nagaga Market Kyampisi and Kasana Weekly Market among others.

Market Proposals

The proposed markets for construction include the markets in the five town councils of Ntenjeru-Kisoga TC, Kasawo TC, Nakifuma Nagalama TC, Namataba TC, Katosi TC. These markets, including those anticipated in the 75 local centers are aimed at balancing the threshold distance moved by residents to acquire basic needs. The district should develop master plans for these markets before construction. Markets such as the one proposed in Mpatta, Mpunge, Kome Ntenjeru and Kisoga are also meant to provide space for the sale of art and crafts in addition to all other goods. At least each parish should have a neighborhood market to provide avenues for the sale of food items. These markets should be developed under PPP arrangements. The district council should prioritize the development of markets as major infrastructure projects. Markets in the 5 town councils are proposed to be developed into a modern market serving not only Mukono district but beyond the district borders since products from all over the district will form part of the merchandise sold. The markets must have lighting to enhance trading beyond daytime.

Physical planning guidelines for market developments

- Market sites must contain provisions for customer parking (if there is no public car park), servicing, and deliveries.
- Markets must be provided with adequate piped water supply, sanitation facilities, crèche, drainage, and waste disposal, as well as covered and hygienic stalls, all for the approval of the local authority.
- Accommodate basic site facilities: firefighting facilities, telephone; water; electricity; and public toilets.
- Shopping Facilities: Large department stores; general merchandise and
- Hardware stores; restaurants, hotels, a variety of service enterprises, and various small stores and shops.
- Parking 20% - 50% extra space required for car parking.

- Height 2 floors (maximum) The upper floor is for storage.
- Building area coverage (%) is 80% and 20% is reserved for landscaping and parking.

6.10.4 Proposed Growth Corridors

The Growth Corridor provides a strategy for the development of Mukono District's economic growth for the next 15 years. This will guide the delivery of key housing, employment and transport infrastructure and provide a clear strategy for the development of the growth corridors. The PDP also identifies broad transport networks, industrial and employment zones, residential areas and recreation and tourism precincts. These corridors are: Namanve-Namataba on the main Jinja Road, Wantoni –Kisoga-Ntenjeru-Katosi along Katosi Road, Municipality –Kalagi along Kayunga Road, Kyampisi-Nakifuma-Namaliri-Kambimbiri along Kayunga Road, Namaliri-Kasawo-Mbulamiti along Bombo Kasawo Road, Kiyunga-Kabimbiri-Kimenyede-Katete-Namaliri, Namataba-Nagojje-Ntunda-Kyabazaala, Kisoga-Kibanga port, Kisoga-Katwe to Njeru, Nsajja-Mpunge, Nakisunga-Mpatta growth corridors. These corridors will play a significant role in enhancing international, regional and district, sub-county, parish and village connections and economic development. These corridors shall develop because of commerce and trade activities, the influence of Mukono municipality and Kampala city urban sprawl, the proposed markets, the road network, health, schools, recreational facilities, industrialization, hotels, tourism, the presence of Lake Victoria, the standard gauge railway, the Kampala-Jinja express way among others.

6.10.5 Waste disposal and management

Based on the situation analysis findings, Mukono District, including Mukono Municipality, town councils and other growth centers, face significant solid waste management challenges due to indiscriminate dumping in gardens, open dumps, roadsides, and channels. This lack of waste segregation leads to environmental pollution, land degradation, and increased public health risks. The waste includes plastics, pampers, glass, clinical waste, paper, vegetable matter, wood, ash, and clothes. Areas like Nakifuma, Kalagi, Namataba, Katosi, Kasawo, Mpatta, Mayangayanga, Namataba, Kisoga, Mpunge, and Ntenjeru urban centers are notable.

Mukono District generates approximately 115,023,456 Kg of solid waste annually as of 2025 as demonstrated from the Solid Waste Accumulation Future Forecast and its anticipated that solid waste produced will increase to 142,743,888 kg/year (142,743.888 tones) by 2040. To manage this volume, the district needs to acquire land for the waste management facility. The PDP proposes three major sites in addition to the site in the municipality about 15 hectares at Katikolo village. The three sites are proposed in Kimenyede, Koome and Katosi TC. The rest of the areas like Ntenjeru, Nama, Namataba, Nakifuma-Nagalama Kasawo TC, Ntunda and Kyampisi are proposed to have transfer centers. These are proposed based on the principle of centrality and threshold distance. The site in Kimenyede will serve the upper sub-counties and town councils while the one in Katosi will serve the lower areas. Besides the waste management facility, the lower local governments especially town councils have an option of engaging public private partnership and conducting door to door collection where the community contributes an

affordable fee and the private partners collect and transport the wastes. However, this will require sensitization of communities, a Clear calendar for collection and disposal of wastes, partnering with capable and well-equipped companies and/or individuals.

The plan recommends that clear approaches of separation at the source and onsite management are encouraged for domestic waste. For industrial waste, however, a typical garbage management plan as illustrated in the figure below is mandatory. This can further be adapted for other forms of waste with respective modifications.

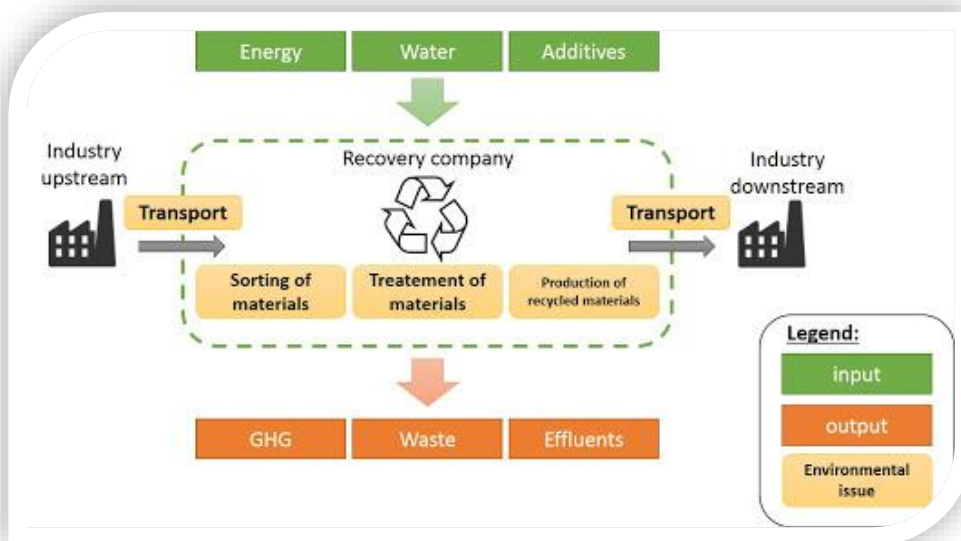


Figure 33: Typical garbage management plan

The proposed solid waste management facility needs serious funding of approximately not less than 10 billion ug shillings for purchase, clearing and constructing a modern solid waste management facility. The facility must include a waste sorting plant, and waste separation, composting to reduce volumes and promote recycling and reuse. The district should aim at transforming waste into usable products, reducing environmental impact and supporting sustainability.

It's important to note that Section 2 of the National Environment Waste Management Regulation 2020 provides for the application of these regulations. (1) These Regulations apply - (a) to all waste classified, characterized, and categorized under Schedule 2, Schedule 3, and Schedule 4 to these Regulations; (b) to the generation, collection, transportation, storage, treatment, and disposal of waste; (c) to transboundary movement of waste; and (d) to all waste management facilities. (2) For the avoidance of doubt, sub-regulation (1) shall not apply to petroleum waste regulated under the Petroleum (Waste Management) Regulations, 2019. Section 7 provides for the waste management hierarchy. (1) A person who generates waste, a waste handler, or a product steward shall manage waste following the Act and these Regulations through the

application of the following hierarchical waste management practices - (a) prevention; (b) reduction and recovery at source; (c) re-use; (d) recycling; (e) other recovery; (f) treatment; and (g) responsible disposal. (2) When applying the waste management hierarchy referred to in sub-regulation (1), the person who generates waste, a waste handler, or a product steward shall apply the options that deliver the best overall environmental outcome and the least negative impact on the environment and human health, taking into consideration best available technologies and best environmental practices.

Environmental and Social Benefits

Proper waste management will reduce pollution, improve public health, and enhance the living environment in Mukono district.

The facility will generate employment opportunities and promote community participation in waste reduction, segregation, and recycling.

Table 17: Site Location Requirements for solid waste management site

Requirement Category	Key Points
Regulatory Compliance	NEMA approvals
Site Size and Location	Large area, away from urban centers, 500m buffer from residences
Environmental Factors	Low permeability soils (clay), stable topography, away from water bodies
Design & Operations	Proper layout, leachate containment, daily soil cover, no burning without permission
Social Acceptability	Community engagement, nuisance minimization, site security
Accessibility	Good road access, balanced proximity to waste sources

N.B: These requirements are outlined in Uganda's National Environment (Waste Management) Regulations, 2020, and the Guidelines for the Management of Landfills in Uganda (2020).

6.10.6 Sanitation and faecal sludge management

Mukono District faces significant challenges in managing fecal sludge from onsite sanitation systems such as septic tanks and pit latrines. With rapid urbanization and population growth, there is an increasing need for sustainable fecal sludge management (FSM) infrastructure. Sanitation challenges in the district can be broadly categorized into two: Urban and Rural Sanitation Challenges. In urban areas including the municipality and the five town council's sanitation facilities are not safely managed, some pit latrines are filled up and closed posing significant health risks to residents, a comprehensive sewage system is absent and many residents rely on pit latrines and septic tanks. Based on the projected sludge accumulation for Mukono District, the district currently produces 100,645,524 Kg of fecal sludge annually as highlighted in the situation analysis report and it's expected to increase to 124,900,902 kg/year (124,900.902 tones) by 2040. Therefore, the PDP adopts a centralized site at Katikolo to ensure the Faecal sludge is properly managed. The site is about 30 acres funded by GGGI. Other small

centers are proposed in areas of Katosi, Ntenjeru, Namataba Nakifuma-Nagalama Koome, and Kasawo TC to ensure the fecal sludge is properly managed in the district and in small urban centers. In view of undulating topography and scattered urban centers, it is not considered economically feasible to provide a centralized sewage treatment facility, which will involve sewage pumping and sewerage system at larger depth involving huge cost, likely large length of idle sewers etc. may make the system uneconomical. On techno-economical consideration, decentralized treatment facilities at urban center level is proposed in the areas cited above. In the above cited areas sludge drying beds and waste water treatment are proposed. For rural areas, septic tanks or ponds or low-cost sanitation facilities may be provided as per local condition as an economical option. Some innovative low-cost options may also be explored.

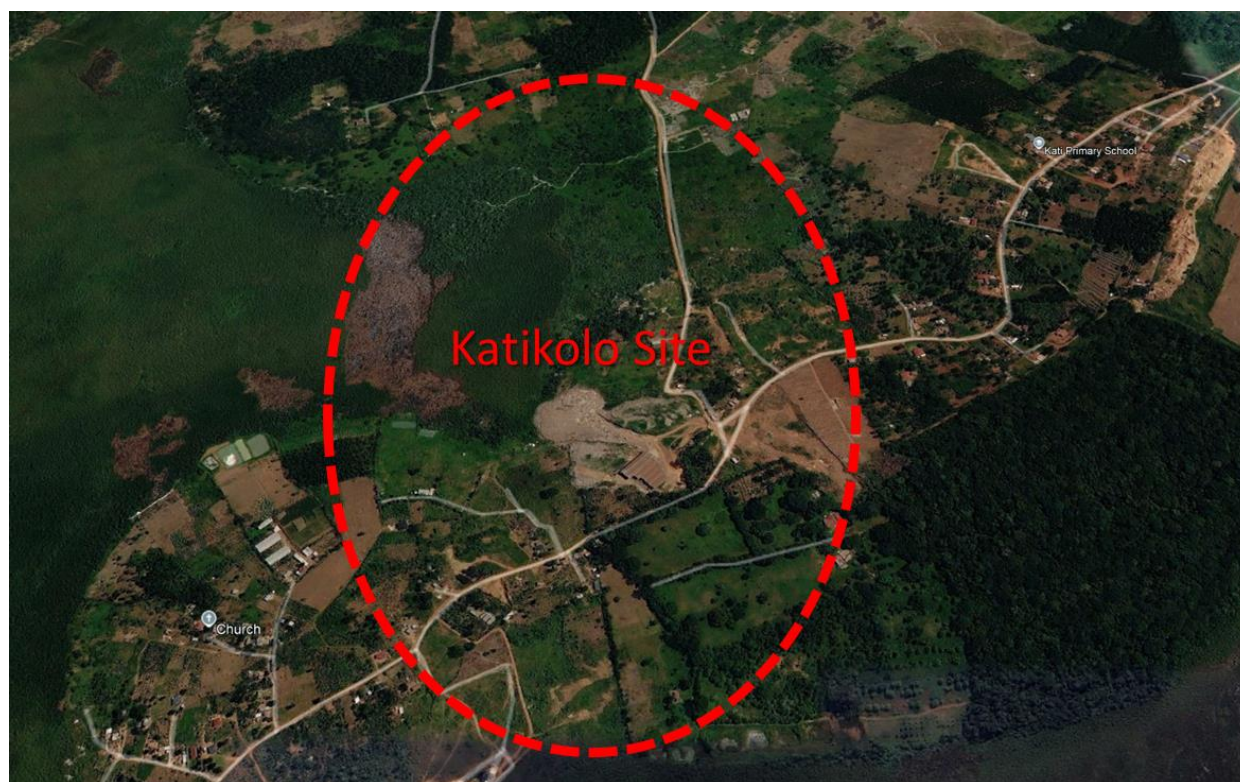


Figure 34: Katikolo Waste Management Site

Some of benefits of establishing the facility

- Improving public health by reducing exposure to untreated fecal sludge.
- Enhance environmental protection by preventing contamination of soil and water bodies.
- Support resource recovery through production of bio-solids, biofuels, etc.
- Provide a scalable and adaptable sanitation solution for Mukono's growing population.

Establishing such a facility will require multiple stakeholders, including the National Water and Sewerage Corporation (NWSC), Ministry of Water and Environment, National Environment Management Authority (NEMA), the district, lower local governments, and private sector actors

Table 18: Site Location Requirements for fecal sludge management site

Requirement Category	Key Points
Regulatory Compliance	NEMA licensing, ESIA, compliance with national ordinances
Environmental Considerations	Away from residences, water bodies; stable, low permeability soils; good drainage
Accessibility	Accessible by desludging trucks; space for treatment units
Social Factors	Community acceptance, stakeholder engagement, proximity to service area
Health & Safety	Controlled access, PPE use, signage, pathogen containment

6.10.7 Cemeteries

Public burial grounds or cemeteries are proposed in the five urban councils of Mukono district (Katosi, Ntenjeru, Kasawo, Namataba, and Nakifuma town councils) to provide a dignified and organized resting place for unclaimed dead bodies, stray dogs, and other similar cases. These burial grounds are essential in urban settings to maintain public health, prevent environmental contamination, and manage space efficiently. They also help in preserving the dignity of the deceased, reducing the risk of disease spread, and ensuring proper sanitation in densely populated areas.

In rural areas, different arrangements should be considered due to the availability of more land and different community practices. Rural settings can utilize family or clan burial sites with community oversight to maintain respect and order. Its key to ensure burial sites are located away from water sources to protect environmental health.

6.11 Natural Resources, Environment, Climate Change, Land, And Water Management

6.11.1 Natural resources

The plan comprises proposals for sustainable natural resources of the district. The strategy covers reforestation of gazetted forest areas; provision and protection of water catchment and environmentally fragile ecosystems. Therefore, the plan proposes actions for the protection, and conservation of environmental resources for sustainable development. The plan proposes partnerships and engagement with local communities in the ownership and management of environmental resources.

The district consists of a wide range of natural resources including the lake, rivers, hills, swamps and forests, which form the eco-system of the district. Overall, there is generally rampant encroachment of protected areas (forests, hills and wetlands areas) for agriculture, settlement, brick making, mining and clay extraction.

6.11.2 Water Resources Development

Mukono District is richly endowed with open water resources, including major lakes and rivers. Open water bodies cover 396.3 km² (rivers and lakes) of the total area of the District. Some of the subcounties along Lake Victoria include Katosi TC, Koome, Mpunge, Mpatta, Nakisunga, Ntenjeru and Ntunda Sub-counties. River Lwajjali originates from Kisweera Swamp in Seta Namuganga and flows northwest, forming part of the district's boundary before joining River Sezibwa. Lake Victoria forms the southern boundary of Mukono District. It supports fisheries, transportation, and tourism, and its shoreline in Mukono is dotted with landing sites and fishing communities. The PDP recommends protection of water sources, prohibition of waste discharges into riverbeds. The plan further suggests establishing and enforcing the mandatory 200 meter buffer zones along Lake Victoria shores and 100 meters riverbanks to prevent encroachment, pollution, and habitat destruction. It will key to demarcate and preserve riparian reserves as no development zones to maintain natural vegetation that filters runoff and stabilizes banks. Restrict incompatible land uses such as industrial activities, quarrying, sand mining, and unregulated agriculture within these buffer zones. There will be a requirement for Environmental Impact Assessments (EIAs) and physical planning approvals for all developments within proximity to water bodies to assess and mitigate potential impacts on water quality and hydrology. The district should also beef up monitoring and regulating waste disposal, effluent discharge, and storm water runoff from urban and industrial areas to prevent contamination of water resources the case of Katosi town council.

6.11.3 Wetlands

Mukono District hosts several important wetlands including Sezzibwa, and Lwajjali that play critical ecological and socio-economic roles. These wetlands are increasingly under pressure from urbanization, agriculture (sugar cane growing), industrial development, and encroachment. Notable wetlands include Namanve Wetland in Goma Division, Mbalala Wetland in the Nama sub-county spans areas such as Ngandu and Walusubi and drains into River Ssezibwa, Njogezi Wetland, a seasonal wetland within Mukono Municipality between Njogezi and Lwajjali rivers, Namasoloza Wetland in Ntenjeru Sub-county. The Kalyambuzi Swamp, Zirimiti Swamp in Ntenjeru Sub-county, Bubumba Swamp, as well as those in Namayumba Parish (Ntunda Sub-county) and Kakukuulu (Kasawo Sub-county).

To minimize on degradation, the PDP proposes the following;

- Enforcing strict protection of wetlands covering about 392 km² in Mukono, preventing encroachment from agriculture, settlements, and brick making activities that degrade water catchments and increase pollution risks.
- Restoring degraded wetlands and riverbanks through reforestation, sustainable land management, and community-led conservation initiatives to improve water retention and filtration.
- Proposed buffer zone around wetland to reduce sedimentation and contamination from human activities. This is also to safeguard their ecological integrity and discourage any incompatible land uses within the wetland zones

- Demarcated the boundaries of all existing wetlands, including both active and seasonal areas, to ensure their clear identification and protection.
- The PDP has emphasized the need to enforce acceptable activities within wetlands following the NEMA Wetland Regulations and the National Environment Act (NEA) of 2019, promoting sustainable management and conservation of these vital ecosystems.

6.11.4 Buffer zones

The PDP maintains the recommended buffer zones on the lake, rivers and wetlands.

The Lake Victoria buffer zone is set at 200 meters from the shoreline. This buffer prohibits construction of permanent structures without clearance from environmental authorities to protect the lake's aquatic life, breeding grounds, and water quality. Encroachment into this buffer zone has led to government interventions to restore degraded areas and prevent further damage.

The Ssezibwa River has a buffer zone of 100 meters from the highest water mark. This zone aims to safeguard the river's natural functions, control soil erosion, and maintain water quality critical for both ecosystems and communities relying on the river.

For smaller rivers such as Lwajjali, the buffer zone is 30 meters, which also applies to several other rivers including Mwaba, Musamya, Nakiyanya, and Kagala. These buffers help preserve riverbank stability and protect aquatic and riparian habitats.

These buffer zones align with Uganda's National Environment Management Act and related regulations, which mandate environmental impact assessments for developments within these zones and empower authorities to regulate human activities that threaten these ecosystems.

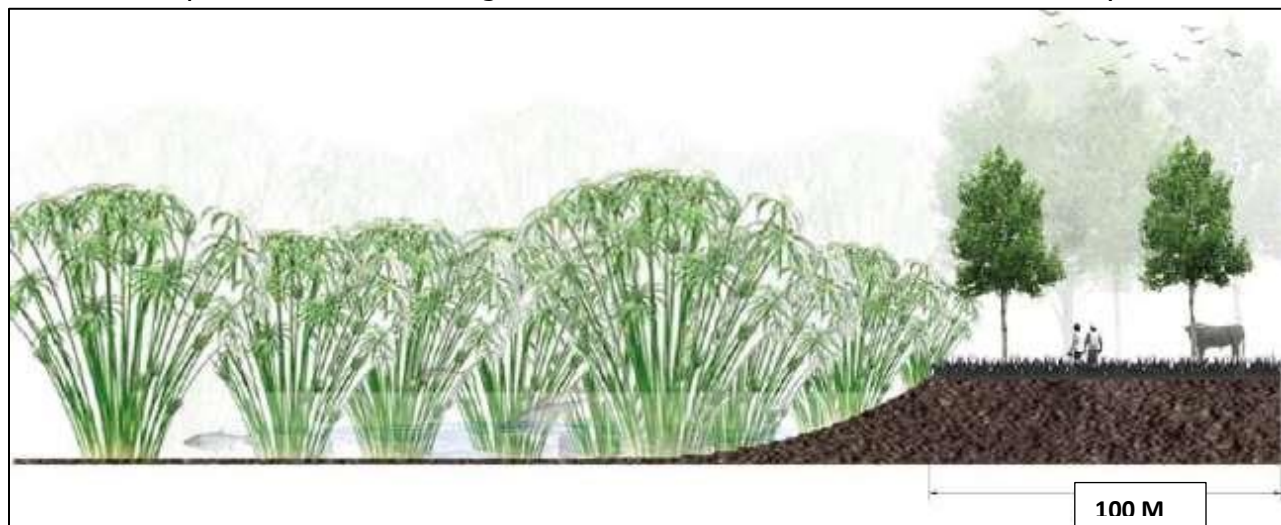


Figure 35: Wetland buffer

6.11.5 Forests

Forest resources in Mukono include both government-controlled reserves and private forests, with the latter often facing less oversight and greater exploitation pressures. There are several gazetted forest reserves in Mukono, with Mabira accounting for about half of the total forest

reserve area (approximately 14529.5 hectares of natural forest). Some of the notable examples of the forest reserves include Zirimiti Forest Reserve; Situated in Ntenjeru-Kisoga, this reserve is notable for its ecological significance and proximity to Lake Victoria. It supports a diverse array of flora and fauna and is managed by the National Forestry Authority. Kifu Forest Reserve: Also known as Kifu Forest, this reserve is located in Nama-Kyampisi and Namyoya Forest Reserve located in Nakisunga subcounty. The Physical Development Plan (PDP) has ensured that forest reserves and large-scale private plantations are thoroughly documented and incorporated into the plan. Additionally, the PDP recommends the establishment and protection of designated agroforestry zones to promote sustainable land use. To manage urban growth, the PDP has focused on limiting urban sprawl by creating growth poles and development centres, encouraging the consolidation of settlements to optimize land use and free up areas for agriculture, forestry, and other future purposes. There is a need for massive environmental education, people should be encouraged to plant trees on farmlands. Agroforestry practices should be introduced where land shortage is severe. The community should be encouraged to use energy saving stoves. Institutional tree planting should also be promoted. The existing laws and policies to safeguard forest reserves should be enforced.

6.11.6 Strategies to address climate change and its impacts in Mukono district

Mukono District, like much of Uganda, is experiencing the tangible effects of climate change, including rising temperatures, erratic rainfall patterns, increased frequency of floods and droughts, and environmental degradation.

Flooding is one of the most significant challenges in Mukono District, particularly during the rainy seasons. Areas along the Sezibwa and Lwajali River, are highly vulnerable due to river overflow and poor drainage. The most affected sub-counties include Ntunda, Seeta–Namuganga, Nabbale, and Kimenyedde, where a combination of low-lying terrain and concentrated surface runoff increases flood risk.

Additional flooding occurs along the shores of Lake Victoria, where rising water levels lead to backflow and inundation. This particularly affects areas in Kisoga-Ntenjeru, Katosi, Mpunge, Mpatta, and Ntenjeru sub-counties. Wetland systems, also experience frequent flooding. Specific hotspots include Kasaala Stream in Namawojolo Parish and parts of Kasenge Parish in Nama Sub-county, where drainage channels are either insufficient or obstructed. Others include around the Tiangtiang, Lwanyonji, Mbalala, Kamapala cememnt industrial areas among others as illustrated in figure 31.

To build resilience and adapt effectively, a multi-sectoral and integrated approach is required. The following strategies are recommended:

Table 19: General Climate Change Strategies

Strategy Area	Key Actions and Focus
Climate-Smart Agriculture	Drought-tolerant crops, agroforestry, conservation farming
Afforestation & Forest Conservation	Promote agroforestry, Reforestation, forest protection, sustainable harvesting Enhance biodiversity conservation and management
Water & Wetland Management	Wetland restoration, rainwater harvesting, water infrastructure Enhance and restore riverbanks and lakeshores
Disaster Risk Reduction	Early warning systems, resilient infrastructure
Community Engagement & Governance	Climate education, capacity building, multi-stakeholder collaboration
Renewable Energy & Livelihoods	Solar, biogas, energy-efficient stoves, alternative livelihoods Renewable off-grid solutions
Monitoring & Research	Climate data collection, impact studies, informed planning
Transport	Climate resilient transport infrastructure National and District road reserves with green infrastructure Promoting the use of public transport including BRT, LRT and MRT

Tree planting is a critical environmental strategy that can be employed in Mukono District aimed at combating deforestation, climate change, soil erosion, and biodiversity loss while promoting sustainable livelihoods and community resilience. Focus can be put on Community and Institutional Tree Planting Drives especially indigenous and fruit tree planting.

Formulation of a drainage master plan covering the GKUGA based on the collection of appropriate data on rainfall and water levels in rivers and wetlands, and the promotion of the development of drainage facilities in the medium and long terms.

Implementation of land use regulations, especially to prevent encroachment of buildings into wetlands.

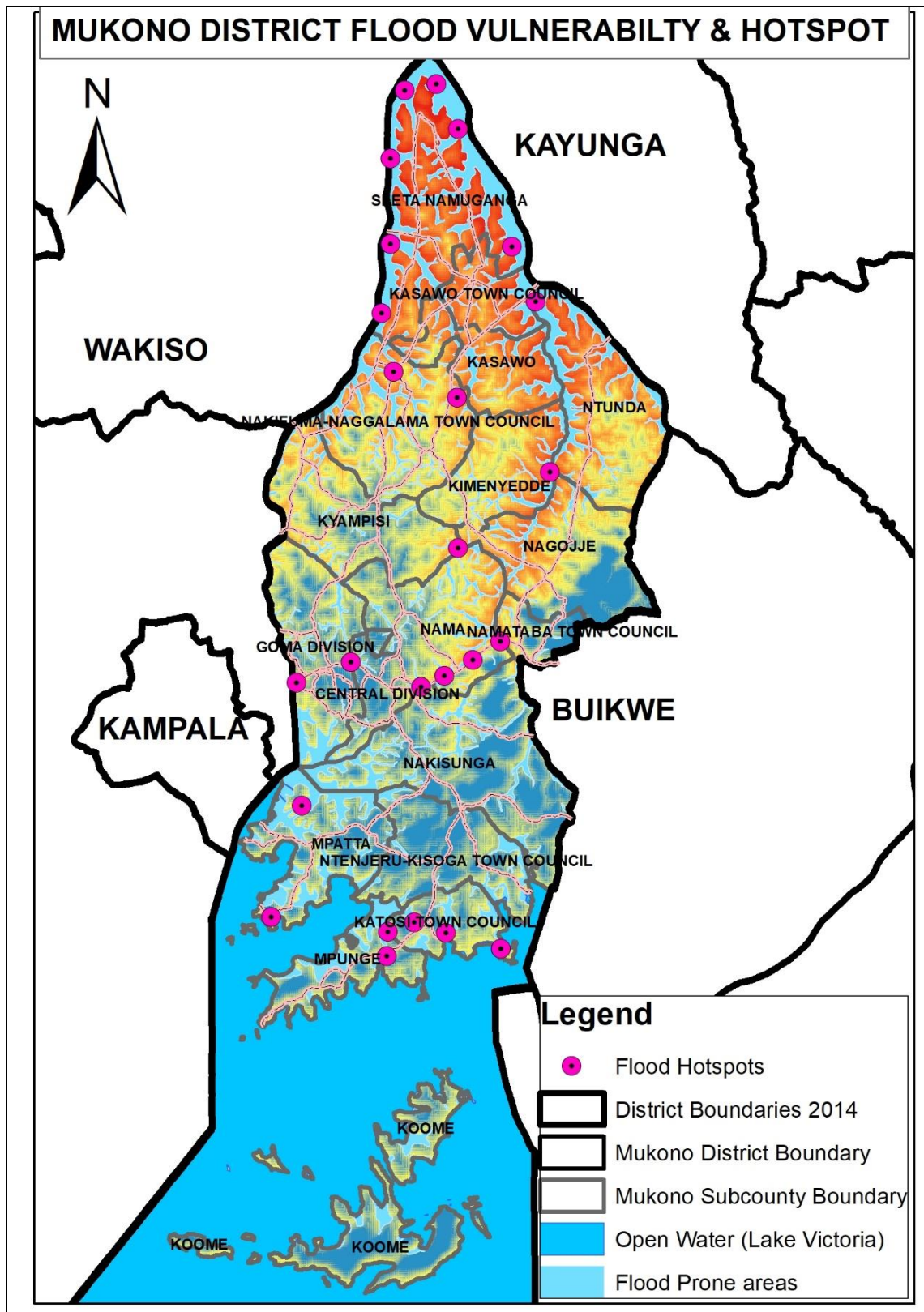


Figure 36: Flood Vulnerability Map

Additionally, there is need to upgrade drainage systems through larger culverts and routine desilting, while introducing Sustainable Urban Drainage Systems (SUDS) such as permeable pavements and retention ponds, supported by community-led maintenance initiatives. Roads in flood-prone areas should be elevated and fitted with proper side drains to ensure effective storm water flow. At the same time, nature-based solutions must be prioritized, including wetland protection, expansion of urban green spaces, and tree planting along riverbanks to enhance natural water absorption and reduce runoff. These interventions should be enforced through zoning regulations that designate high-risk areas for conservation, medium-risk areas for controlled development, and low-risk areas for urban expansion.

6.12 Agro-Industrialization

6.12.1 Agriculture

Agriculture is the predominant economic activity in Mukono District, with a focus on subsistence farming. Agricultural zoning is crucial for Mukono District, which relies on farming for both export revenue and food security. Agricultural zones dictate the types of agricultural activities that can occur including crop cultivation, livestock, aquaculture, and more. The PDP designated the biggest percentage of land in the district for agricultural production. More farmer's markets have been proposed in the various growth centers.

The PDP also strongly recommends urban farming initiatives in urban centres to enhance food security and reduce pressure on rural agricultural land. In urban and growth centers there is need to exercise Minimum plot sizes to prevent excessive subdivision that could hamper large-scale farming. Ensuring adherence to environmental consideration such as restricting activities near rivers or sensitive ecosystems to protect water quality and biodiversity.

Table 20: Specific intervention for Agricultural revitalization

Intervention components	Specific intervention
Increase agricultural production and productivity	1. Practice agricultural diversification by balancing crop and livestock production system, multiple cropping, crop-rotation, intercropping, and agro-forestry to improve agricultural production 2. Introduce low cost irrigation, improved water management and retention practices, plant protection. 3. Adopt improved soil management practices 4. Adopt improved pasture management practices 5. Introduction of drought-resistant crops 6. Introduction of High Yielding Varieties 7. Introduction of low- cost irrigation especially for communities along water bodies like lake victoria , Lwajjali and SSezibwa 8. Extension of presidential demonstration farm 9. Introduce mechanized agriculture through tractor rotation or tractor high approach
Improved access to factors of production	10. Government Finance: Improve access to agricultural financing by broadening access and encouraging people to access Parish revolving funds set up by Government 11. Private sector Finance: Enable farmers access affordable financial services, credit facilities quick services remittances, especially trough agricultural development support provided by development partners working on refugees

	12. Financing by SACCOs: Popularise SACCOs as a source of financing to agriculture. 13. Land: Improve security of tenure and land security by encouraging people to embrace land titling 14. Information: Broaden access to agricultural information through institutional changes in provision of extension services by introducing e-extension using cheap digital information platforms and sponsoring mass media programmes 15. Entrepreneurship: Provide agricultural entrepreneurship to progressive farmers and agro-processing 16. Power: Extend power supply grid and introducing renewable energy to support agro-processing 17. Farm implements: Introduce community tractor hire system 18. Grievance: Establish community-based grievance redress mechanism to resolve grievances
Improved access to market and marketing capacity	19. Invest in cooperative to create market for agricultural produce 20. Broaden access value addition technology procurement of equipment (like cassava clippers) 21. Construct/rehabilitate markets in strategic location. Most of the existing markets are makeshift with no physical structures. 22. Rehabilitate roads connecting to agricultural zones
Improve food security and nutrition security	23. Improve agri-food systems through investments in agricultural research and development, postharvest activities, and nutrition-sensitive innovations, and information
Improved sustainable agricultural system	24. Restore vegetation cover along the banks of Rivers 25. Sensitize the community to balance agricultural development practices and environment protection.

The target groups should be the crop and livestock farmers in rural settings, vulnerable groups (youth, women, disabled), agri-business operators, farm shops, and LG Production departments.

6.12.2 Agro-Processing Industrial Zones

The PDP has designated more agro-processing and industrial zones within the district to concentrate industrial activities in areas of Kimenyede, Mpatta, Kyampisi, Namuganga, Kasawo, Nakisunga, Ntenjeru and Kisoga. Among others. Some of the available opportunities for industrial development include fish feed industries, Value-addition chain, Agro processing, manufacturing, beverages and Juice, Honey, and wine industry. Given Mukono District's agricultural potential, agro-processing zones should be promoted to support value addition, food processing, storage, packaging, and agricultural logistics. The proposed zones are strategically located near agricultural production areas and transport corridors to strengthen rural industrialization and household incomes.

The PDP emphasizes incorporating environmental buffer zones to minimize pollution and negative impacts on surrounding communities. The plan has enhanced the road networks and railway line linking industrial zones to major highways. The plan has considered several complementary facilities such as training institutes, and logistics hubs within or near industrial areas to support industrial growth.

6.12.3 Landing sites

Fishing is a significant economic activity in Mukono District, primarily conducted along the shores of Lake Victoria at landing sites like Katosi and Bugula. Additionally, fishing occurs in rivers such as Sezibwa and Lwajjali, as well as in the district's swamps. There are also several large-scale aquaculture farmers in Ntenjeru-Kisoga, Mpunge, Koome, Mpunge, Mpatta, Katosi-Ntenjeru, Ntenjeru, Nama, Goma, Koome, Kimenyedde, and Kyampisi. They include Buwuuka Aqua Farm, Kyazzi Farm, Nyanja Fisheries, Asante Farm, Lufafa Dickson, NAMU Fish Farm, Sharp Spade Fish Farmers Development, Bunankanda Farm, Nalubowa Violet, Sako Fish Farm, Musumba Joseph, Go fish holdings, Tamale Jude, Munyakadiisi conso, Yalelo Uganda, Kawanda fish farm and Perch on the Nile. Their total harvest in a year ranges from 1000-96000 kilograms. The type of production area is either pond or cage, and the average price of fish is about 7500 UGX. These water bodies provide a substantial source of fish, which is both consumed locally by families and sold on the market. The main fish species caught include; Nile Perch, and Nile Tilapia among other smaller species. Fish caught in Mukono is sold in local markets within the district and nearby urban centres such as Kampala. Nile perch and other species are exported, although export volumes are constrained by quality and sustainability concerns.

Landing sites are among the employers and settlements areas offering avenues for Fishing as the main livelihood activity. These have been maintained, however the plan suggests the need to work on accessibility, sanitation, hygiene, health, and education challenges facing the fishing communities. There is a need to provide safe drinking water, reduce water-borne diseases, increase toilet coverage in the community and develop strategies to reduce HIV prevalence such as awareness creation, circumcision campaigns, and distribution of condoms. The plan lays out and proposes access to landing sites to improve connectivity. The municipality should focus on the establishment of infrastructure at fish landing sites and the means to manage this infrastructure sustainably.

Recommended Services expected at landing sites

The basic service facilities required at a small-scale fisheries landing center are:

- Services for boats and crews: for unloading the catch (sometimes they might be needed for 24 hours/day), for loading fishing gear, fuel, water, ice, supplies, etc.
- Bunkerage: a simple diesel or petrol (sometimes both) fuel station should be available at a point from which fishing vessels can take their supply directly from a pump by a hose or by hand-carried fuel containers
- Engine repair workshop: facilities and qualified personnel should be available for efficient engine repairs. A properly equipped workshop should provide a basic repair service for small fishing craft and maintain a stock of spare parts most often used in the area.

- Boat repair area: a properly equipped boat repair area, including some boat lift-out facilities, should be provided to enable fishermen to repair their vessels on shore.
- Fishing gear repair area: a small shed with a dry, clean floor for the repair and storage of nets and other fishing gear should be provided.
- Berthing services: dock-side services such as freshwater outlets should be available and properly designed to avoid wastage; dock-side electricity supply outlets with power points for small tools may also be needed in more sophisticated small-scale fishing communities.
- Food supply and washroom facilities: it might also be desirable to provide a takeout canteen, a fishermen's food store; and sanitary facilities, including toilets and showers, which are necessary both for the comfort of the crews and shoreside workers and to ensure that hygiene standards are maintained.
- Fish handling, marketing, and processing facilities: these facilities should be designed according to the type of fish and the products currently marketed as well as for any future products which may be under consideration; a more detailed description and design parameters of these facilities are listed in the following section.

6.12.4 Abattoir and Slaughter Facilities

Once a regional meat hub, **Kyetume Abattoir** has declined and remains non-operational. However, the PDP recommends for the **rehabilitation of Kyetume Abattoir as large-Scale abattoir capable of slaughtering: 350 heads/day**. Due to spatial inequality and the increasing demand for beef, other facilities are planned in all the major town councils of Kasawo, Namataba, Nakifuma, Ntenjeru, Katosi, and in two distant subcounties of Namuganga and in Kome. The design of the facility has to include; a slaughter ground hung rails, and sanitary facilities among others. The area planned for this use will be the only permitted premise where goats, cows, and birds will be slaughtered from.

The following strategies are proposed to ensure sustainable management of the facilities:

Wastes generated at the abattoir should be looked at as a source of revenue. The blood from slaughtered animals can be collected and sold off to people who rear animals like pigs; it can be fed directly or mixed with other animal feeds, as a supplement. The cow dung can be used as manure or fed into a biodigester to make biogas, used for cooking. In this case, two (2) drainage systems would be created in the abattoir: one for blood – to a blood pond, and another for dung – to a wastewater treatment plant.

A wastewater treatment plant ought to be installed/constructed at the abattoir. This could be any one of the following, depending on the number of animals slaughtered per day; the Municipal Engineer would advise accordingly:

- A septic tank – soak away pit system;
- Biodigester; or

- Sewage ponds

Layout considerations for the abattoir

The plans envision an abattoir that serves large communities and hence it's likely to have a heavier workload. As such, the plans proposed a full slaughterhouse and not a simple slaughter slab. This means that the site must have physically identifiable operational zones such as killing, dressing, inspection, and off-cleaning areas, each in turn provided with its given set of equipment and operating gear.

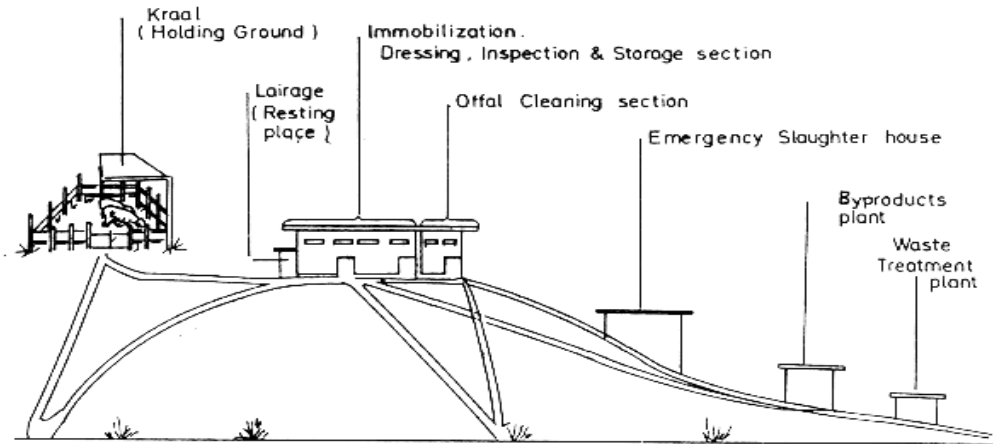


Figure 37: Typical slaughter premises and auxiliary units

The premise must be fenced to keep out undesirable individuals and to prevent animals from entering the yard. Outside the fence, a kraal with roofing must be provided, but within the yard and close to the killing floor, a lairage would be necessary. Lairages are enclosed or roofed spaces for resting animals before slaughter, while kraals are essentially holding grounds for animals waiting longer for slaughter. Both must be provided with water facilities. In addition, the kraals should have feeding troughs for cut herbage, or else the animals should have ready access to grazing in the neighborhood.

Auxiliary services and functions such as livestock marketing, hide-drying, and manure accumulation and collection must be located at some distance from the plant. In other words, no activities should take place in the immediate environs of the premises other than the resting of animals and, if unavoidable, kraaling. Slaughtering in the yard in during peak seasons must similarly be discouraged, as all such activities predispose meat to contamination.

Materials for construction and installation of slaughterhouse

This must be based on the general principle that the materials must be durable and be able to resist deterioration or destruction from external influences such as the weather, air, steam, water, and insects. This means that materials such as swish, wood, thatch, and corrugated iron are undesirable. In their place brick, concrete, stone, reinforced concrete, asbestos, tile, and slate should be used.

For the operating chambers, the materials used must not be pervious to water and blood or stained by fat; glazed tile or a hard smooth material should be used for the walls to facilitate cleaning and prevent absorption of moisture and fat. A similar principle should apply to the selection of equipment for the chambers: stainless steel, galvanized metal, and aluminum are good choices for metal fittings or furnishings while plastics may suit containers and working surfaces.

6.13 Innovation, Technology Development and Transfer

6.13.1 Communication Infrastructure and Information Communication Technology

Mukono district is connected to the ICT network and it has access to all the mobile networks in the country including MTN, Airtel, and UTL. Several FM radio stations serve its diverse community with news, entertainment, religious content, and local programming. The district is home to Mpoma Satellite Station; a significant communication facility located in Nama. It functions as a satellite tracking and communication station, playing an important role in Uganda's satellite communication infrastructure and potentially contributing to national security and scientific research. The Mpoma Earth Satellite Station was initiated in 1978 during the regime of former President Idi Amin. Its location in Mukono District underscores the district's strategic role in national ICT infrastructure development. The PDP maintains this site because of its significant role in the country serving as the country's ground station and operations center for satellite communication and management. It is also crucial for managing satellite data related to weather forecasting, land and mineral mapping, and national security.

The Mpoma station has the ability to allow Uganda to control its own satellites locally, enabling timely access to high-resolution earth observation data and enhancing research, resource management, and environmental monitoring. It is central to advancing Uganda's national goals in space technology, fostering local expertise, and building capacity in satellite design, operation, and data analysis.

The PDP makes the following recommendations to improve on services at Mpoma

- Expand capacity-building programs to train more Ugandan engineers and technicians in satellite technology and space science.
- Develop a national space policy and legal framework to guide satellite missions and institutional coordination.
- Invest in digital infrastructure for data storage, cloud computing, and AI to maximize the value of satellite data.
- Collaborate with regional and international partners to leverage expertise and share satellite data for mutual benefit.
- Promote satellite missions aligned with Uganda's development priorities, such as urban planning, environmental protection, and health surveillance.

6.14 Human Capital Development

6.14.1 Social Infrastructure

Mukono District's social infrastructure is overwhelmed by the rapid pace of urbanization thus creating a significant demand for additional infrastructure development. This has also necessitated upgrading existing facilities and expanding services to meet the growing needs of the population, particularly in areas such as educational institutions, and healthcare facilities. Addressing these infrastructure gaps is crucial for supporting the district's economic growth and improving the quality of life for its residents.

6.14.2 Health Facilities

Although the District is equipped with a diverse range of health facilities to cater to the medical needs of its population, the situation analysis report reveal a service gap based on population projections for the district. Based on the targeted population of 2,000,000 per Regional Referral hospital, 500,000 for a district hospital, 100,000 for Health Center IV and 20,000 for health center III, and 5000 for HCII; the district has a current deficit of 1 government hospital, 9 health center IVs (Upgrade the 13 health center III), and upgrading of all the 23 health center IIs to HCIIIs. Therefore, the PDP proposes a new hospital space in Between Kyampisi, Nama, Nagojje and Kimenyede sub counties. This considered central and will be able to support the existing hospital(s) for improved service delivery and quality of health service. Staff motivation is key to attracting qualified staff to these facilities and availability of accommodation in the vicinity of the institutions could be one of the avenues to counter understaffing. The district should therefore renovate, up-grade and develop new health and emergency facilities to foster efficiency and effectiveness in the delivery of health services within the district as highlighted by the numbers above.

General Recommendations for the Health Sector

- The existing health facilities within the district are recommended for expansion to cater for the growing population, by 2040. The district should consider establishing new health facilities based on population densities, distance to existing facilities and poverty levels. The District needs to Upgrade about 23 Health Centre IIs to III. Also, the demand for Health Centre IVs within the district will rise to 9 thus there is a need to upgrade 13 health center IIIs to IV for improved and effective service delivery.
- The existing health facilities should be upgraded with better equipment, sanitation, and water services (public standpipes under NSWC).
- Healthcare worker shortages should be addressed by attracting and retaining qualified personnel through competitive salaries, career development opportunities, and improved working conditions.

6.14.3 Education

Although the District has a well-established education system, encompassing both government and private institutions at various levels, the situation analysis report revealed gaps. Most of the government schools lack adequate facilities such as teacher's quarters, class room blocks, electricity, water, libraries, thus limiting student's excellence. The education service projection for government schools reveal the need for more 16 primary schools, more 33 secondary schools and 19 tertiary schools by 2040 based on the population criteria. The PDP thus proposes secondary and tertiary schools in Ntenjeru-Kisoga, Mpunge, Mpatta, Kyampisi, Koome, Ntunda, Seeta Namuganga, Nagojje, Kasawo, and Kimenyedde among others.

General Recommendations on Educational Sector

- Based on population projections, the district will, in addition to the existing secondary schools, need approximately more schools in 2040. Therefore, there is a need for adequate allocation of land for educational facilities, predominantly government-owned, to meet the district's long-term educational needs.
- New educational facilities should be strategically distributed across residential neighborhoods, ensuring convenient accessibility while maintaining a safe distance or buffer from major roads. In addition, existing education facilities will need to be renovated in the long run to enhance their functionality and aesthetic appeal. Focus should also be put on sanitation, water supply, electricity, and structural integrity both in new and old schools.
- To strengthen the district's private academic institutions and improve educational equity, targeted private-public partnerships in key areas should be established. These could include joint development of industry-aligned curriculum, teacher exchange programs to share best practices, and scholarship programs funded by public resources to provide access to quality education for students from low-income families. Such partnerships

would not only benefit private schools by offering access to funding and resources but also enrich public schools with private expertise and innovation.

- Most schools don't have established learning facilities like the library and the computer laboratory thus providing these facilities will aid in equipping students with skills thus achieving higher performance.

6.14.4 Recreational facilities.

Mukono District is home to a variety of recreational facilities that cater to diverse interests, offering relaxing, adventurous, and cultural experiences. Recreation areas are part of the key issues that the plan has put into consideration. This has been done by proposing outdoor recreation facilities like Public open spaces, playgrounds, waterfront developments, and tourism to cater to the recreation needs of the district. The existing sporting facilities in the schools and religious centers have been maintained. In addition to these sporting facilities, public open spaces, neighborhood parks, recreation parks, leisure parks, kid's parks, waterfront developments, and playgrounds have been proposed throughout the planning area. There is a proposed district stadium in Mpatta sub county; all sub counties must have public open spaces because investment in leisure, recreational and Sports activities is paramount amidst rapid urbanization and climate change issues in the district. It is therefore prudent for Construction of the district stadium in Mpatta sub county. Cultural Festival sites in Kasawo, Various Sport Grounds, Establish Green Parks, Amusement Centres, as emerging Capital Investment Projects to allow the district to explore new frontiers in socio-economic development. These shall help in the beautification of the neighborhoods but also act as breathing spaces in the areas thereby, striking a balance between the built-up spaces and the voids therein. Therefore, the monotony of the built-up shall be broken. The recreation areas are created in a network where they are interconnected but also are planned based on the ideas of centrality. The local authority, however, needs to have a deliberate effort to develop these spaces through a public-private partnership to create favorable spaces to play, work and stay. These need to be developed and beautified to a level that will make them convenient for the public to use in terms of recreation, relaxation, and hosting public functions like rallies and parties. To avoid environmental degradation caused by recreation areas, efforts should be made to provide basic facilities like toilets, dustbins for waste collection, and parking.

6.14.5 Piped water

Mukono District has several water points, including protected springs, boreholes, wells, and taps, which serve as the primary sources of water for its residents. Urban areas benefit from piped water supplied through gravity flow systems, largely managed by the National Water and Sewerage Corporation (NWSC). Rural areas, however, rely heavily on wells, springs, and boreholes, which pose health risks due to potential contamination and limited treatment facilities. Despite these advancements, certain areas remain underserved. For instance, Koome Island continues to face significant challenges in accessing safe water due to its remote location and limited infrastructure.

According to the Water Demand Projections for Domestic Water Use in district, by 2040 the total Average Day Domestic Water Demand will have increased to 362,584 (m³/d). Thus the plan maintains the critical water infrastructure; the Katosi Water Treatment Plant, which has a capacity of 240 million litres per day and is capable of serving over 7.5 million people in Mukono, Kampala, and Wakiso districts. The plan further recommends the expansion of piped water coverage to areas beyond urban centers using the well laid roads with wide road reserves that accommodate water infrastructure, while also establishing buffer zones along rivers and wetlands and encouraging forestry to protect and preserve the catchment areas.

5.2 Governance and Security

5.2.1 Civic use

The district, sub county, Municipal and Town council headquarters are integral components of civic land use and as such, they are maintained in their original places except for Kasawo TC, Kasawo SC, Katosi TC, and Ntuda SC , that are renting office space. Other entities like Seta-Namuganga, are operating in a dilapidated building whose structural integrity is wanting. For those renting, the available office space is limited and tiny to offer an ambient office working environment. The plan encourages some mixed-use activities near the civic zone such as commercial and retail servicing uses to support the running of the civic area. Restaurants and other day-to-day service needs will be permitted in the zone where appropriate.

Some of the recommendations to be considered during design of civic facilities include

- The building should cover 50% of the lot
- Access to other utilities like water, sanitation, and power should be provided.
- Buildings must take into account the needs of the physically impaired particularly those with a mobility handicap. The ramp should be used for access in addition to other facilities such as lifts where possible.
- Landscaping shall be done to enhance the amenity of the site and provide shade, privacy, and screening.
- Adequate on-site parking space must be provided for both visitors and staff following the parking standards provided.

5.2.2 Police facilities

Although most police stations and posts are operational and provide basic law enforcement and public safety services. There several challenges such as understaffing, inadequate facilities, and limited resources affect response times and overall effectiveness. Some places like Seta-Namuganga does not have a police post, it was transferred. The plan maintains all the existing police stations and posts. However, it is recommended that the police be equipped with necessary tools such as fire response team and truck to take charge of the situations within the district. The police will ensure law and order but also this is sought to address the challenges of rampant insecurity and petty theft in the communities.

Police station/posts specifically requires the following facilities

- Building Infrastructure – office structure, quarter guard, staff accommodation structures, medical
- infrastructure, recreation halls, officers' mess, education facilities, and places of worship.
- Driveway – Separate visitor and police emergency.
- Car Park – separate and provide generally for visitors, staff, and at the rear for an emergency. Yard for accident vehicle parking.
- Open spaces – parade grounds, open ground and recreation grounds, helicopter landing site.

5.2.3 Community resource centers

Community Resource Centers are multifunctional hubs designed to provide local populations with access to information, skills training, social services, and essential infrastructure.

CRCs serve as focal points for promoting clean water, sanitation, and hygiene practices. They provide platforms for community engagement on several issues, including hygiene promotion, sanitation marketing, and behavior change communication. They act as centers for disseminating information on public health, including infection prevention and control. These are proposed at all sub county headquarters and or at health facilities in district. This is aimed at serving community services like meetings, relaxation, indoor games, etc. especially as the district urbanizes. The community centers are also proposed to incorporate public libraries to improve the record-keeping and education standards in the district. Accessibility and inclusivity are important, ensuring facilities serve vulnerable groups such as persons with disabilities.

5.2.4 Centralized Radioactive Resource Storage Facility (CRRSF)

The establishment of a Centralized Radioactive Resource Storage Facility (CRRSF) by the Atomic Energy Council (AEC) in Mpoma Sub-county, Mukono District, marks a significant step in Uganda's national strategy for radioactive material safety and control. Occupying a 4.75-hectare site, the facility is part of the broader AEC headquarters complex and serves as a key national node for managing radioactive sources from medical, industrial, and research applications. The Physical Development Plan (PDP) recommended for the relocation of the CRRSF storage site accessed from Nagojje trading center in Nagojje sub county, Kyajja parish, Kiwala village. Serious planning measures such as controlled buffer zones, infrastructural reinforcements, and continuous environmental monitoring must be put in place. The facility should be situated in an area with low public occupancy and minimal traffic to reduce exposure risks. It should be remote from other hazardous storage areas like explosive or flammable material stores and not prone to flooding or seismic hazards. Sufficient loading/unloading areas and access routes are essential to safely transfer materials, along with utilities like water, power, and drainage tailored to site conditions.



Source: National Radioactive Waste Disposal Institute-South Africa
[\(https://www.nrwidi.org.za/solutions/cisf/\)](https://www.nrwidi.org.za/solutions/cisf/)

5.3 Tourism Development

5.4 Waterfront Developments

With the existence of Lake Victoria, it is highly anticipated that waterfront developments in terms of Hotels and beaches will be inevitable. The entire belt along Lake Victoria has been planned for this use (Mpatta, Kome, Mpunge, and Ntenjeru-Katosi areas). This is aimed at creating optimal and sustainable use of water resources. In a bid to promote green growth and indigenous culture, the hotel sites must have cottages developed using natural materials like grass and wood cuttings. Modern Building materials shall be limited to 10% to create a natural African design. Furthermore, the hotel developments must provide for onsite parking, servicing, and amenities with noise regulations and shall further be developed according to the tourism and hotels act. The activities offered at these facilities will include; accommodation, Kayaking, biking, swimming, boat rides, picnicking, and sport fishing, among others.

Strategies for Development of Waterfronts Along Lake Victoria

The Physical Development Plan has incorporated strategies aimed at promoting sustainable, resilient, and economically productive waterfront development along the Lake Victoria shoreline within Mukono District. The proposed interventions seek to balance environmental conservation with tourism development, fisheries, recreation, transportation, settlement growth, and investment promotion while protecting the ecological integrity of the lake and surrounding ecosystems.

The PDP recognizes Lake Victoria as a strategic environmental, economic, tourism, and transport asset and therefore promotes integrated waterfront planning approaches that support sustainable utilization, regional connectivity, public accessibility, and climate resilience.

In addition, the PDP proposes the development of water transport access routes and ferry connections linking mainland and island communities including:

- **Mpunge – Koome ferry connection**
- **Kisoga – Ntenjeru – Mpunge – Mpatta corridor**
- **Mpatta – Bule connections**
- **Water transport linkages to Ggaba and Port Bell**

The PDP further designates publicly accessible waterfront sites at **Mpatta, Mpunge, and Katosi** to support recreation, tourism, transport access, fisheries, and public use of the shoreline.

Table 21: Proposed Waterfront Development Strategies in the PDP

Proposed Strategy in the PDP	Key Intervention / Focus Area	Expected Outcome
Establishment of Waterfront Development Zones	Designation of controlled waterfront development areas along Lake Victoria	Promotes organized and compatible shoreline development
Protection of Wetlands and Sensitive Ecosystems	Conservation of wetlands, riparian buffers, and environmentally sensitive areas	Enhances environmental protection and climate resilience
Development of Eco-Tourism and Recreational Facilities	Promotion of resorts, beaches, recreation parks, and tourism infrastructure	Supports tourism growth and local economic development
Promotion of Sustainable Fisheries Infrastructure	Development of fish landing sites, cold storage, and fish processing facilities at key landing sites	Enhances fisheries value chains and livelihoods
Integration of Green Infrastructure Along Waterfronts	Landscaping, urban greening, public open spaces, and shoreline beautification	Improves environmental quality and reduces heat accumulation
Regulation of Shoreline Development	Enforcement of development controls, building setbacks, and buffer zones	Prevents encroachment and environmental degradation
Development of Water Transport Infrastructure	Improvement of piers, jetties, landing sites, ferry terminals, and lake transport connectivity	Enhances regional mobility and economic integration
Proposed Ferry and Water Access Routes	Ferry connections from Mpunge to Koome, Kisoga–Ntenjeru–Mpunge–Mpatta corridor, Mpatta–Bule linkages, and connections to Ggaba and Port Bell	Improves accessibility, trade, tourism, and connectivity between mainland and island communities

Designation of Publicly Accessible Waterfront Sites	Reservation of public access areas at Mpatta, Mpunge, and Katosi	Promotes recreation, tourism, public access, and controlled waterfront utilization
Promotion of Climate-Resilient Waterfront Design	Flood-resilient infrastructure, drainage systems, and erosion control measures	Strengthens adaptation to climate change and flooding risks
Promotion of Mixed-Use Waterfront Development	Integration of tourism, commercial, residential, recreational, and transport activities	Encourages vibrant and economically productive waterfronts
Strengthening Institutional Coordination and Enforcement	Collaboration among environmental, planning, transport, and water authorities	Improves sustainable management of waterfront developments

5.5 Tourism

Mukono District embraces tourism and therefore looks at ensuring that the tourism potential is exploited to enhance the revenue base of the district. This can only be achieved by developing the tourism sites that are unexploited and providing the necessary human resource requirement to be able to deliver tourism. There is significant tourism potential, offering a variety of attractions that cater to nature lovers, cultural enthusiasts, and adventure seekers. The district's rich natural, cultural, and historical assets need to be leveraged through various proposals and projects aimed at enhancing tourism infrastructure, attracting visitors, and supporting local economic growth. Tourism planning within the district provides for socio-economic development, environmental protection, and conservation. Tourism planning with nature based and referred as ecotourism is emerging as a strategy to integrate ecological concerns in development for purposes of sustainable development within the Country. The districts diverse natural resource and ecological diversity should therefore prioritize tourism as key drivers for economic development.

Some of the tourism sites include Ngamba Island in Koome Sub-county; a renowned chimpanzee sanctuary. The island also hosts a variety of bird species and offers unique opportunities for wildlife observation. Sezibwa Falls in Nagojje Sub-county; is a culturally significant site steeped in Buganda traditions and attracts visitors for their scenic beauty, birdwatching opportunities, and cultural heritage, Koome Island and Mainland; is known for its diverse wildlife, including rare monkey species and vibrant birdlife. The district also offers cultural tourism such as caves and cultural Rock sites such as Dindo Hill located in Seeta-Namuganga-Kitale A village that hold cultural significance with traditional ceremonies and guided tours. The PDP therefore has designated and protecting land for tourism development in Mpunge, Mpatta,Katasi,Kasawo, Kimenyede, Kome,Nagojje and Namunganga to prevent encroachment and ensure sustainable use.

There are some prospective Eco-Tourism and Apiary Centre tourism profile in Kasuulo Local Forest Reserve. This is intended to develop a 40-acre eco-tourism and apiary center in Mpunge Sub-county. Facilities will include an eco-lodge, walking trails, birdwatching hides, an apiary training center, and demonstration apiaries. It aims to promote nature-based tourism, support biodiversity conservation, and provide training and income-generating opportunities for local communities. This is so far Registered as a concept-stage Public-Private Partnership (PPP) project. The second one is Makusu Island Eco-Tourism Resort; a multi-billion-shilling eco-tourism resort on Makusu Island, Mpatta Sub-county. The project envisions a resort with accommodation, wildlife conservation, water-based activities, and employment for over 1,200 people. The project has faced delays due to regulatory and planning approvals, but has received endorsements from the Ministry of Water and NEMA.

Also, the plan has ensured that tourist sites and attractions within Mukono are connected and easily accessed. This includes expanding key roads such as those connecting Mukono town to cultural and natural sites, facilitating better movement for tourists and service providers. Proposing public transport facilities, markets, and craft centres, to help communities to showcase local culture and products. There has been a strong emphasis on incorporating environmental protection measures in the PDP such as waste management, green spaces, and conservation buffers to maintain the natural beauty and biodiversity that attract tourists.

Table 22: General Recommendations for the tourism sector

Recommendation Area	Key Actions
Infrastructure	Upgrade roads, ICT, sanitation, and transport facilities
Marketing & Branding	Scale “Explore Uganda” campaigns, focus on premium segments
Service Quality	Enforce standards, train professionals, develop amenities
Sustainability	Protect ecosystems, manage visitor capacity, promote community tourism
Security	Enhance safety measures in tourist zones
Public-Private Collaboration	Strengthen partnerships, ensure transparency
Data & Planning	Use market research, implement evidence-based strategies
Economic Diversification	Integrate tourism with agriculture, crafts; empower youth/women

5.6 Mineral Based Industrial Development

5.6.1 Industrialization

Mukono District is rapidly emerging as Uganda's fastest-growing industrial hub, hosting several industrial parks that are pivotal to the country's economic development. Industrial zoning applies to areas intended for manufacturing, warehousing, and other heavy or light industrial activities. Key industrial parks include: Namanve Industrial and Business Park; Mbalala Industrial Park formerly a rural area and Lwanyonyi Industrial Park in Kyetume respectively. Although these industrial parks provide employment, and boost local revenue collection through operational taxes

and trading permits, they contribute immensely to environmental degradation. The district is experiencing rapid industrial growth, and this growth has led to an increase in industrial waste, including hazardous materials. The district lacks specialized facilities for handling industrial waste, leading to improper disposal practices that can contaminate water sources and soil.

The PDP therefor has designated more manufacturing industrial zones within the district to concentrate industrial activities in areas of Kimenyede, Namuganga, Kasawo, Nakisunga, Ntenjeru and Kisoga. Among others. Some of the available opportunities for industrial development include Marble due to the availability of rocks/stones as raw material. The PDP emphasizes incorporating environmental buffer zones to minimize pollution and negative impacts on surrounding communities. The plan has enhanced the road networks and railway line linking industrial zones to major highways. The plan has considered several complementary facilities such as training institutes, and logistics hubs within or near industrial areas to support industrial growth.

5.6.2 Mining

Mukono District holds significant potential for mineral exploitation, particularly in stone quarrying and sand mining, which are crucial for the industrialization process. The sub-counties of Mpatta, Mpunge, Seeta Namuganga, Nakisunga, Kyampisi, and Ntunda are key areas where these activities are prominent. Stone quarrying is a major industry, with numerous quarries operating in the district including Rock site investments in Nakisunga, Mega stone quarry, and Rofa in Namubiru-Nama, Mena granite, Starline, Alite and Star group in Kimenyede, Katosi quarry among others. However, concerns have been raised about environmental impacts and safety issues, prompting regulatory actions by the National Environment Management Authority (NEMA) to ensure compliance with environmental standards. Additionally, Mukono is noted for its deposits of glass sands, which have been mined historically for glass production. It is located on Kome Island in Mukono district.

The PDP has established clear zones within the district's physical development plan for mining activities (e.g., Mpatta, Mpunge, Seeta Namuganga, Nakisunga, Kyampisi, Ntunda). This has been aimed at preventing encroachment into agricultural, residential, or environmentally sensitive areas and facilitate orderly resource extraction. Mandatory buffer zones around mining has been ensured around the sites to protect nearby communities, water bodies, and ecosystems from dust, noise, and pollution. These mining sites have been associated with industrial parks or processing centers in close proximity to encourage local value addition (e.g., glass sand processing), to boost employment and economic diversification.

5.6.3 Industrial Zones and Typologies

Overall the Physical Development Plan has identified and categorized Mineral based industrial areas within Mukono District according to the scale, intensity, and nature of industrial activities in order to promote organized industrial development, compatible land use, infrastructure coordination, and environmental management. The classification recognizes the distinct economic roles of the various industrial parks and growth areas across the district.

1. Mixed (Medium-Heavy) Industrial Zones

Namanve Industrial Park is designated as a Mixed (Medium-Heavy) Industrial Hub due to its strategic national importance and concentration of large-scale manufacturing, logistics, warehousing, and processing industries.

2. Medium Industrial Zones

Medium industrial zones comprise areas that accommodate manufacturing, processing, warehousing, and industrial support activities operating at moderate scale and infrastructure demand. These include Mbalala Industrial Park, Namataba, Lwanyonyi Industrial Park, Nakisunga, Kyampisi, and Kasawo.

3. Light Industrial Zones

Light industrial zones accommodate low-impact industrial and processing activities including small-scale manufacturing, assembly, packaging, and service industries. These zones are integrated closer to urban centers and residential communities due to their lower environmental impact. These include Katosi, Ntenjeru, and Nakifuma among others.

The industrial typologies provide a framework for coordinated infrastructure planning, environmental management, investment promotion, and integration of industrial development with surrounding residential, commercial, and transportation systems within the district.

General Industrial Development recommendations

To promote and accelerate sustainable industrial development in Mukono District, the vision is to “establish a modern industrialized sector.” The following objectives are recommended to promote “Sustainable Industrial Development” in Mukono District.

- Successful industrial diversification and upgrading is based on both agriculture modernizations and higher value-addition and promotion of new technology in industries.
- Promotion of production network and value-chain
- Development of high-skilled human resources and creation of more employment opportunities with quality jobs through industrialization
- Reduction of rural poverty and disparities between rural and urban areas by promoting industrial production with value-addition by rural areas
- Noise and emissions standards to protect adjacent communities and environments.
- Buffer zones to minimize the impact of industrial activity on nearby residential or commercial areas.
- Infrastructure requirements like roads that can handle heavy vehicles and wastewater management systems suitable for industrial discharge.

Table 23: Proposed Industrial Zones and Typologies in Mukono District

Industrial Area / Park	Proposed Typology	Key Characteristics
Namanve Industrial Park	Mixed (Medium–Heavy) Industrial Hub	Large-scale manufacturing, logistics, warehousing, export-oriented industries
Mbalala Industrial Park	Medium Industrial	Manufacturing, warehousing, processing industries
Namataba Industrial Area	Medium Industrial	Processing, logistics, moderate-scale manufacturing
Lwanyonyi Industrial Park	Medium Industrial	Industrial processing and manufacturing activities
Katosi	Light Industrial / Light Processing	Small-scale industries, packaging, low-impact processing
Mpatta	Agro-Processing	Agricultural value addition, food processing, storage
Ntenjeru	Light Industrial	Low-impact manufacturing and service industries
Nakisunga	Medium Industrial	Manufacturing and processing industries
Kyampisi	Medium Industrial & Agro-Processing	Mixed industrial and agricultural value-addition activities
Nakifuma	Light Industrial	Small and medium-scale industrial enterprises
Kasawo	Medium Industrial	Manufacturing and processing activities
Seeta–Namuganga	Agro-Processing	Food processing, agro-logistics, agricultural support industries

5.6.4 Urban Heat Mitigation Strategies for Industrialisation in the PDP

Given the continued expansion of industrial hubs such as Namanve, Mbalala, Namataba, and Lwanyonyi, the PDP proposes strategies intended to promote sustainable industrial development, environmental protection, and climate resilience. The proposed interventions focus on green industrial infrastructure, industrial landscaping, environmental buffer zones, sustainable transport systems, and climate-responsive industrial design to minimize heat accumulation and improve environmental quality within industrial areas and surrounding urban centers.

Table 24: Proposed Industrialisation-Related Urban Heat Mitigation Strategies in the PDP

Proposed Strategy in the PDP	Key Intervention / Focus Area	Contribution to Urban Heat Mitigation
Establishment of Industrial Green Buffer Zones	Tree planting, landscaped setbacks, and green belts around industrial parks	Reduces heat accumulation, improves air quality, and minimizes industrial environmental impacts
Integration of Green Infrastructure within Industrial Areas	Urban greening, open spaces, retention green areas, and industrial landscaping	Enhances cooling effects and reduces surface temperatures
Promotion of Climate-Sensitive Industrial Design	Ventilated building layouts, reflective roofing materials, and reduced surface sealing	Minimizes heat absorption and improves thermal efficiency
Protection and Restoration of Wetlands and Natural Ecosystems	Conservation of wetlands, forests, and environmentally sensitive areas near industrial zones	Supports natural cooling systems and climate regulation
Promotion of Sustainable Industrial Transport Systems	Integration of SGR, MGR, BRT, LRT, and freight management systems serving industrial areas	Reduces congestion, vehicle emissions, and transport-related heat generation
Development of Internal Industrial Green Corridors	Avenue tree planting and landscaped road reserves within industrial parks	Improves microclimate conditions and reduces urban heat island effects
Integration of Stormwater Management Systems	Sustainable drainage systems, permeable surfaces, and water retention infrastructure	Reduces heat retention and improves environmental resilience
Promotion of Energy-Efficient and Low-Carbon Industrial Development	Adoption of cleaner technologies and energy-efficient industrial processes	Reduces waste heat emissions and environmental pollution
Controlled and Phased Industrial Expansion	Planned industrial growth and zoning controls	Prevents unplanned industrial sprawl and excessive loss of green cover
Provision of Worker Housing and Social	Integrated industrial-residential planning	Reduces long-distance commuting and associated vehicular heat emissions

Infrastructure Near Industrial Areas		
Environmental Compliance and Pollution Control Measures	Industrial waste management and environmental monitoring systems	Minimizes environmental degradation and heat-related pollution impacts
Preservation of Open Spaces within Industrial Parks	Reservation of green/open spaces within industrial developments	Enhances ventilation, cooling, and environmental quality

5.7 Sustainable Energy Development

Mukono District faces challenges in electricity supply, particularly in rural areas, where access to hydroelectric power remains limited. Urban areas have better connectivity to the national grid, managed by UEDCL, but rural communities often rely on alternative energy sources such as solar systems and paraffin lamps for lighting.

An efficient, reliable, and sustainable energy services will provide the impulse for the development of various sectors of the economy including agriculture, tourism, communication, industries, trade, and commerce among others. An integrated approach has been suggested for power generation and planning in the district. The basic goal is to decrease, first, the power shortage during normal and peak load and second increase the power generation capacity up to the level of meeting the total future needs. Therefore, the Physical Development Plan (PDP) recommends adequate road corridors to facilitate the easy passage of power lines and has incorporated all existing and planned power facilities, including transmission mains, within the district to ensure coordinated and efficient electricity infrastructure development.

The objective of this plan is to improve reliability and access to power. To realize this objective, the district should exploit the following strategies:

- Improve the service quality.
- Establish a programme that invest in renewable energy sources such as solar and wind energy to provide rural areas with cheap, reliable sources of power and electricity.
- Establish/expand rural electrification program by the Ministry of Energy and Mineral Development that expand installation of rural electricity grid, especially along main road connecting rural growth centres.
- Expand rural substation distribution transformers to increase the power current.
- Subsidize rural electricity installation costs.

7 PLAN IMPLEMENTATION

7.1 Introduction

A plan, no matter how well designed, is ineffective without proper implementation, a challenge often seen in Uganda, where Physical Development Plans (PDPs) are created but not executed due to misalignment between planning departments and policymakers. Mukono District's PDP seeks to change this by grounding its implementation in community priorities and adopting a 14-year framework aimed at driving socio-economic transformation while promoting inclusivity, equity, sustainability, and heritage preservation. Given the district's vast size and diverse population, the plan employs a dual approach focused on land use planning and capital investment projects, with leadership from the district council and collaboration from government agencies, the private sector, and communities. The framework acknowledges that poor infrastructure, weak public services, and institutional barriers hinder investment and job creation, resulting in substandard living conditions. Therefore, the implementation framework commits to making the PDP's strategies part of everyday district decision-making, providing policymakers with clear guidance on prioritising and timing actions to achieve sustainable development

7.2 Plan Phasing (Implementation schedule)

Development phasing is a crucial strategic process that ensures essential facilities, services, and infrastructure are delivered efficiently and on time. It enables development to occur in an organized, economical, and coordinated manner. The plan's proposals need to be prioritized and sequenced, considering which programs must be implemented first to enable subsequent activities. The scheduling will also take into account the timing and availability of financial resources. Generally, the sequencing of development activities follows the following pattern to optimize flow and resource allocation.

Phase I (Short Term 1-5 years): Pre-development Phase

The pre-development phase will involve key activities such as mobilizing communities, development partners, and resources; acquiring land for institutional and social services like schools, health centers, and community centers; surveying and opening neighborhood and major access roads; and establishing initial programs for providing basic services. This phase will typically last between 1 to 5 years after the approval of the district physical development plan, depending on resource availability and the district's commitment. During Phase 1, emphasis is placed on quick-win projects those that can be completed promptly with significant visibility and impact, using minimal resources. These projects aim to build trust and confidence among citizens and stakeholders and may include expanding or opening new roads, improving drainage, installing street lighting, rehabilitating markets, health facilities, and schools, as well as planting trees along roads, riverbanks, and wetlands.

Phase II (Medium Term 5-7 years): Development Phase

This is the development phase; in which major components of the development plan will be executed. These may include the opening and construction of roads, drainage channels, networks

of basic services, social facilities, and residential development. The phase may take 5-7 years after activities in the first phase have been successfully implemented.

Phase III (Long term 7-15 years):

This phase will be characterized by the development of support elements as well as the implementation of activities that will overlap with the previous phase, it is also the period where the public infrastructure will be enhanced in terms of improving the aesthetic value of the environment, i.e., landscaping, streetscape, modification of microclimate, improving walkability and considering all variables that add to the comfort and beauty of the urban setting. This may also be the continuous phase until the process of plan review is underway for 7-15 years.

7.3 Approaches to Mukono District PDP Implementation

The Plan, is a two-pronged approach to utilize the district's resources for sustainable development while establishing capital projects to catalyze the process. The two approaches include: Land Use Planning, Administration, and Management as one and the second development of capital investment projects as justification to guide spatial development frameworks.

7.3.1 Land Use Planning, Administration and Management

Land use planning, administration, and management are intended to create organized control and secure ownership of land as a critical resource for guiding spatial development. Since land is limited, all proposed developments, especially major investment projects, must occupy appropriate, agreeable, suitable, and sustainable spaces for future growth. Reliable information on land resources, including their value, location, and proper usage, supports spatial development that promotes socio-economic transformation and environmental sustainability. To safeguard land for future development, the District PDP implementation matrix includes various proposals. While the District PDP provides a broad framework outlining the spatial structure of Mukono District, its effective implementation requires detailed, practical actions as explained below.

a) Implementation of the Plan:

This requires wide stakeholder consultation, capacity building, sensitization, and awareness creation of the local community, in every village, market, urban, ward/parish levels, among others, to internalize the plan as a legal document with its consequences, benefits, impacts, outcomes and constraints for future spatial development as well as social-economic growth and environmental management. Several meetings, barazas (community), public participation and training of champions to spearhead the ideas of the District PDP. This includes the formation of implementation, technical and nontechnical Committees in parishes and sub-counties governance structure.

A comprehensive training program is a prerequisite if Mukono District is to sustain its development projects. Continuous on-the-job training and short-term training should be carried out to improve staff output and help employees of the district to develop confidence and ability to learn by adapting themselves to new working methods and technologies. The training programme may include: Management training in physical planning, Supportive staff training, Low cadre staff training and Geographical Information Systems training to handle GIS data related to the PDP. The programme should include

the councillors at all levels since they are part of the District policy formulation process. The roles of Councillors and those of Technocrats should be clearly defined during the training to avoid conflicts in plan implementation. Training constitutes a worthy investment in human resources.

To ensure effective implementation of land delivery for public facilities, the recommended steps include: identifying land impacted by the PDP proposals; conducting public education and awareness campaigns; documenting land attributes such as ownership, development status, usage, acreage, location, encumbrances, and value to create a comprehensive database; valuing the land; negotiating with landowners; acquiring the land through means such as purchase, exchange, surrender, compulsory acquisition, or lease; amalgamating land parcels when necessary; and reserving and titling the land for public use.

b) Preparation of Urban and detailed Development Plans for the various proposed Urban Centres:

These are detailed plans to guide areas of concentrated human settlement activities especially urban Centres of Kiyoola TC, Kirondo TC, Seta-Byafula TC, Seta-Nazigo TC, Kuyaro TC, Mbalala TC, Namawojjolo TC, Namataba TC, Namagunga TC, Wakisu TC, Katoogo TC, Kisowera TC, Lwanyonyi TC, Kabembe TC, Kiyunga TC, Kyabakadde TC, Kyampisi TC, Namasumbi TC, Kiwumu TC, Kwaba TC, Nakanyonyi TC, Kawomya TC, Kakinzi TC, Kabawala TC, Nalubabwe TC, Ndese TC, Namaliri TC, Kabimbiri TC, Kasawo TC, Lugala TC, Gimbi TC, Kyanika TC, Namuganga TC, Namanoga TC, Nakadindiri TC, Nsabwa TC, Nakasejjere TC, Nsagi TC, Kalagi TC, Nagalama TC, Nakifuma TC, Nakasajja TC, Kasayi TC, Maggwa TC, Ntunda TC, Kyabazala TC, Kasana TC, Nagojje TC, Kimenyedde TC, Kawuku TC, Kateete TC, Mayangayanga TC, Seeta TC, Namanve TC, Mukono Town, Bukerere TC, Nyenje TC, Kyetume TC, Namaiba TC, Nakisunga TC, Katosi TC, Mpunge TC, Kalagala TC, Salama TC, Ttaba TC, Kabanga TC, Mpatta TC, Nakalanda TC, Mubanda TC, Bethany TC, Buwaya TC, Kiyanja TC, New Camp TC and Koome TC among others, which are intensive development enclaves that require systematic consideration of spatial order. Preparation of these plans will deepen the implementation of the district spatial plan since some of the principles, guidelines and standards proposed will only be realized if they are part and parcel of these plans as per The PPA CAP 142. Thus, providing detailed urban spatial frameworks to social-economic development, environmental (protection, restoration, conservation) as well guaranteed cultural heritage for future generations. Each urban centre will therefore initiate, conceptualize, and prepare a detailed scheme to guide development within the stipulated legal frameworks and in tandem with the District PDP schema. These areas are witnessing rapid population growth and are proposed as commercial zones, residential, Institutional, and industrial areas for the future that require immediate attention while respecting the district spatial plan designated functionality. Each urban centre will require about 100 million for the preparation of the local physical development plan as a minimum.

c) **Conduct tenure-responsive land use planning for some of the key growth centres in the district:**

Cadastral information for major growth Centres is paramount to qualify ownership and facilitate the ability of the owner to access credit in financial institutions and develop the land resource to its full extent. To add value for most urban land, the cadastral referencing becomes a resource to reduce land conflicts, and achieve correct measurement and correct value. It is important to improve security of tenure by lobbying, scaling up and encouraging people to embrace the government programme for acquiring a Certificate of Customary Ownership (CCO) and registration.

d) **Development Control Enforcement:**

Development control is the key determinant in realizing plan implementation. The implementation is realized when development control principles are understood and constantly monitored. This process is therefore significant and effective realization of the intended plan.

The Development Approval Process

1) Accordingly, all development applications that:

- Do not require Environmental and Social Impact Assessments (ESIA), or other technical studies or as set out by the strategies of this Plan; and
- Conforming to the strategies and policies included in the Physical Development Plan, development permission will be granted development permission unless a review of other applicable material considerations, as set out in the Physical Planning Act CAP 142 provide sufficient justification to refuse the application.

2) Where development applications do not, in the opinion of the district Physical Planner or the Physical Planning Committee, conform to the strategies and policies of the PDP:

- The applicant may be refused, without further consideration, or
- Where the district Physical Planner or Physical Planning Committee deems further consideration of the application is warranted, they may:
 - Undertake a detailed planning review of the merits of the application;
 - Require the proponent to prepare one or more of the following to identify and address impacts arising from the potential development:
- Carry out an Environmental and Social Impact Assessment (ESIA) where it is required or where the District Physical Planner or Physical Planning Committee considers that there may be environmental impacts and/ or impacts to Core Assets or the development is within a floodplain, riparian area, natural hazard or risk prone area.

3) If, upon further consideration, the District Physical Planner or Physical Planning Committee and the Building Committee deems that the application has merit, they may approve it, subject to any conditions, which may have arisen from review.

- 4) Where approval of the applications entails significant changes to the proposed land use structure, set out in the PDP, they shall be deemed amendments to the Plan. This would include such instances as the alienation of lands designated for agricultural use (where the land is greater than 10 hectares), extension to the urban areas or growth centers; changes to the Settlement Structure of growth Centres; development impacting natural, historical or cultural heritage conservation areas; and reclassification of boundaries of the Ground Water Protection Areas.
 - 5) Where the change is significant and the project is of great importance to the district with no impact on natural resources and compatible with the neighbouring use, the district planner and physical planning committee may opt to seek change of Use from the National Physical Planning Board by following the laid-out procedure in the Physical Planning Act.
- e) **Mapping of Resources and Infrastructure:**
Detailed asset inventory for key resources and embedded infrastructure enhances accountability, transparency, and integrity concerns, of what is where and who owns it (public or private) as significant determinants of future capital investments. Meaningful infrastructural development and further expansion and/or extension require details of the existing situation as part of the feasibility study and background checks. The district spatial plan implementation will further be deepened with more information and or databases of more accurate surveys.

7.3.2 Capital Investment Projects

The capital investment projects require the space (land) for construction, operation, maintenance, and actual functionality. A plan developed without the capital investment framework embedded in District Spatial Plan, may not be realized. Planning without a budget is like operating a machine without an operator. The Capital Investment Plan, when mirrored in the District PDP provides the budgeting process of a major investment project envisaged to allow the plan actualized. Just reflect on the linkage of PDP and the district Investment Plan, which provides the space and the budget (funds) for implementation to bridge the gap of integration. The district PDP therefore proposes several capital investment projects geared to help in the implementation of the plan; the main categories being land acquisition (banking), construction of social and physical infrastructures (examples include, markets roads, sports facilities, Parking yard, district hospital, water), environmental restoration (conservation) among others.

7.3.2.1 Capital Projects Funding

Capital projects contained in this PDP will be funded through budgetary allocation from the National Government; District revenue sources, grants and loans from development partners.

7.3.2.2 Strategies for Raising Revenue

Mukono District expects to gain from resources mobilized by the National Treasury while the district shall also mobilize some of the resources for funding the budgetary requirements and

putting in place mechanisms to raise revenue and resources. Since the allocations from the national government are often not sufficient, Mukono district shall pursue alternative modes of generating revenue. Some of these modes will include;

- Increasing the local revenue sources especially from the proposed Urban and Rural growth Centres, recreational areas, Tourism potential areas and industrial zones in the PDP. And also, strict monitoring of district development to ensure that all development dues are paid to the district authority.
- Getting long term loans and grants from the friends of the district (Partners in development).
- Entering into PPPs with both local and private investors.
- Collaborating with local and foreign organizations in the developed world.

External Funding: Mukono District should make use of PPPs, host investor forums and conferences to entice investors develop the Investment Promotion Plans, and Industrial programmes among others.

7.3.3 The capital investment projects

a) Urban Support Infrastructure in major (Growth Centres)

The Urban Support Infrastructure in the Core Centres of Kasawo, Ntenjeru, Kisoga Namataba, and Nakifuma among other growth centres will entail the development of the following infrastructures: Market, Street lights, slaughter houses, green gardens, Waste management sites, and parking. The major centres and growth centres are supposed to play a major role in the socio-economic transformation of the district. Core centres function to service the hinterland, achieve agglomeration economies, and nucleated settlements; they require basic services to propel them to have higher order goods and services as well as attract investments.

b) Major transportation Infrastructure

These include the railway line extension to Kibanga port and to Nakifuma-Kasawo, the Kibanga in land port, and the ferry terminals in Mpatta, Mpunge, and katosi etc. These major transportation infrastructure projects should be of significant concern within the implementation framework of the Mukono District PDP because they represent critical investments that can greatly influence the district's economic growth and development. These projects enhance connectivity and accessibility, facilitating the efficient movement of goods and people within the district and beyond. Improved transportation infrastructure attracts investment, boosts trade, creates job opportunities, supports industrial and commercial activities, and enables better access to markets and services. Additionally, such capital projects require careful planning, financing, and coordination to ensure they align with the district's spatial and development goals, avoid environmental degradation, and maximize social and economic benefits for the community.

c) Urban Access Roads in growth centres, sub-county growth centres, rural and local centres

Urban access roads in major centres are in pathetic condition. However, implementing the PDP requires increased accessibility, more networks and connectivity enhanced to leverage these areas to perform their designated function in the plan. All the major centres in the district require a facelift, and expansion on their urban access road to promote faster growth, livability, and safe and secure neighborhoods.

d) Rural Access and Priority Roads District-wide

The district PDP provides for rural access and Priority roads that require gravelling and/or tarmacking. These rural access roads are to enhance effective network, and connectivity to facilitate the timely flow of goods, services, and labour in every part of the district. It is anticipated that these roads will open parts of the district to effectively participate in the local and national economy, and reduce the use of motorcycle menace (accidents) as car and/or vehicular penetration is enhanced.

e) Renovation of the Abattoir in Kyetume

The renovation of the Abattoir in Kyetume is important for consideration within the implementation framework of Mukono District because it directly impacts public health, local economy, and food safety. A modernized and well-managed abattoir ensures hygienic slaughtering processes, reducing the risk of disease transmission and contamination of meat products. This supports community health and compliance with national health standards. Economically, an improved abattoir facilitates better market access for farmers and traders, enhancing income generation and livelihood opportunities. Additionally, upgrading the facility can attract more business, improve operational efficiency, and contribute to the district's overall development goals by supporting the agricultural and livestock sectors.

f) Urban Water Supply and: Rural Water Supply

Urban water supply to meet increased demand due to high population growth. Urbanization and population growth have increased demand whose management cannot be implemented without a spatial framework, this district's Spatial Plan therefore delves into water demand projection. This water demand projection will only be met through the protection and conservation of water resources, availability of space for water infrastructure (reticulation system), piping, bore-hole development, water springs, and construction for specific urban needs.

g) Solid and liquid waste management sites

The Physical Development Plan (PDP) proposes two sites Setta-Namuganga and Mpatta for the proper management of faecal sludge in the district and small urban centers. Additionally, two sites are designated in Kimenyede and Ntenjeru-Nakisunga for solid waste management. Including this critical infrastructure in the district's implementation framework is essential because effective waste and sludge management helps protect

public health. It also contributes to environmental protection and supports sustainable urban development by promoting proper sanitation and waste disposal services, which are vital for creating clean and healthy communities.

h) Market Infrastructure for Small Towns (market, rural and local centres)

One of the core principles of sustainability planning is the improvement of the local economy. Making business environment possible for Street Vendors, and artisans comfortable, secure, safe, and profitable investing in small market infrastructures. These market infrastructures include: market stalls, street lighting, refrigeration services, market furniture, shelter for production specialized commercial entities, saloons, shoe shining, fish markets, and livestock markets.

i) Industrial Development Infrastructure in the District

Although Industrial development exists in the district, its requires stimulus. It is believed that agro-processing is a sure way of revitalizing economic growth. The district PDP has designated industrial parks to promote manufacturing ventures. Some of these may include fish feed factories, wine factories, juice factories, cement and marble factories among others.

j) ICT Infrastructure (hubs, fibre network)

Information, Communication and Technology (ICT) infrastructure cannot be gained to be as significant as an aspect of the digital revolution. ICT connections district-wide are therefore a necessity, where each sub-county headquarters and or priority major centre should have an ICT Hub as well as connected to a fibre network(NITA-U). Youth participation in the local economy can be leveraged through ICT infrastructure in rural villages. The Digital economy therefore requires deepening in rural villages that include participation in business outsourcing. Over 4 ICT hubs need to be established and connected to the national network.

k) Improving Health Facilities and construction of (District hospital, health centre IVs and HCIII)

Affordable health for all and health coverage to ensure equity distribution district-wide is a challenge, the PDP details the deficits per sub-county based on population projection analysis. To ensure equity and access by distance and location, the proposed additional health facilities must be established to meet the deficit and ensure their equitable distribution district-wide. Establishing these health facilities will be through construction and providing basic equipment in each location.

l) Improving Education Facilities and Construction of Educational Infrastructure

Free Education for all in early childhood education development and primary schools and 100% transition from primary to secondary require an increased investment in the education infrastructure, through the establishment of new schools to much the population increase rehabilitation and expansion of existing facilities as well for basic

education services. The district Spatial Plan has provided the deficit education sector institutions to be provided. This education sector investment must receive deliberate effort in resource mobilization from the National Government, Public-Private Sector Partnership (PPP) and development partner support.

m) Tertiary Educational Institutions

Tertiary education to cater for technical institutes and polytechnics requires a large capital outlay for improvement and expansion and setting up of new facilities. The district education sector requires land for expansion as well as funds for infrastructural development. The district has lagged in establishing these institutions to leverage manpower skill development for the youth in terms of technical, entrepreneurial as well as managerial skills.

n) Civic /office space (Namuganga, Kasawo TC/SC, Katosi TC, etc)

Including civic /office spaces within the implementation framework of the District Physical Development Plan (PDP) is crucial because these spaces serve as centers for governance, administration, and community engagement. Civic infrastructure fosters a sense of community identity and pride, supports transparency and accountability, and can stimulate local economic activities around these hubs. Well-planned civic offices provide a conducive environment for local government operations, enhancing efficiency in service delivery and coordination among different departments and stakeholders.

o) Tourism and Cultural Heritage Infrastructure

Mukono district has great tourism potential, however, there are impediments due to inadequate infrastructure developed. These infrastructures include: access roads to place destinations, heritage sites, waterfalls, and lodges. Secondly, the restoration and improvement of the cultural sites, and the development of campsites, signage and branding are significant for the meaningful exploitation of these tourism potentials. Facilities such as leisure sports, water sports, and marina are lacking. Central and Local Government, Public-Private Sector Partnerships as well as private investments must be encouraged and fully exploited to transform tourism in the region.

p) Protection, Conservation and Restoration of Environmentally Significant Areas

Environmental quality is a major component of the District Spatial Plan, under the Green Economy Strategy to ensure ecological integrity of the natural resource capital and sustainable development: These environmentally significant areas include: Hill Tops, Wetlands, Lake and River Riparian Reserves, Water Catchment & Ground Water Reserves, Rural and Urban Green Parks that require protection, conservation and restoration. The District must invest heavily in restoring the natural capital (mother nature) which is the foundation for economic and social transformation. The environment cushions the economy, provides rain, and cool temperatures, reduces drought, and famine, grows food, catches more fish, provides raw materials for industries, reduces health risks, and provides

safe and quality living human settlements and habitats for animals and plants (man included). The National and District Governments, Public-Private Sector partnerships, Development Partner Support, and private initiatives are investments encouraged to secure mother nature in the District.

q) Agricultural Productivity: Land use & Irrigation Infrastructure: Mechanization

To ensure that the district is food secure, has products for trading and can produce raw materials for agro-processing; investment in agricultural infrastructure is paramount by expanding more arable land through irrigation and mechanization (tractors). The district must establish irrigation schemes in every sub-county, while the use of tractors to till more land promptly cannot be gained. Smallholder agriculture must embrace technological change in terms of innovations, seed multiplication, farm demonstration in every sub-county, value addition and varieties are prerequisites for growth. Agro-processing and other new investment frontiers for the district, will require huge capital outlay. The central and local Governments, Public-Private Sector partnerships, Development Partner Support, and private initiatives, both foreign direct investment and domestic investment are highly encouraged.

r) Energy Infrastructure (Electric Power)

Energy has also been branded to be the engine of economic growth as well as social well-being. The district PDP in the same vein, applying the Network principle, opines that a district-wide energy power connection is envisaged. The energy connection from the National Grid is urgently required, however, there are proposals for an energy-secure district, that is to develop its energy source, that is safe and affordable. Therefore, investment as well as expansion of the National Grid under the Rural Electrification Programme is a great desire. The central and local Governments, Public-Private Sector Partnership, Development Partner Support, and private initiatives, both foreign direct investment and domestic investment, in this energy, are highly encouraged.

s) Establishment of Sports and Recreational Infrastructure

Investment in leisure, recreational and Sports activities is paramount to increase the job market in these unexploited industries in the district. It is therefore prudent for the Construction of the district sports centres in sub-counties. Sports and motorist centres in Mpatta, Cultural Festival sites, Various Sports Grounds, Establish Green Parks, and Amusement Centres, as emerging Capital Investment Projects to allow the district to explore new frontiers in socio-economic development.

7.4 Role of Stakeholders in the Plan Implementation

According to the Local Government Act, CAP 243 (sect 4 a-c) of 1997 provides for creation of districts with powers within its jurisdiction. The local government Act empowers the district council to prepare and execute development plans for their respective areas. The challenge for decision makers is to create an environment which harnesses the potential of Mukono District as a place to work and to live. To achieve this the policy/decision makers must address key issues including

land, transport, public finance and regulation. Making the District work requires investments in residential, commercial and industrial structures, as well as infrastructure.

Table 25: Overall roles of various stakeholders in the Mukono District PDP Implementation

Sector / Role Area	Key Institutions	Core Function in PDP Implementation	Implication for Mukono PDP
Local Planning & Implementation	Mukono District Local Government (DLG); Town Councils; Sub-counties; Mukono Municipal Council (MC)	Physical planning, development control, service delivery, and enforcement of zoning regulations	Direct on-ground implementation of the PDP, ensuring land use compliance and service provision
Transport & Infrastructure Development	Ministry of Works and Transport (MoWT); Uganda Railways Corporation	Planning, design, and construction of national roads, railways, and transport systems	Enables connectivity, supports urban growth corridors, and shapes spatial structure of Mukono
Trade, Industry & Investment	Ministry of Trade; Uganda Investment Authority (UIA)	Promotion of industrial development, investment attraction, and economic zones	Drives economic growth nodes and industrial land use in Mukono
Water Supply & Public Health Infrastructure	National Water and Sewerage Corporation (NWSC); Ministry of Health (MoH)	Provision of water, sewerage systems, and health services	Improves sanitation, reduces health risks, and supports livable settlements
Environment & Natural Resources Management	National Environment Management Authority (NEMA); National Forestry Authority (NFA); Ministry of Water and Environment (MoWE)	Environmental regulation, wetland protection, forestry management, and resource conservation	Ensures sustainable land use, environmental protection, and climate resilience
Agriculture & Fisheries	Ministry of Agriculture, Animal Industry and Fisheries (MAAIF); Fisheries Department	Agricultural development, food systems, and fisheries management	Protects agricultural land, supports rural livelihoods, and regulates fishing activities
Education & ICT Development	Ministry of Education and Sports (MoES); National Information Technology Authority-Uganda (NITA-U)	Provision of education infrastructure and ICT systems	Supports human capital development and smart urban systems

Tourism Development	Tourism Ministry,UTB	Promotion and development of tourism sites and infrastructure	Enhances tourism potential and land use for recreation and heritage
Cross-Cutting Social Services	MoH; Mukono DLG	Delivery of health and community services	Improves welfare and resilience of communities
Multi-Sector Coordination	MoWT; Mukono DLG; other MDAs	Joint planning and implementation of cross-cutting projects	Ensures integrated infrastructure and service delivery

Specific Roles per some entities

Table 26: Role of central Central Government

Central or national government	❖ Invoke a national law, only where the situation warrants. ❖ Mobilize the relevant government agencies to undertake, commission, and supervise planning. ❖ Provide funding or support for accessing international funding. ❖ Provide specialized technical expertise if required. Ensure public investments conform to plans and codes ❖ Provide legal mandate for the plans. ❖ Create the policy environment in which the plans are prepared.
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Table 27: Role of Ministry of Kampala Capital City & Metropolitan Affairs

Role Area	Function of the Ministry of Kampala Capital City and Metropolitan Affairs	Implication for Mukono PDP Implementation
Metropolitan Planning Coordination	Aligns Mukono District Physical Development Plan with the wider Greater Kampala Metropolitan Area spatial framework	Ensures compatible land uses, prevents urban sprawl, and promotes integrated regional growth
Policy Guidance & Standardization	Provides national planning policies, standards, and regulatory frameworks	Guarantees compliance with national physical planning guidelines and planning laws
Infrastructure Integration	Coordinates development of shared metropolitan infrastructure (transport, drainage, waste systems)	Enables Mukono to benefit from large-scale, interconnected infrastructure systems
Resource Mobilization	Facilitates access to central government funding, donor support, and PPP investments	Supports financing of major projects beyond district capacity
Institutional Coordination	Brings together key actors such as Kampala Capital City Authority, Wakiso, Mpigi, and sector ministries	Promotes harmonized implementation and reduces duplication or conflict

Monitoring & Oversight	Tracks implementation progress and enforces compliance with approved plans	Ensures accountability and adherence to the Physical Development Plan
Metropolitan Governance Support	Develops and strengthens GKMA-wide governance and coordination mechanisms	Enhances joint planning, data sharing, and integrated urban management

Role of Ministry of Lands Housing and urban Development

Role Area	Function of the Ministry of Lands, Housing and Urban Development	Implication for Mukono PDP Implementation
National Physical Planning Oversight	Oversees implementation of the National Physical Development Plan and approves lower-level plans	Ensures Mukono PDP aligns with national spatial planning priorities
Policy Development	Formulates policies on land use, housing, and urban development	Guides zoning, settlement planning, and housing strategies in Mukono
Legal and Regulatory Framework	Implements laws such as the Physical Planning Act and Land Act	Provides legal backing for enforcing zoning regulations and land use control
Plan Approval & Technical Backstopping	Reviews and approves district physical development plans and provides technical guidance	Ensures Mukono PDP meets required planning standards and quality
Land Administration & Management	Oversees land registration, titling, and land tenure systems	Facilitates secure land tenure, land acquisition, and orderly development
Urban Development Guidance	Promotes sustainable urbanization, housing standards, and orderly settlement growth	Supports planned urban expansion and slum upgrading in Mukono
Capacity Building	Trains and supports local governments in physical planning and land management	Enhances Mukono District's technical capacity to implement the PDP
Monitoring & Compliance	Monitors adherence to planning standards and development controls	Ensures developments in Mukono follow approved plans and regulations
Coordination with Local Governments	Works with districts and urban authorities on planning and land issues	Strengthens collaboration between national and Mukono District institutions

Role of the National Planning Authority

Role Area	Function of the National Planning Authority / NPPB	Implication for Mukono PDP Implementation
National Development Planning Framework	Prepares long-term and medium-term frameworks (Vision 2040, NDPs)	Aligns Mukono PDP with national development and transformation goals

Policy Integration	Harmonizes sectoral, spatial, and economic plans across MDAs	Ensures Mukono PDP reflects national priorities (urbanization, infrastructure, industrial growth)
Strategic Guidance	Provides direction on national development priorities and spatial investment focus	Guides Mukono on key growth areas and catalytic projects
Public Investment Planning	Appraises and prioritizes public projects through the national Public Investment Management system	Ensures Mukono PDP projects are feasible, bankable, and fundable
Resource Allocation Alignment	Links planning frameworks to national budgeting processes	Improves chances of Mukono projects receiving central government funding
Monitoring & Evaluation	Tracks implementation of national plans and development outcomes	Provides benchmarks for assessing Mukono PDP performance
Inter-Sectoral Coordination	Coordinates ministries, departments, and agencies (MDAs)	Supports integrated, multi-sectoral implementation of Mukono PDP
Data & Evidence-Based Planning	Promotes use of statistics, modelling, and research in planning	Strengthens evidence-based spatial and investment decisions in Mukono
Physical Planning Regulation (NPPB Function)	Through the National Physical Planning Board, reviews, approves, and provides oversight on physical development plans in line with the Physical Planning Act	Ensures Mukono PDP meets statutory planning requirements and is legally compliant
Development Control & Appeals (NPPB Function)	Handles appeals, resolves planning disputes, and guides development control practices nationally	Provides a mechanism for resolving conflicts and enforcing orderly development in Mukono

The Role of Mukono district Council

Mukono District is the major stakeholder in the PDP implementation, responsible for providing services in its jurisdiction as mandated by the Local Government Act of 1997. The organization of Mukono district is such that the CAO is the accounting officer and the technical head of the District, while the LCV is the political head and has an elected council under him that is chaired by the speaker who is an elected member among the councillors.

The District therefore has legal powers to take various steps to execute its mandate as derived from the Local Government Act. The District's primary functions relate to physical planning, development of public markets, development control, revenue collection, management of the education and health, provision of roads infrastructure and maintenance, garbage management, environmental protection and management, provision of water and sanitation services, handling of labour and gender issues and promoting effective communication in the District. The District Council is also mandated under the Public Health Act (1964) and the Occupational Health and

Safety Act (2006) to be responsible for administering community health in the city, enforcing planning, and building regulations. In order to carry out her responsibilities the district council is required to make by-laws and impose penalties on defaulters.

Day to day coordination will be undertaken by the engineering, physical planning and natural resources departments. The department where physical planning falls will supervise and coordinate all activities outlined in the PDP and assess the progress of the projects and advise on the necessary approaches to accelerate project implementation. The departmental team will establish management procedures, information flow, public awareness and ways to integrate other activities in the PDP. Policy issues will be referred to the District Physical Planning committee for consideration before they are submitted to the Full Council for approval. Full Council is to provide policy guidance including evaluating project progress reports and advising on alternative solutions in enhancing the goals and objectives of the plan.

Role and Responsibilities of the physical planning committee

- To approve or defer development applications and recommend to the building committee
- To recommend development applications to the Board for change of land use
- To recommend to the urban council, the subdivision of land which may have a significant impact on contiguous land or be in breach of any condition registered against a title deed in respect of such land;
- To determine development applications relating to industrial location, dumping sites, or sewerage treatment which may have an injurious impact on the environment as well as applications in respect of land adjoining or within a reasonable vicinity of safeguarding areas
- To prohibit or control the use and development of land and buildings in the
- interests in the proper and orderly development of its area;
- To control or prohibit the consolidation or subdivision of land or existing plots;
- To ensure the proper execution and implementation of approved local physical development plans;
- To initiate the formulation of by-laws to regulate physical development; and
- To ensure the preservation of all land planned for open spaces, parks, urban forests and green belts, environmental areas, social and physical infrastructure, and other public facilities, following the approved physical development plan.
- Role and Responsibilities of the physical planner
- To monitor and enforce physical planning compliance. Ensure that building plans conform to the land use plan.
- To direct and control spatial planning, and urbanization within the Town Council
- Guiding developers in processing proper development applications and building plans
- Enforcing the Physical Planning Act, CAP 142; and other relevant laws
- Demarcating plots in towns/ trading centers
- Inspecting development applications (structures/ buildings) in town/ trading centers to ensure compliance with the land use plan;
- Maintaining the planning information, equipment, and records;

- Guiding the urban Authorities on balanced development and equitable allocation of resources

Role and Responsibilities of Works and Technical Services Department

- To ensure proper adherence to standards during project execution as set out in the design dossiers and documents.
- To ensure that timely technical guidance is offered to the public.
- To provide a sound all-weather road network accessible at all times by all types and forms of transport
- Supervising engineering works
- Preparing status reports on the building and structural plans implementation
- Approving buildings and other structural plans
- Enforcing engineering and works policies
- Carrying out regular road inventories
- Producing road condition assessments reports
- Supervising culvert installation and fabrication
- Preparing and inspecting routine maintenance programs
- Sensitizing road users on the importance of roads

N.B: The physical planning unit must collaborate with the works department to ensure that all planned roads are factored in the work plan for opening. This will help to open up the town in terms of accessibility and create new areas for development.

Role of the Private Sector and the Development Partners

Development partners such as the World Bank, ADB, IMF, European Union, GGGI, SIDA, IGAD, KOICA, GIZ, WFP, JICA, BTC, Irish Aid, UKAID, UNICEF, USAID, and DANIDA often provide substantial resources to support major infrastructure projects including technical schools, hospitals, roads, solid waste sites, and markets. Meanwhile, the private sector acts as a primary driver of economic growth by investing in commercial developments, large-scale housing, and industrial ventures. For the Mukono District Physical Development Plan (PDP) to be effectively realized, it is essential to actively involve both development partners and the private sector. This can be achieved through targeted publicity campaigns and effective mobilization efforts led by the District authorities.

The Role of CBOS/NGOS

Mukono district hosts numerous local and international NGOs and Community Based Organizations (CBOs). The Mukono District Local Government acknowledges that sustainable development in communities is achievable through partnerships with these organizations. It is important for District authorities to recognize and utilize the capacities of NGOs and CBOs in areas such as fundraising, expertise, management, and community mobilization and sensitization.

These organizations are vital in community capacity building, environmental monitoring, public awareness campaigns, fundraising, and education all critical activities for the successful implementation of the Physical Development Plan (PDP). Coordination and oversight of NGOs and CBOs fall under the responsibilities of the District, Town Council, and sub-county Community Development Officers (CDOs). Regular meetings involving CDOs, organization coordinators, and community leaders should be held to identify and collaboratively implement joint community programs and projects between the District authorities and these organizations.

The Role of the Media

The media plays a crucial role in raising mass awareness to ensure sustainable community participation at all levels. This is essential for initiating the desired changes and reinforcing progress during the implementation phases. Journalists based in the District are a valuable resource and should be actively involved in the implementation process. Many journalists and local radio station owners participated in the PDP consultative workshops, giving them a solid understanding of the Vision and Objectives of the District's strategic planning. Nonetheless, organizing seminars and workshops to develop effective mass communication strategies remains important. These meetings can be convened and led by the District Information Officer, who will then coordinate with media outlets to broadcast planning materials and messages to the public.

7.5 Alignment of Mukono PDP vs National Priorities

The implementation of the Mukono District Physical Development Plan (PDP) is anchored within the broader national development and spatial planning frameworks of Uganda, particularly the National Development Plan IV and the National Physical Development Plan. These frameworks set out the country's strategic priorities in areas such as infrastructure development, industrialization, urbanization, environmental sustainability, and human capital development.

As part of the Greater Kampala Metropolitan Area, Mukono plays a critical role in supporting metropolitan growth, regional connectivity, and economic transformation. The PDP translates these national priorities into spatially defined proposals and sector-specific interventions tailored to the district context.

The table below therefore illustrates how the key proposals within the Mukono PDP align with and contribute to the achievement of national development and physical planning priorities, demonstrating both policy coherence and strategic integration across planning levels.

Table 28: Alignment of Mukono PDP vs National Priorities

National Priority Area	Relevant Mukono PDP Proposals	Alignment Explanation
Infrastructure Development (NDP IV & NPDP)	Roads (514 km), GKMA corridors, railway, ferry terminals, inland port, multimodal terminal	Directly supports national goal of integrated transport networks and logistics efficiency, especially along the Kampala–Jinja corridor
Industrialization & Economic Growth (NDP IV)	Agro-industrial hubs, industrial parks, growth corridors, markets	Promotes value addition, trade, and job creation consistent with national industrialization agenda
Urbanization & Spatial Planning (NPDP)	Urban centres, planning enforcement, development control, transport terminals	Supports planned urban growth, reduces sprawl, and strengthens urban hierarchy in GKMA
Housing & Human Settlements (NDP IV & NPDP)	Slum upgrading, rural housing, regularization, urban services	Aligns with goal of improving housing conditions and promoting inclusive urban development
Agro-industrialization (NDP IV)	Agro-processing parks, abattoirs, landing sites, urban agriculture	Enhances agricultural value chains and food systems, a core pillar of NDP IV
Environmental Sustainability (NDP IV & NPDP)	Wetland restoration, buffer zones, forestry, catchment protection	Directly supports climate resilience, ecosystem protection, and sustainable land use
Waste Management & Sanitation (NDP IV)	Landfills, transfer stations, sludge treatment, collection systems	Improves urban environmental health and aligns with national sanitation goals
Human Capital Development (NDP IV)	Health centres, hospital, schools, recreation facilities	Supports improved health, education, and social wellbeing
Tourism Development (NDP IV)	Waterfront development, cultural sites, tourism access roads	Aligns with national tourism growth strategy and diversification
ICT & Digital Transformation (NDP IV)	NITA-U network expansion, ICT hubs	Supports digital economy, smart cities, and innovation systems
Governance & Service Delivery (NDP IV)	Administrative offices, community centres, planning committees	Strengthens institutional capacity and decentralized service delivery
Integrated Transport & Mobility (NPDP)	NMT (walkways, cycling), multimodal transport, terminals	Promotes sustainable mobility and integrated transport systems

Polycentric Development (NPDP)	Service centres, Nakifuma terminal, markets	Reinforces development of multiple urban nodes beyond Kampala
Regional Integration (NPDP)	Inland port (Kibanga), railway extension	Enhances Mukono's role in regional trade and logistics systems

7.6 Alignment of Mukono PDP vs Uganda Tenfold Growth Strategy (2025)

The Mukono District Physical Development Plan is strongly aligned with Uganda's Tenfold Growth Strategy. Its proposals directly support the Strategy's key priorities by:

- Promoting agro-industrialization through irrigation, markets, and agro-processing.
- Strengthening physical infrastructure (roads, rail, ports, and transport terminals) to improve competitiveness.
- Supporting tourism and trade through improved connectivity and lakeshore development.
- Conserving natural capital through wetland and forest protection.
- Encouraging planned urbanization and investment through designated growth centres and industrial zones.
- Improving public health and environmental sustainability through sanitation and waste management infrastructure.

Table 28: Alignment of Mukono PDP vs Tenfold strategy 2025

Mukono PDP Proposal	Example Locations in the PDP	Aligned Tenfold Growth Strategy Pillar	Contribution to the Tenfold Growth Strategy
Upgrade strategic road network	Ntenjeru–Bule Road, Kigombya–Setta Nazigo Road, Namataba–Kisoga Road	Physical Capital & Infrastructure	Improves connectivity, reduces transport costs, and facilitates trade and industrialization.
Develop public transport terminals	Mukono Bus Park; Taxi Parks at Katosi, Kasawo, Mpatta, Namataba, Kisoga, Mpunge, Ntenjeru and Nakifuma	Business Environment & Urban Productivity	Enhances mobility, supports commerce, and improves access to markets and services.
Develop inland water transport	Kibanga Inland Port; Ferry terminals at Katosi, Mpatta and Mpunge	Trade, Tourism & Export Growth	Improves regional trade, fisheries, tourism, and logistics along Lake Victoria.
Railway extension	Kibanga Port–Nakifuma Railway linked to Kyetume ICD	Physical Capital	Supports efficient cargo movement, industrialization, and export competitiveness.

Industrial parks and agro-processing zones	Kimenyede, Mpatta, Kyampisi, Namuganga, Kasawo, Kisoga and Ntenjeru	Agro-Industrial Development (ATMS)	Promotes value addition, manufacturing, employment, and export growth.
Modern market development	Katosi, Kasawo, Nakifuma–Nagalama, Namataba and Ntenjeru–Kisoga	Commercialization of Agriculture	Strengthens agricultural marketing, structured trade, and farmer incomes.
Irrigation and agricultural modernization	Lake Victoria shoreline, River Sezibwa and River Lwajjali catchments	Agro-Industrial Development	Supports year-round production, higher productivity, and climate-resilient agriculture.
Planned residential development	High density: Nakifuma, Katosi, Kasawo; Medium density: Nama, Nakisunga; Low density: Ntunda, Namuganga, Mpunge	Land Use Planning & Urban Productivity	Promotes orderly urban growth while protecting productive agricultural land.
Develop growth centres	Ntenjeru–Kisoga, Kasawo, Nakifuma–Nagalama, Namataba and Katosi	Investment & Urban Development	Creates service centres that stimulate investment, employment, and regional economic growth.
Develop waste management facilities	Katikolo, Kimenyede, Koome and Katosi	Environmental Sustainability	Improves waste management, sanitation, and environmental quality.
Develop waste transfer stations	Ntenjeru, Kasawo, Nakifuma and Namataba	Environmental Sustainability	Enhances efficient collection and disposal of municipal waste.
Develop faecal sludge treatment facilities	Central facility at Katikolo; decentralized facilities at Katosi, Kasawo, Ntenjeru and Nakifuma	Human Capital & Public Health	Improves sanitation, public health, and labour productivity.
Protect wetlands,	Lake Victoria (200 m buffer); River Sezibwa	Natural Capital	Conserves ecosystems that support agriculture,

forests and water bodies	(100 m buffer); wetlands at Namanve, Mbalala and Namasoloza		tourism, and climate resilience.
Climate change adaptation measures	District-wide tree planting, wetland restoration, drainage improvements, BRT, cycling and pedestrian infrastructure	Natural Capital & Climate Resilience	Builds resilience against climate change and promotes sustainable urban development.
Tourism and fisheries development	Kibanga Inland Port, Katosi Landing Site and Lake Victoria tourism facilities	Tourism Development (ATMS)	Diversifies tourism products, strengthens fisheries, and increases local incomes.
Develop strategic economic corridors	Namanve–Namataba, Wantoni–Kisoga–Ntenjeru–Katosi, Mukono–Kalagi, Kisoga–Kibanga Port and Nakisunga–Mpatta	Investment, Trade & Physical Infrastructure	Facilitates industrial investment, regional integration, logistics, and export-led growth.

7.7 Monitoring and Plan Evaluation/Review

One of the key stages of all development projects is the progress tracking of the implementation of the development projects and the continual feedback run shaped by an elaborate monitoring and evaluation framework. In implementing the District PDP, when and how individual sectorial projects are being executed, together with detailed monitoring indicators contribute to the overall success of the PDP.

Monitoring and evaluation provide a basis for adaptive management and continued improvement of environmental conditions and guide the continuous measurement of progress indicators throughout the plan implementation. It guides the measurement of the achievement of various aspects of the proposed projects and the assessment of project viability as projected in the plan.

The District Physical Planner (s) shall prepare a Monitoring Report every 5 years and should include the following factors:

- Changes in key demographic and economic considerations
- Trends in development activity, by building type, in the growth Centres and wards
- Impacts of climate change and environmental risk adaptations
- Assessment of conformity of new development with the strategies and policies of the PDP and implications for the district's' settlement structure

- Impacts on core assets including forests, natural heritage system, historical and cultural heritage, food and agriculture of the communities
- Significant land use changes and challenges
- The percentage of the PDP that has been implemented.

Table 29: Monitoring and Evaluation Framework

Theme	Sub-theme	Key Indicator(s)	Means of Verification (Monitoring Tools)	Frequency	Responsibility
Transport	Community Access Roads	Km of roads upgraded to all-weather standard	Engineering reports, site inspections, GIS mapping	Quarterly	District Engineer
	Secondary Roads	% of priority roads upgraded	Progress reports, contractor reports	Quarterly	MoWT / LG, MoK
	GKMA Roads	No. of corridors completed	Project completion reports	Quarterly	Central Gov't, MoK, MoWT
	NMT	Km of walkways/cycle lanes; No. of trees planted	Field surveys, GIS, tree inventory	Quarterly	Urban Authority
	Inland Port	% completion of Kibanga Port	Project reports, site inspection	Annual	MoWT
	Ferry Terminals	No. of terminals constructed	Site verification reports	Quarterly	MoWT
	Transport Terminals	No. of parks constructed/upgraded	Physical inspection	Quarterly	LG
	Multimodal Terminal	% completion of Nakifuma terminal	Progress reports	Annual	MoWT
	Railway	Km of railway extended	Project reports	Annual	URC
Housing	Informal Settlements	No. of households upgraded	Household surveys, GIS mapping	Bi-annual	MoLHUD, MoK, LG / NGOs
	Planning Enforcement	No. of enforcement actions taken	Committee reports	Quarterly	Physical Planning Committee, MoK, MoLHUD

	Development Control	% of illegal structures regularized	Permit records, inspections	Quarterly	LG
	Rural Housing	No. of housing units developed	Field verification	Annual	LG
	Urban Services	% of households with basic services	Utility data, surveys	Annual	NWSC / UMEME
Trade	Markets Major	No. of markets constructed	Site inspection	Quarterly	Ministry of Trade, MoK, LG
	Markets Local	No. of parish markets operational	Field reports	Quarterly	LG
	Urban Centres	No. of service centres developed	Planning reports	Annual	LG
	Growth Corridors	Km of infrastructure developed	GIS, project reports	Annual	Central Gov't
	Agro-industrial	No. of industrial hubs established	Investment reports	Annual	UIA, Ministry of trade
Waste	Landfills	No. of landfill sites developed	Environmental audits	Annual	NEMA / LG
	Transfer Stations	No. constructed	Site inspection	Quarterly	LG
	Collection Systems	No. of trucks/bins procured	Procurement records	Quarterly	LG
Sanitation	Faecal Sludge	No. of treatment plants built	Site inspection, operational reports	Annual	NWSC
Environment	Wetlands	Hectares restored	GIS, satellite imagery	Annual	NEMA
	Buffer Zones	% compliance with buffer regulations	Field inspections	Quarterly	LG
	Forestry	No. of trees planted/survival rate	Tree audits	Bi-annual	Forestry Dept
	Water Resources	No. of protected catchments	Environmental reports	Annual	MWE

Agriculture	Agro-processing	No. of agro parks established	Investment reports	Annual	MAAIF
	Landing Sites	No. upgraded	Site inspection	Quarterly	LG
	Abattoirs	No. constructed/rehabilitated	Veterinary reports	Quarterly	LG
	Urban Farming	% households practicing urban farming	Surveys	Annual	LG
Social	Health Facilities	No. upgraded	Health reports	Quarterly	MoH, LG
	New Hospital	% completion	Project reports	Annual	MoH, LG
	Education	No. of schools built	Education reports	Annual	MoES, LG
	Recreation	No. of facilities developed	Site inspection	Annual	LG
ICT	Digital Infrastructure	Km of network extended	Technical reports	Annual	NITA-U
	ICT Hubs	No. established	Project reports	Annual	NITA-U
Governance	Admin Offices	No. constructed	Site inspection	Quarterly	LG
	Community Centres	No. built	Field reports	Annual	LG
Tourism	Waterfront	% completion of tourism belt	Project reports	Annual	UTB
	Cultural Sites	No. developed	Site inspection	Annual	Ministry of Tourism, LG
	Access Roads	Km improved	Engineering reports	Quarterly	LG, MoWT

A review and update of the District PDP should be undertaken at least every 10 years, if the monitoring report recommends the same. The amendments shall make adjustments to ensure the objectives of the PDP are being met and ensure that the strategies, policies established remain achievable and appropriate with regard to changing social, economic, environmental, technological and political circumstances.

Amendments to the Plan

The Plan will be reviewed and updated every 10 years to take into consideration the new developments and comprehensive amendment study made after 2040. The provisions of this review are outlined in the Physical Planning Act CAP 142. Other amendments prior to the 10-year review are generally discouraged. However, special situations may exist and in considering any

reviews, the District Physical Planner (s) or Physical Planning Committee will take into consideration:

- The need for the proposed change
- The implications, the amendment may have for other components or Core Assets recognized in the PDP.
- The impact of the proposed change on the ability of the District to achieve its goals, objectives, vision, strategies and action plans as highlighted in the PDP.

All amendments to the PDP shall be subject to the requirements contained in the Physical Planning Act CAP 142.

Plan Interpretation

The Physical Development Plan document includes Thematic Maps, District Physical Development Plan, and the Planning Report. The District Physical Development Plan shall provide the framework for the Local Area plans/ detailed plans, which provide more detail for those identified communities.

Table 30: Mukono District PDP Costed Implementation Matrix

Programme Area	Sub-Programme / Project	Total Cost (UGX)	Timeframe	Key Outputs to be Achieved	Source of Funds	Implementing Agency
Governance & Public Sector Management / Land Administration	A1: District PDP implementation (consultation, sensitisation, capacity building)	50 Million	Short term (2025–2030)	PDP awareness created; stakeholders trained; implementation framework operational	Central Govt, Local Revenue, Loans, Grants, PPP	MLHUD, Ministry of Kampala, Mukono DLG, Town Councils, Sub-counties
Governance & Planning	A2: Detailed structure plans for towns & growth centres	19,818 Billion	Medium term (2030–2037)	Approved structure plans for urban centres and growth nodes		MLHUD, Ministry of Kampala, Mukono DLG, Town Councils
Land Management & Administration	A3: SLAAC / tenure-responsive planning	31.8 Million	Long term (2037–2040)	Cadastral maps produced; land titles regularised; secure tenure systems		MoLHUD, Mukono DLG, Sub-counties
Urban Governance & Development Control	A4: Development control enforcement	100 Million	Routine	Controlled development; reduced illegal structures; improved compliance		NPPB, MLHUD, Ministry of Kampala, Mukono DLG, Town Councils
Resource Planning & Infrastructure Management	A5: Resource mapping	150 Million	Medium term	Resource inventory and spatial database developed		NPA, Ministry of Kampala, MDAs, District, Sub-counties
Integrated Transport Infrastructure	B1: Urban support infrastructure (drainage, lighting, parking)	132,944 Billion	Medium/Long term (2037–2040)	Functional urban infrastructure systems in major centres		Ministry of Kampala, MoWT, MDAs, DLG, Town Councils
Transport Infrastructure Development	B2: Urban access roads		Medium/Long term	Upgraded and functional urban road network		MoWT, UNRA, DLG

Transport & Rural Connectivity	B3: Rural access roads		Medium/Long term	Improved rural road connectivity across district		MoWT, DLG
Transport & Logistics Development	B4: Railway, inland port, ferry terminals	Railway: 18B/km; Port: \$180M; Ferry: \$4.3M	Long term	Railway extension; functional inland port; operational ferry terminals		MoWT, Uganda Railways, Ministry of Trade
Water & Sanitation Infrastructure	B5: Wastewater & solid waste systems	3B (WTP); 16.1B (SWM)	Long term	Wastewater treatment plant; engineered landfill system operational		MWE, DLG, Urban Councils
Agro-industrial Development	B6: Kyetume Abattoir rehabilitation	4 Billion	Medium/Long term	Functional modern abattoir		MAAIF, DLG
Water Supply Services	B7: Urban water supply	2.246 Billion	Medium/Long term	Expanded and reliable urban water supply network		NWSC, MWE, DLG
Rural Water Supply	B8: Rural water supply		Medium/Long term	Increased access to safe rural water		MWE, DLG
Trade & Urban Economic Development	B9: Market infrastructure for small towns	1 Billion	Medium/Long term	Functional modern markets in growth centres		DLG, Sub-counties
Industrialisation / Agro-processing	B10: Agro-industrial infrastructure	2.246 Billion	Long term	Agro-industrial parks and production hubs established		UIA, MDAs
ICT & Digital Transformation	B11: ICT infrastructure & hubs	28,827 Billion	Long term	ICT hubs operational at district and sub-county level		NITA-U, ICT Ministry
Human Capital Development (Health)	B12: Health infrastructure	7,959 Million	Long term	District hospital built; HC II–IV upgraded		MoH, DLG

Human Capital Development (Education)	B13: Education infrastructure	8,488 Millions	Medium/Long term	New and upgraded schools (primary & secondary)		MoES, DLG
Higher Education Development	B14: Tertiary institutions infrastructure	—	Medium/Long term	Expanded universities/colleges infrastructure		MoES, DLG
Tourism Development	B15: Tourism & heritage infrastructure	7,304 Million	Long term	Improved tourism sites, cultural heritage and access roads		MTWA, UTB, DLG
Environment & Natural Resources	B16: Environmental conservation	11,310 Million	Long term	Restored wetlands, protected forests and catchments		NEMA, NFA, MWE
Agriculture Modernisation	B17: Agricultural infrastructure	183.3 Million	Long term	Irrigation systems developed; tractors and mechanisation introduced		MAAIF, DLG
Energy & Electrification	B18: Energy infrastructure	472,149 Billion	Medium/Long term	Expanded electricity, solar and renewable energy systems		Ministry of Energy, DLG
Social Development & Recreation	B19: Sports and recreation infrastructure	2.945 Billion	Long term	Sports grounds, parks, cultural centres established		MDAs, DLG
Total		869.51 Billion				

NB Short-term (5 years) Medium Term (7 years) and Long Term (beyond 7-15 Years).

Table 31: Priority projects in the Greater Kampala Urban Growth Area (GKUGA), focusing on Mukono District. Profiles across transport and infrastructure sectors

Project	Project Brief	Total Cost (USD)	Time Frame	Source of Funds	Implementing Agency
Upgrading of Jokas–Namanve–Mukono Road (RD-S16)	Upgrading 14 km road to provide an alternative route to Jinja-Kampala highway and improve regional connectivity	13.0 Million	2024–2030 (Short Term)	Government, Development Partners, Loans	Uganda National Roads Authority (UNRA), Ministry of Works and Transport
Uganda Railways Corporation Capacity Building (PT-S1)	Rehabilitation and modernization of 92 km railway network and institutional strengthening	366.3 Million	2024–2030 (Short Term)	Government, Development Partners	Uganda Railways Corporation, Ministry of Works and Transport
BRT Pilots – CBD–Kajjansi, CBD–Mukono, CBD–Kasangati (PT-S2–4)	Development of pilot Bus Rapid Transit corridors to improve public transport and reduce congestion	628.0 Million	2024–2030 (Short Term)	Government, PPP, Development Partners	Kampala Capital City Authority, Ministry of Works and Transport
Deep Groundwater Supply System for North GKUGA (WS-01)	Construction of boreholes, tanks, pipelines and pumping systems for suburban water supply	85.44 Million	Short–Medium Term	Government, Development Partners	National Water and Sewerage Corporation, Ministry of Water and Environment
Water Supply System from WTP – West GKUGA (WS-02)	Development of water treatment plant, reservoirs, pipelines and pumping stations	424.75 Million	Medium–Long Term	Government, Development Partners	National Water and Sewerage Corporation, Ministry of Water and Environment
Improvement of Basic Drainage Facilities (DR-02)	Installation of flood monitoring equipment and drainage improvement works	To be determined	2024–2030	Government, Development Partners	Ministry of Water & Environment, NEMA, UNMA, MoWT

Nantabulirwa 33/11kV Distribution Substation (PS-01)	Construction of power substation and 33kV connections to support urban growth in Mukono/Namanve	3.0 Million	As soon as practicable	Utility Investment, PPP	UMEME, UEDCL, ERA
Solid Waste Management Master Plan & Capacity Building (SW-01 & SW-02)	Preparation of solid waste master plan and institutional capacity strengthening	3.0 Million	2025–2030	Government, Donors	MKCC, MLHUD, NPA, Local Governments
Kampala Waste PPP Project (SW-03)	Development of Ddundu landfill, Kiteezi transfer station and waste diversion facilities	1,149.4 Million	2025–2050	PPP, Government, Private Sector	KCCA and Neighbouring Local Authorities
Solid Waste Management for Metropolitan Centres (SW-04 & SW-05)	Collection systems, transfer stations, waste diversion facilities and landfill for Mukono metropolitan centre	425.4 Million	2025–2050	Government, PPP, Development Partners	MKCC, MLHUD, NPA, KCCA, Local Governments
Preventing the Growth of Emerging Slums	Project for Preventing the Growth of Emerging Slums near Mukono Metropolitan Centre	2.0 Million	Long term	Government, PPP, Development Partners	Mukono District MoLHUD
Total		USD 3.30 Billion			

8 CONCLUSIONS & RECOMMENDATIONS

8.1 Conclusions:

The success of any planning scheme in shaping future growth patterns and influencing public policy decisions is dependent upon the degree to which the plan is carried out by those responsible for its implementation.

Planning regulations and standards are not the only means available to implement this plan. Land acquisition for public facilities; construction of roads, railway line, abattoir, schools, and health facilities; and extension of public water and electricity to name a few activities all play a part in bringing about the community aspirations in the PDP. Public education related to physical planning and plan implementation related to the vision of the community as a whole is a key component of implementation.

During implementation, developments in the planning area should follow the proposal set by the PDP, also it should adhere to the planning regulations and development specifications established by the legally stipulated National Physical Development Standards, to achieve sustainable orderly development.

This implementation framework shall guide land use development in the District for the next 14 years (2026 - 2040) and the plan is subject to review at the end of the said planning period.

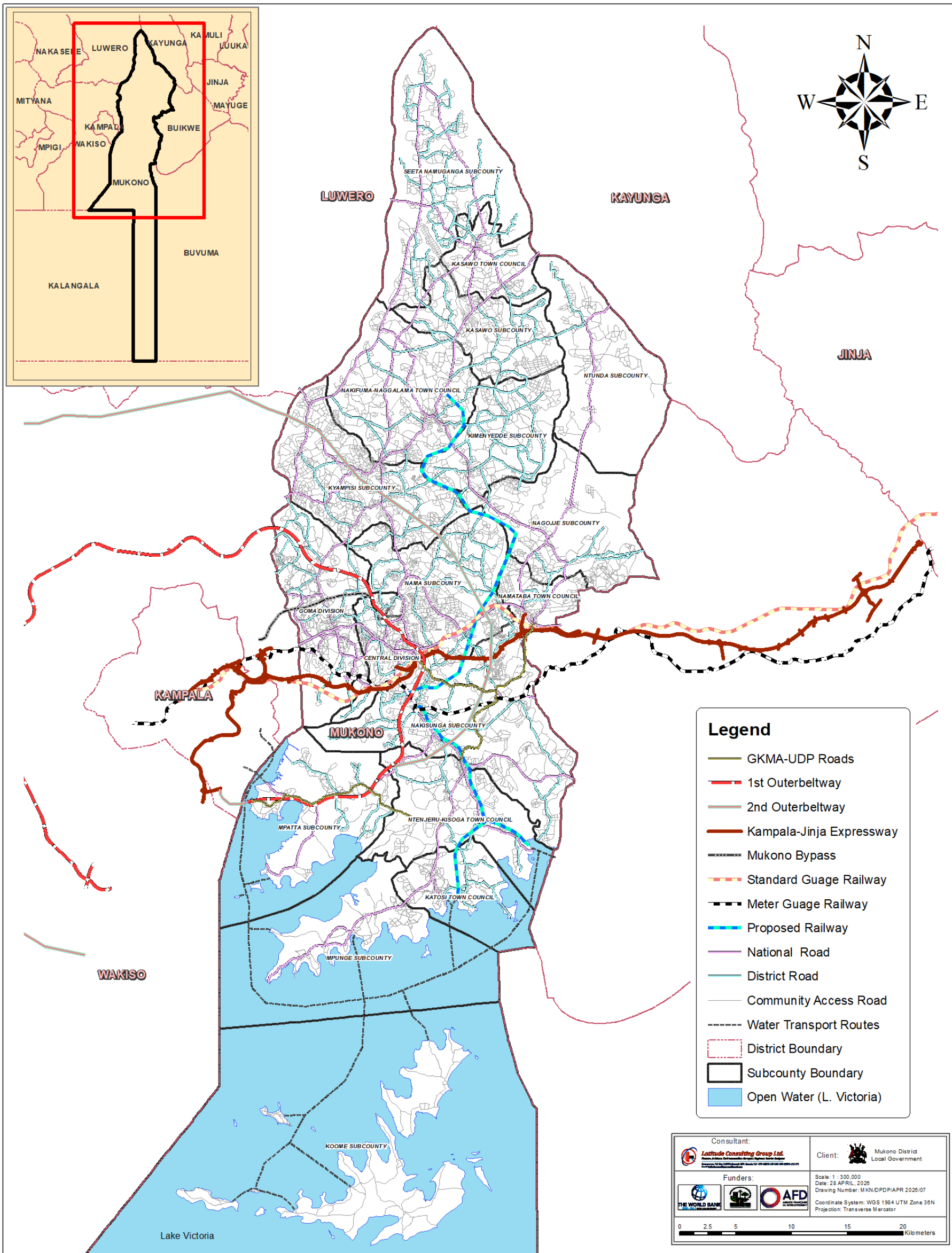
8.1 Recommendations:

- **Market the Plan:** Community sensitization on the issue of physical planning and the implementation of the proposed PDP should be a continuous process to ease community tension and minimize compensation and hence development cost. The district should continue with public outreach efforts and look for ways to keep the plan in the public eye. For people to value and use the plan, they must have access to it.
- The district may sponsor an event to highlight the availability of the plan and any other key issues. Such an event could be a clean-up day, or a tree-planting ceremony to initiate the implementation of the Plan.
- **Establish a Task Force:** A popular technique for seeking plan implementation is to establish a task force or several implementation committees assigned the responsibility of monitoring and implementing various recommendations and actions of the plan. This technique is helpful, as it reduces the workload of the physical planning committee and keeps recommendations and projects in the public's eye. A task force or standing committee can be made up of both public officials and community volunteers, as well as physical planning committee members.
- **Reference the Plan in Local Decisions:** The PDP should be referenced at public meetings and public hearings. The goals, policies, and recommendations of the plan must be integrated into the day-to-day activities of the community or it will not be fully utilized as a tool for

guidance, focus, and change. The question that should always be asked concerning any district project or decision is: "Is it consistent with the PDP?".

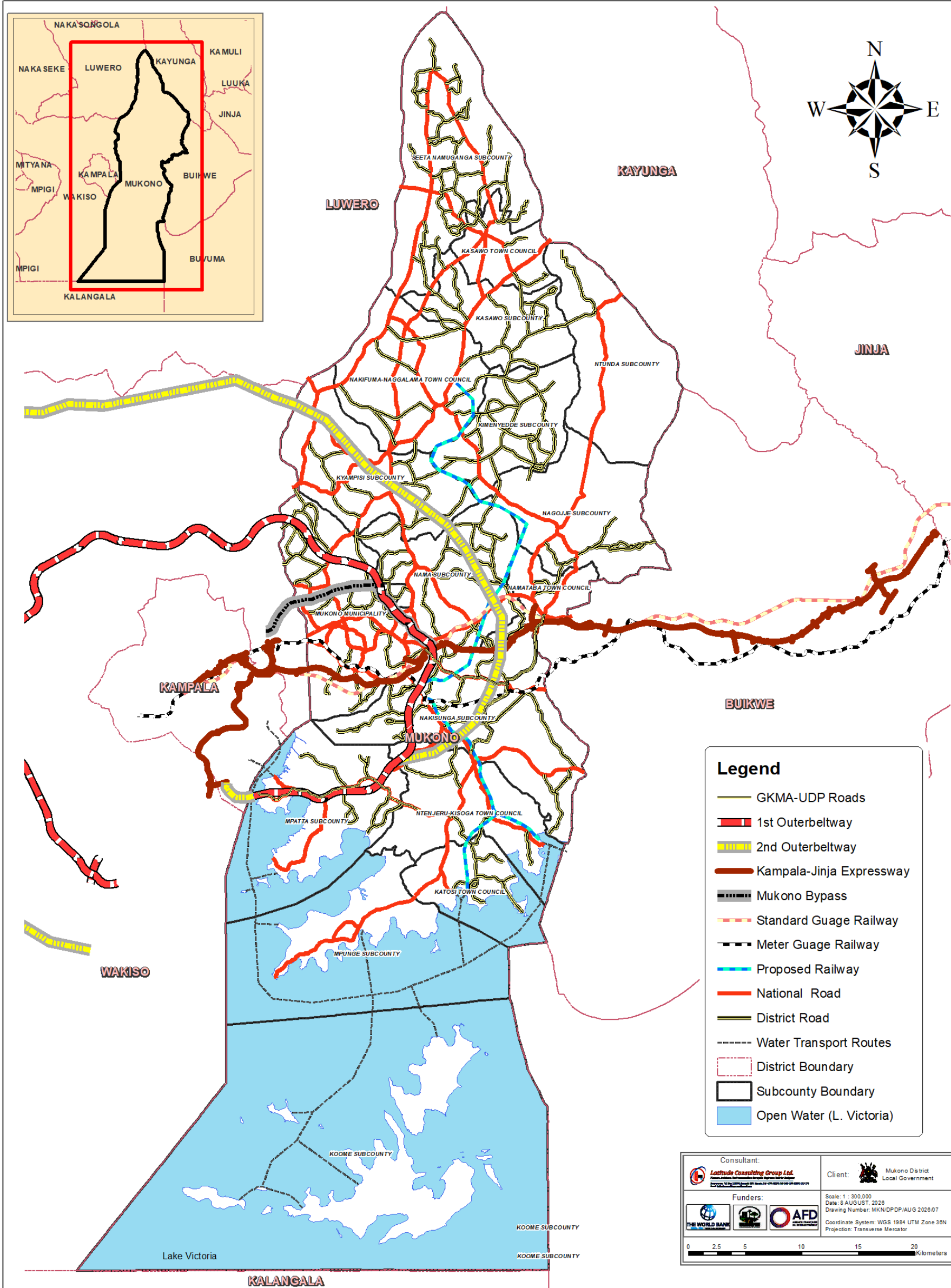
- **Create a Success Story:** Every great achievement begins with a small first step. An early success story will help to build momentum for more challenging and time-consuming tasks. If possible the success story should be made in the first year of plan implementation; this will build confidence and a strong attachment of the community to the plan.
- **Make Printed Copies:** Printed copies of the published plan should be circulated widely in the locality such as at the district, by elected officials, committees, task forces, and in the community. Newly elected leaders should receive a copy when they assume public office. If possible district Libraries, schools, and other public places where people may go to find information should be given copies of the plan. Local real estate professionals, architects, engineers, surveyors, builders, lawyers, and bankers should also have copies of the plan.
- **Prepare Posters:** It is often helpful to develop visually intriguing posters or infographics that can describe and summarize the goals of the plan. These can be distributed around the community.
- There is a need for the district to prioritize the development proposals that benefit the community and allocate funds based on short, medium, and long-term phases as described in the table above.
- Developing institutionalized coordination mechanisms particularly to link the decision-making processes about budgets and infrastructure improvement with those of physical planning. This will also help in ensuring transparency as well as accountability
- To minimize the cost of development, the Mukono district ought to involve the landowners in the development process. This can be achieved by declaring some of the developing corridors as a concession for development through people's participation where landowners will become development partners and share the development cost through the contribution of a portion of their land

Mukono District Physical Development Plan: 2026 - 2040



District Roads, Railway, & Water Transport Network

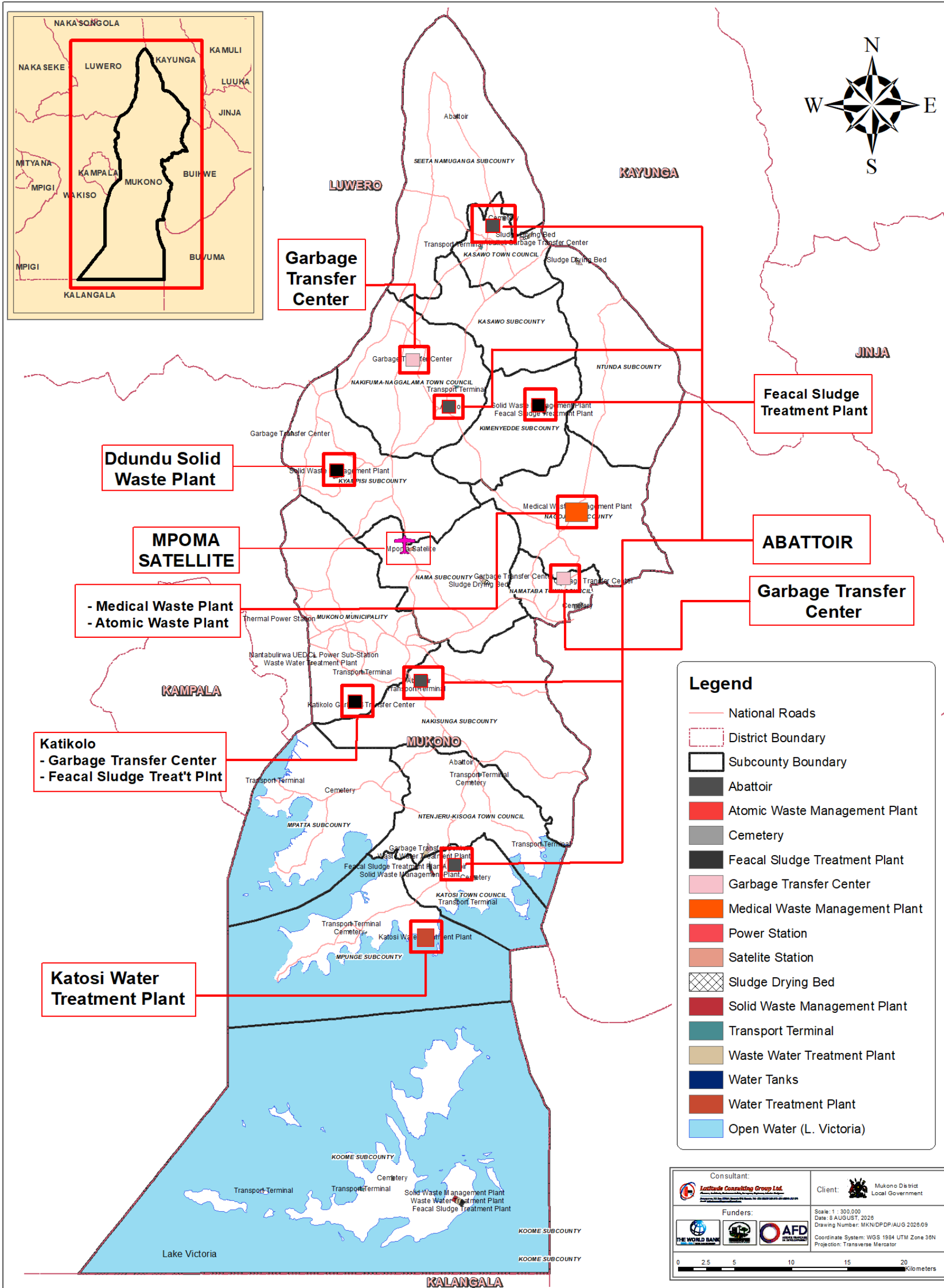
Mukono District Physical Development Plan: 2026 - 2040



District Roads, Railway, & Water Transport Network

Figure 38: Transport Infrastructure

Mukono District Physical Development Plan: 2026 - 2040



Utility Infrastructure Landuse

Figure 39: Utility Infrastructure land use Plan

Mukono District Physical Development Plan: 2026 - 2040

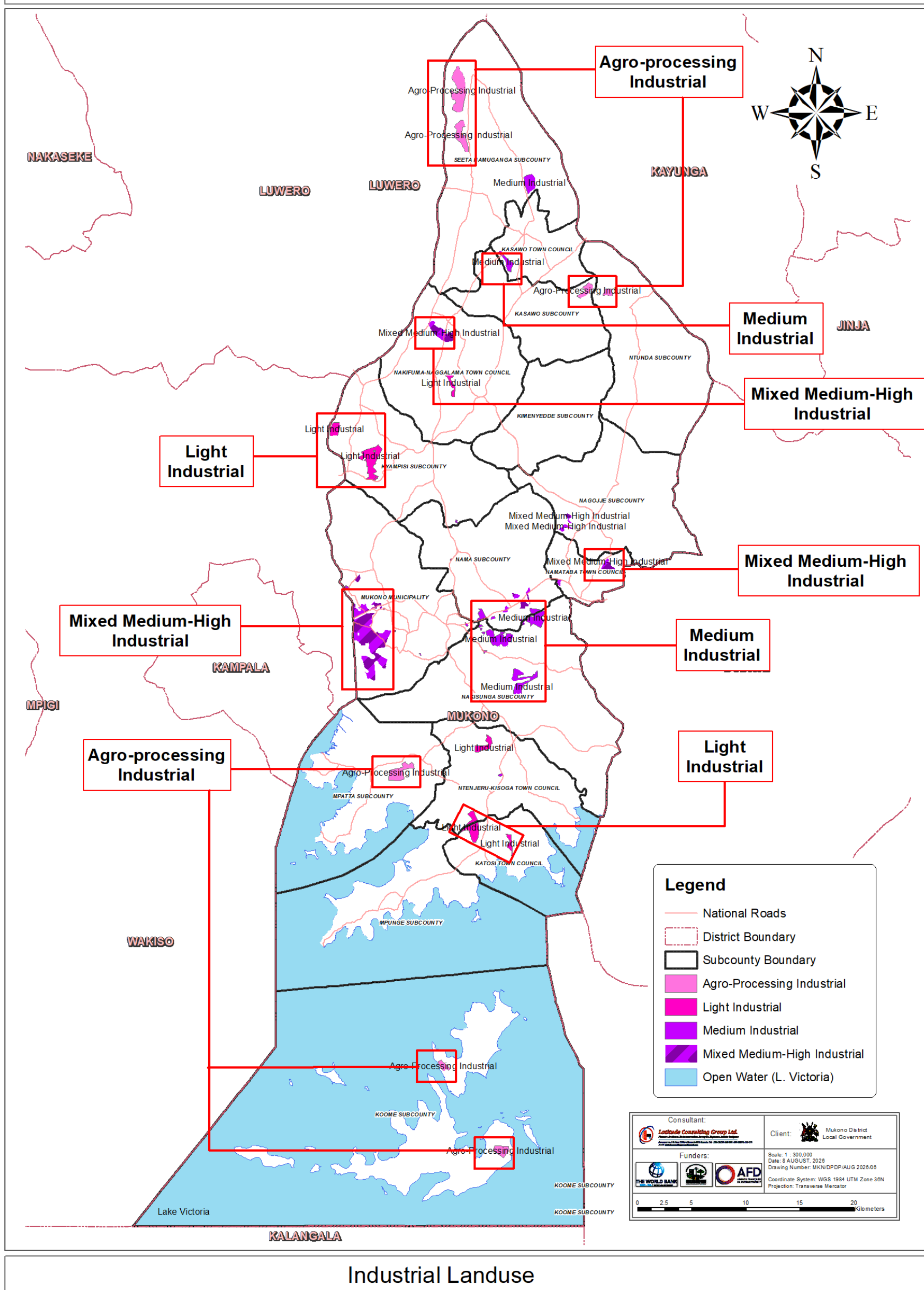
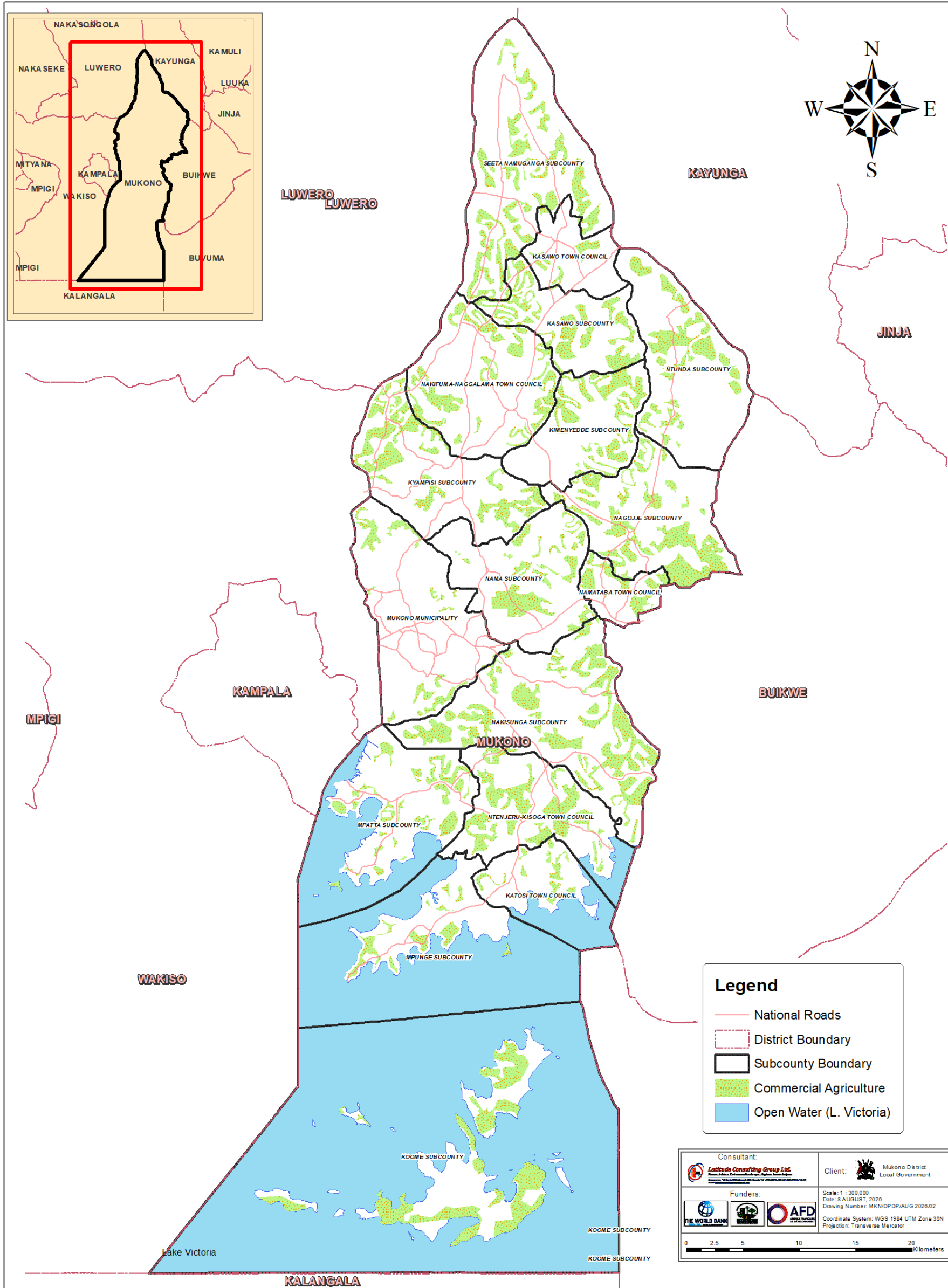


Figure 40: Industrial Land use Plan

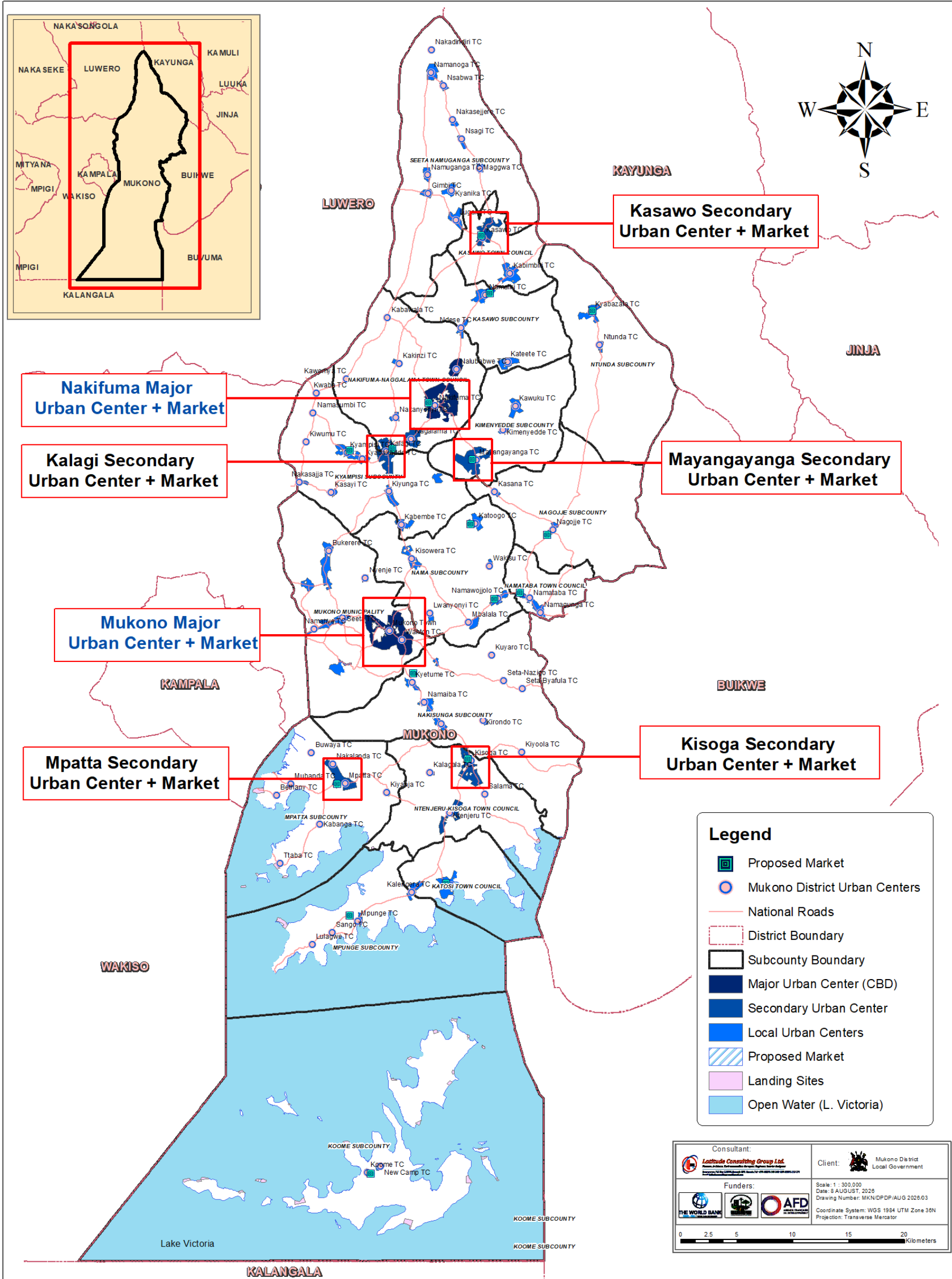
Mukono District Physical Development Plan: 2026 - 2040



Agricultural Landuse

Figure 41: Agricultural Land use

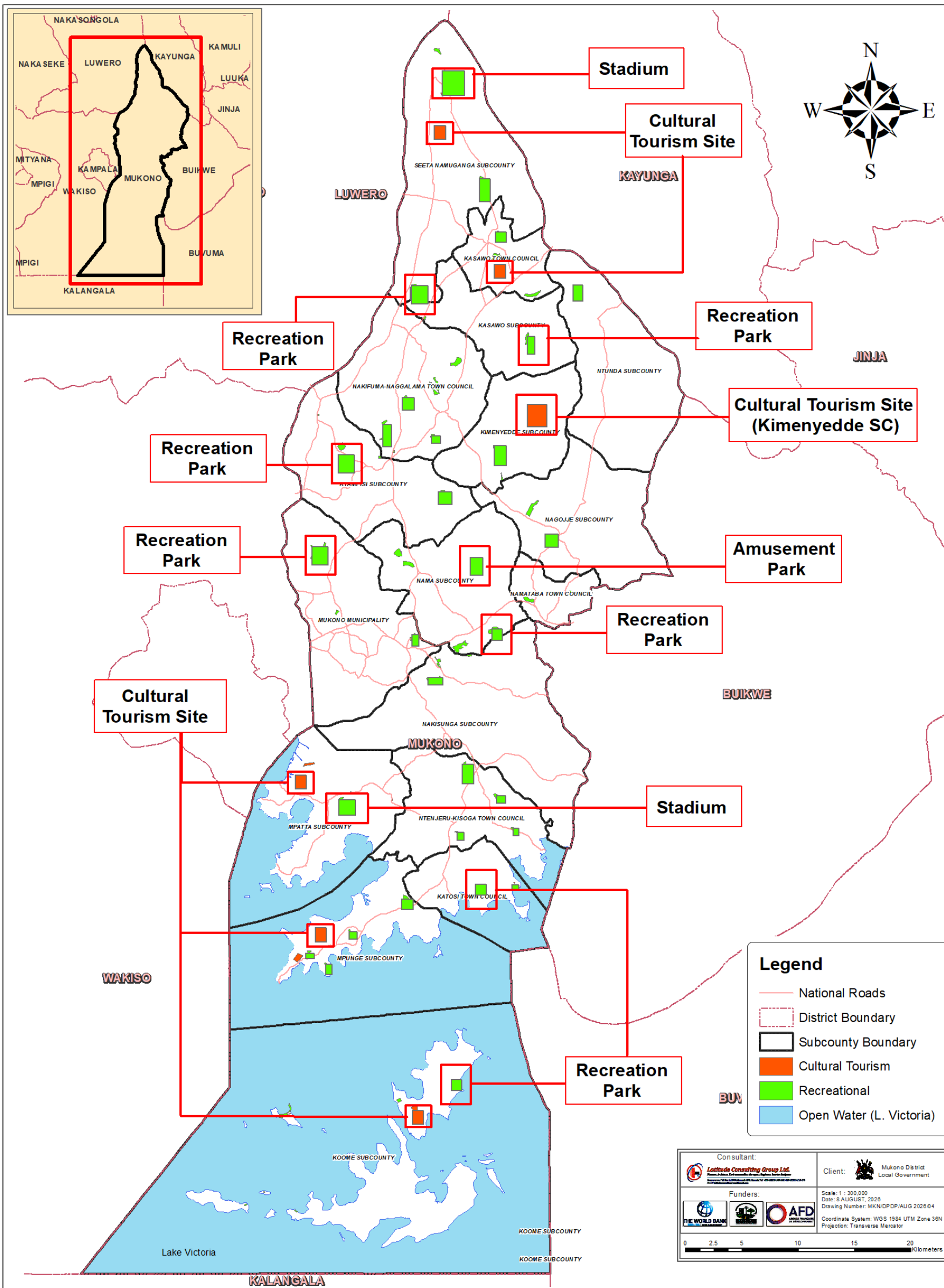
Mukono District Physical Development Plan: 2026 - 2040



Commercial Landuse

Figure 42: Business and Trade

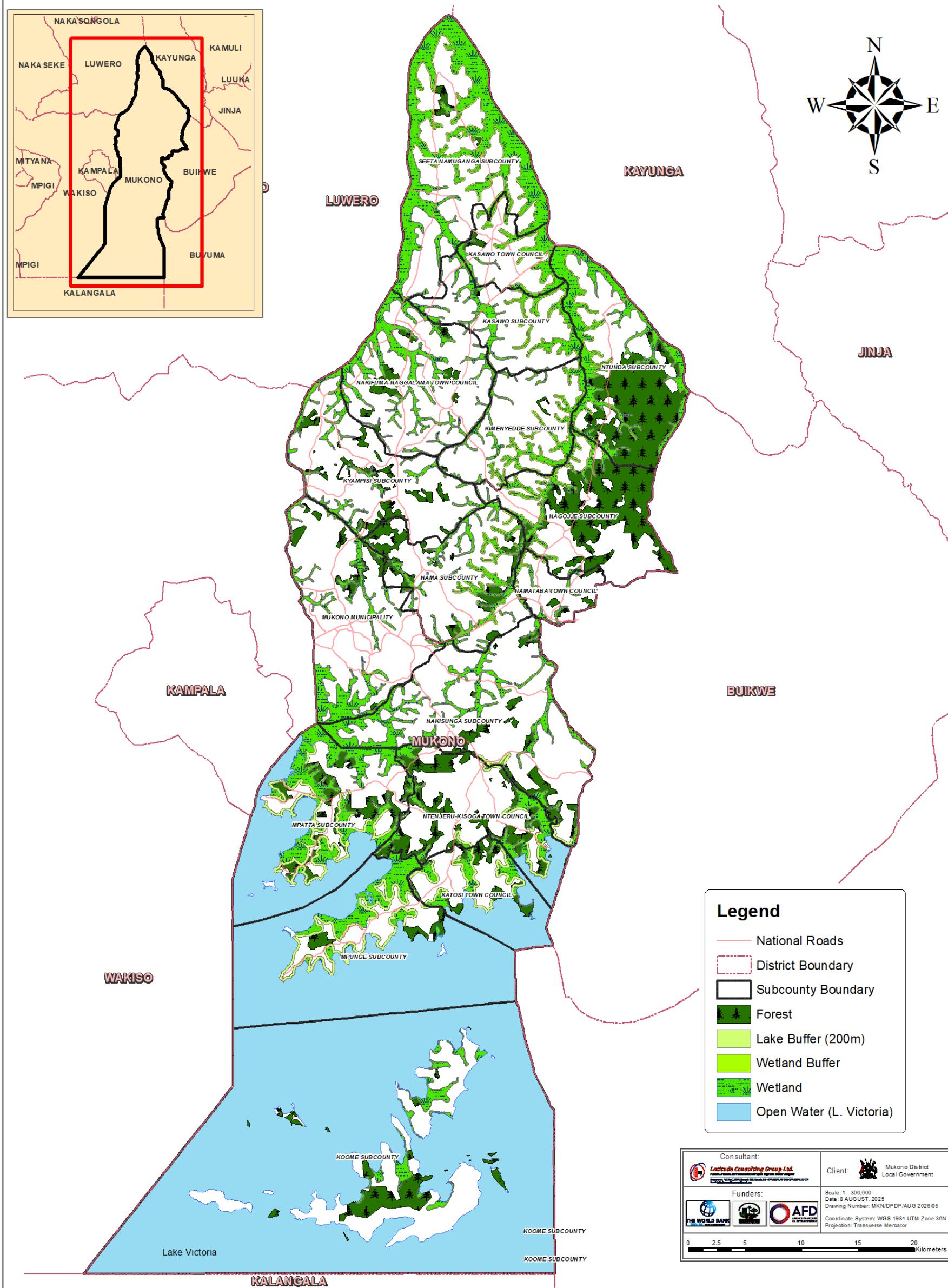
Mukono District Physical Development Plan: 2026 - 2040



Cultural Tourism & Recreational Landuse

Figure 43: Cultural tourism and Recreational plan

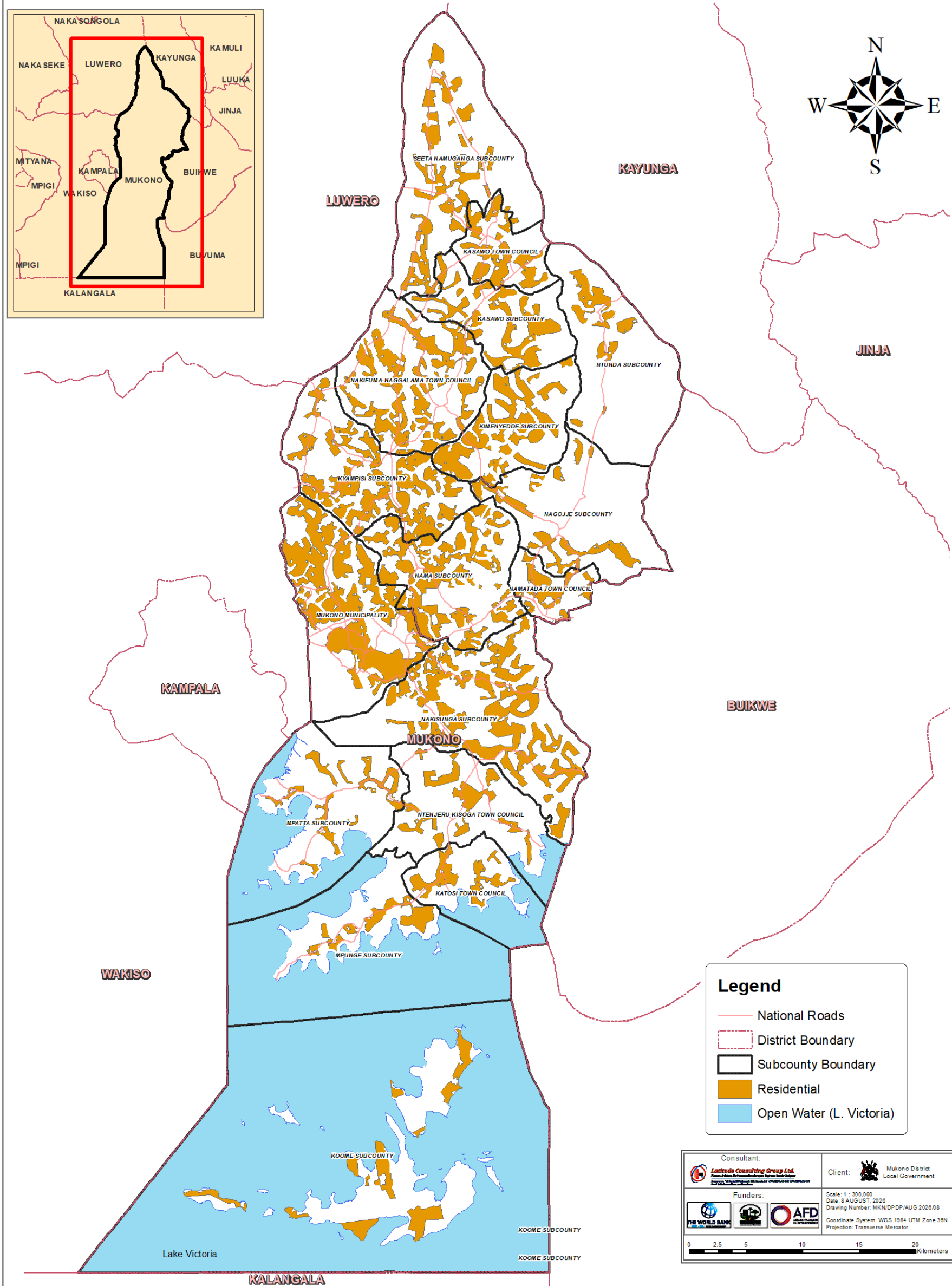
Mukono District Physical Development Plan: 2026 - 2040



Environmental Landuse

Figure 44: Environment and Natural resource Preservation Plan

Mukono District Physical Development Plan: 2026 - 2040



Residential Landuse

Figure 45: Residential Land use Distribution

Mukono District Physical Development Plan: 2026 - 2040

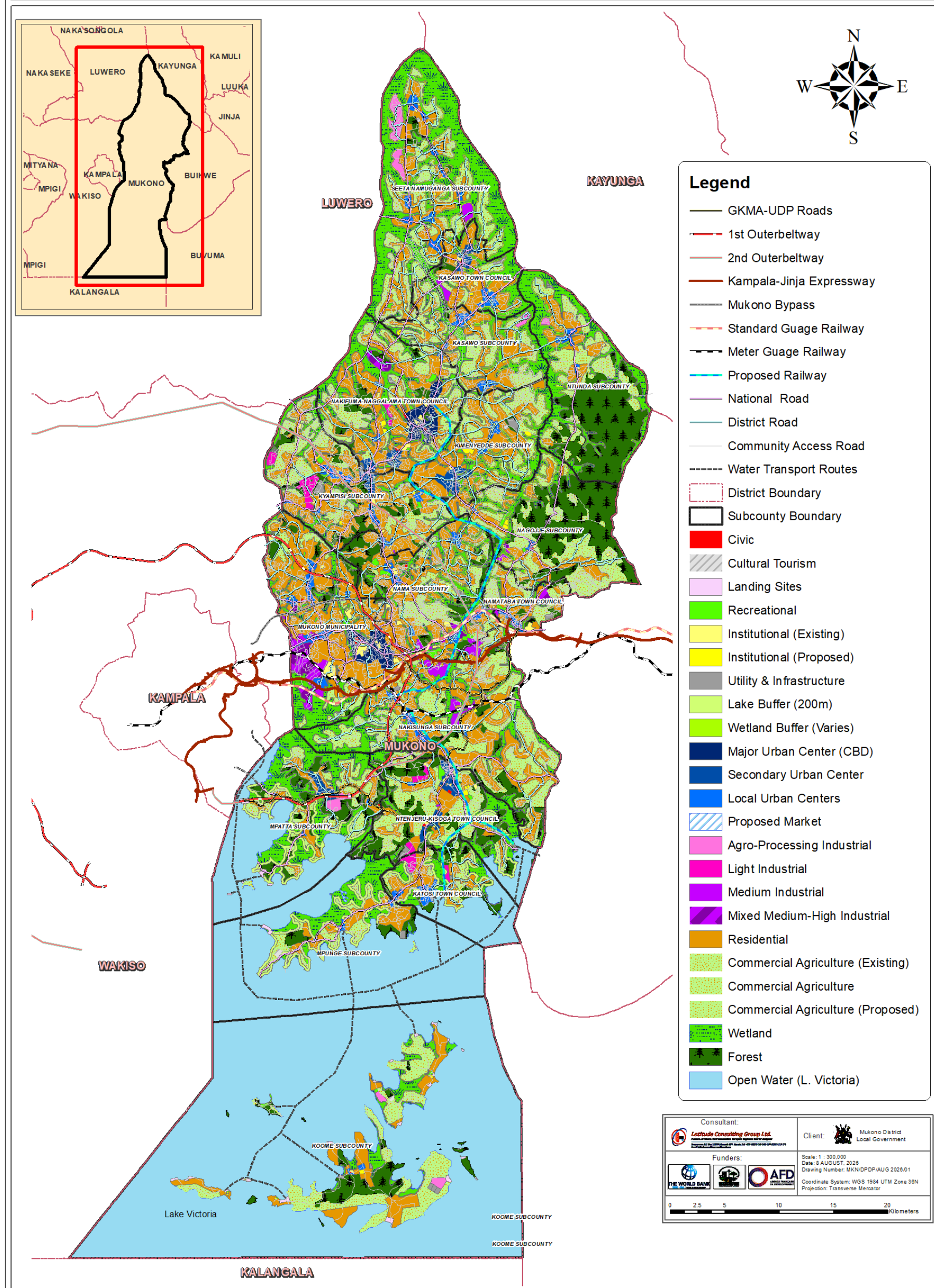


Figure 46: Proposed District PDP 2026-2040

EVALUATION TOOL FOR IMPLEMENTATION OF A PHYSICAL DEVELOPMENT PLAN (PDP)

(District / Urban Local Government Level)

GENERAL INFORMATION

District/Municipality: _____
Physical Development Plan Name: _____
Plan Period: ☐ 5 years ☐ 10 years ☐ 15+ years
Year of Evaluation: _____
Evaluating Officer: _____
Department: ☐ Physical Planning ☐ Engineering ☐ Environment ☐ Other: _____

OVERALL PLAN IMPLEMENTATION STATUS

Indicator	Response
PDP approved and in force	☐ Yes ☐ No
Implementation period elapsed (%)	_____ %
Overall implementation level	☐ High ☐ Moderate ☐ Low
Plan reviewed since approval?	☐ Yes ☐ No

LAND USE IMPLEMENTATION

1. Compliance with Planned Land Uses

Land Use Category	Level of Compliance	Remarks
Residential areas	☐ High ☐ Moderate ☐ Low _____	
Commercial zones	☐ High ☐ Moderate ☐ Low _____	
Industrial zones	☐ High ☐ Moderate ☐ Low _____	
Institutional areas	☐ High ☐ Moderate ☐ Low _____	
Public open spaces	☐ High ☐ Moderate ☐ Low _____	

2. Land Use Deviations

Are there unauthorized developments?
☐ Yes ☐ No
If yes, type of encroachment:
☐ Residential ☐ Commercial ☐ Industrial ☐ Other
Extent of deviation:
☐ Low ☐ Moderate ☐ High

INFRASTRUCTURE IMPLEMENTATION

Infrastructure Type	Planned	Implemented	% Achievement
Roads	_____ km	_____ km	_____ %
Drainage systems	_____	_____	_____ %
Water supply	_____	_____	_____ %
Electricity coverage	_____	_____	_____ %
Public facilities	_____	_____	_____ %

SPATIAL GROWTH AND URBAN FORM

Is urban growth following the PDP structure?
☐ Yes ☐ No ☐ Partially

Direction of growth:
☐ Planned corridors ☐ Uncontrolled sprawl ☐ Mixed

Presence of urban sprawl outside planned zones:
☐ High ☐ Moderate ☐ Low

Density trends align with plan?
☐ Yes ☐ No

DEVELOPMENT CONTROL AND ENFORCEMENT

Indicator	Status
Building permits enforced	☐ Yes ☐ No
Illegal developments controlled	☐ Effective ☐ Weak ☐ None
Physical Planning Committee active	☐ Yes ☐ No
Number of enforcement actions taken	_____

ENVIRONMENTAL COMPLIANCE

Wetland protection enforced?
☐ Yes ☐ No

Buffer zones respected?
☐ Yes ☐ No

Green spaces implemented as planned?
☐ Yes ☐ No ☐ Partially

Environmental degradation observed?
☐ Yes ☐ No

TRANSPORT AND ACCESSIBILITY

Road network implemented as per PDP?
☐ Fully ☐ Partially ☐ Not implemented

Functionality of transport corridors:
☐ Good ☐ Fair ☐ Poor

Public transport terminals implemented:
☐ Yes ☐ No

Non-motorized transport infrastructure:
☐ Adequate ☐ Inadequate

PUBLIC FACILITIES AND SERVICES

Facility Type	Planned	Implemented	Status
Schools	_____	_____	☐ Functional ☐ Non-functional
Health centres	_____	_____	☐ Functional ☐ Non-functional
Markets	_____	_____	☐ Functional ☐ Non-functional
Recreational spaces	_____	_____	☐ Functional ☐ Non-functional

PRIVATE SECTOR COMPLIANCE

Are private developments aligned to PDP?
☐ Yes ☐ No ☐ Partially

Level of compliance:
☐ High ☐ Moderate ☐ Low

Major violations observed:

COMMUNITY PARTICIPATION

Was community involved in PDP implementation?
☐ Yes ☐ No

Level of awareness of PDP:
☐ High ☐ Moderate ☐ Low

Community satisfaction with development pattern:
☐ High ☐ Moderate ☐ Low

KEY PERFORMANCE RATINGS (SUMMARY)

Rate implementation (1 = Very Poor, 5 = Very Good):

Aspect	1	2	3	4	5
Land use compliance	☐	☐	☐	☐	☐
Infrastructure delivery	☐	☐	☐	☐	☐
Environmental protection	☐	☐	☐	☐	☐
Development control	☐	☐	☐	☐	☐
Spatial orderliness	☐	☐	☐	☐	☐

KEY FINDINGS

Major achievements:

Major implementation gaps:

Critical challenges:

RECOMMENDATIONS

Priority actions for improvement:

Required policy/enforcement actions:

Suggested plan revision needs:

FINAL IMPLEMENTATION SCORE

Overall PDP implementation level:

- ☐ Excellent (80–100%)
- ☐ Good (60–79%)
- ☐ Fair (40–59%)
- ☐ Poor (Below 40%)

SIGNATURES

Evaluator: _____
Signature: _____
Date: _____

Town Clerk/District Physical Planner: _____