



KAMPALA URBAN FOREST MANAGEMENT PLAN

2024/25-2029/30





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LIST OF ACRONYMS AND ABBREVIATIONS

ACRONYM

CBD	Convention on Biological Diversity
DBH	Diameter at Breast Height
EPSDD	Environment, Planning and Sustainable Development
GIS	Geographical Information System
GKCCMA	Greater Kampala Capital City Metropolitan Area
GKMA-IUDMP	Greater Kampala Metropolitan Area Integrated Urban Development Master Plan
KCCA	Kampala Capital City Authority
KIIDP	Kampala Institutional and Infrastructure Development Project
KUFMP	Kampala Urban Forestry Management Plan
MDAs	Ministries, Departments and Agencies
MKCCMA	Ministry for Kampala Capital City and Metropolitan Affairs
MoHLUD	Ministry of Housing, Land and Urban development
NEMA	National Environment Management Authority
NDC	Nationally Determined Contributions
NDP	National Development Plan
NFA	National Forestry Authority
NGOs	Non-Government Organizations
SDGs	Sustainable Development Goals
SLICKS	Inclusive Cities Kampala and Strasbourg
UBOS	Uganda Bureau of Statistics
UNFCCC	United Nations Framework Convention on Climate Change
UWA	Uganda Wildlife Authority

DEFINITION OF TERMS.

- i. **Canopy cover:** The proportion of the forest floor covered by the vertical projection of the tree crowns.
- ii. **Causative Agent;** stress factors that result in deteriorating tree health
- iii. **Civic;** land use form that comprises both government and government offices
- iv. **Commercial zone 1;** form of land-use (boulevards) made up of 2000sqM comprising of mixed use and commercial and as well as residential
- v. **Commercial zone 2;** form of land-use made up of 450-1000 square meter, with onsite and offsite parking.
- vi. **Diameter tape;** Equipment used to measure estimated tree girth in centimeters
- vii. **Endangered species;** is a species which has been categorized as very likely to become extinct in the near future
- viii. **Enrichment Planting;** The introduction of valuable species to degraded forest without elimination of valuable species which already exist at that particular site
- ix. **Exotic Species:** Species that have been brought to their current locations by humans and often become invasive, or too pervasive for the environment
- x. **Gapping;** Replacement of dead trees
- xi. **High density; A** form of land-use comprising of 30% green cover, 20% paved and 50% built up.
- xii. **Low density;** A form of land-use that has 60% green coverage, 40% built up with an average 30 people per hectare according to the KPDP 2012.
- xiii. **Medium density;** a form of land use comprising of 30% green cover, 20% paved, 50% built up.
- xiv. **Mixed use;** A form of land-use comprising of 20% green, 20% paved and 60% built up.
- xv. **Native Species (Indigenous Species);** plants and animals that originated and live in an area without any human intervention and so exist as result natural processes
- xvi. **Occupational Health,** stresses the protection and promotion of the health of workers by preventing and controlling occupational diseases and accidents and by eliminating occupational factors and conditions hazardous to health and safety at work
- xvii. **Ozone.** Is a highly reactive trioxxygen both natural and man-made occurring in the stratosphere and lower troposphere.
- xviii. **Forest.** A complex ecological system in which trees are the dominant life form.
- xix. **Urban Forest.** A system of trees and vegetation on both public and private lands found within and around cities or other urban areas

FOREWORD



THE EXECUTIVE DIRECTOR, KCCA

Together, we are shaping a Kampala that balances growth with environmental integrity; one where nature thrives alongside progress.

Through this plan, KCCA reaffirms its dedication to environmental stewardship and the integration of nature-based solutions into physical planning, infrastructure development and community life. The plan's five strategic objectives of expanding and protecting the city's urban forest cover; strengthening institutional coordination and enforcement; promoting community engagement and awareness; integrating urban forestry in city planning; and establishing a robust monitoring and learning system set a clear pathway towards measurable results.

Importantly, this plan embraces innovation through digital tools, citizen reporting platforms and partnerships that connect residents, schools, cultural institutions and businesses to the greening of our city. It calls upon every Kampala resident to take

ownership of our trees; plant, protect, and nurture them as part of our shared heritage and urban future.

I extend my sincere appreciation to all partners, particularly the World Bank, French Development Agency (AFD), Ministry for Kampala and Metropolitan Affairs, Academia, NGOs, private sector actors, DOSHNUT (U) Ltd and the Directorate of Physical Planning that took lead in this process.

Hajjat Buzeki Sharifah
Executive Director

FOREWORD



THE LORD MAYOR, KCCA

The Kampala Urban Forestry Management Plan (KUFMP) 2024/25–2029/30 is a testament to our city’s collective resolve to reclaim, protect and expand its natural heritage. Kampala’s green spaces, once the pride of the Pearl of Africa, are under growing pressure from urbanization. Yet, they remain vital to our city’s identity, culture, and resilience. This plan demonstrates that environmental conservation and urban transformation are not mutually exclusive. They are inseparable components of a sustainable city.

This updated plan emerges from a broad, participatory process that engaged citizens, experts, institutions, and partners. It builds upon the successes and lessons of the first KUFMP (2019–2023/24), which laid the foundation for organized urban forestry management. The plan aligns with the Kampala Climate Change Action Strategy, the Green Infrastructure Ordinance (2021), and the Greater Kampala Metropolitan Area Integrated Development Master Plan (2024), ensuring that our greening efforts reinforce wider environmental and socio-economic objectives.

As a city, we are choosing a development pathway that values trees not as ornamental elements but as urban natural assets essential for the city’s survival through cooling our neighborhoods, filtering our air, controlling floods and enhancing mental well-being. The KUFMP challenges every resident, institution, and leader to take personal and collective responsibility for restoring Kampala’s green cover.

The Authority remains committed to mobilizing partnerships, resources and public participation for the implementation of this plan. I call upon all Ugandans, especially the people of Kampala, to join hands in making our city greener, cleaner, cooler, and more livable for generations to come.

Together, let us build a Kampala that truly lives up to its vision: a smart, vibrant, inclusive, and environmentally sustainable city.

His Worship, Erias Lukwago
Lord Mayor

EXECUTIVE SUMMARY

Uganda's capital city Kampala is the fastest growing urban area in the country. Currently, the city faces several environmental challenges largely resulting from rapid urbanization, climate change and inadequate infrastructural development. In order to address the challenges, Kampala Capital City Authority (KCCA) has embarked on updating the Kampala Urban Forestry Management Plan (KUFMP) 2024/25–2029/30 as one of the strategic and actions to restore, protect and sustainably manage the city's green infrastructure. The earlier KUFMP covered the 2019–2023/24 period. The updated management plan adequately aligns with local, national and international frameworks so as to effectively promote sustainable urban development and enhance climate resilience and biodiversity conservation.

The updated KUFMP covers a period of five years (2024/25–2029/30) and its implementation framework is guided by the vision *"By 2040, the Kampala urban forest area will be greener, healthier, climate-resilient and integrated in Kampala urban planning for urban sustainably, community well-being, ecosystem services."* The mission of the Plan is to implement inclusive, evidence-based and participatory actions that increase tree cover, restore degraded green spaces and enhance community stewardship. The plan responds to persistent issues such as declining tree canopy cover, encroachment on green spaces, limited data for decision-making, inadequate institutional coordination and low public awareness.

The design of the plan is guided by citywide tree audits conducted in all five divisions of Kampala city (Makindye, Lubaga, Nakawa, Kawempe and Central), a comprehensive review of the previous KUFMP, stakeholder engagement meetings and benchmarking with urban forestry plans of cities in other countries. The audits provided baseline information about tree spatial distribution, demographic characteristics and health of trees in the city. The plan is also developed in accordance with a participatory development process, which included inputs from various stakeholders to ensure that it aligns with local priorities and promote multi-stakeholder participation and stewardship. Additionally, through benchmarking with other global cities including Helsinki, Cape Town, Canberra, City of Paramount and London, Kampala's urban forestry plan integrates complementary smart forestry strategies.

The plan is guided by five strategic objectives namely; (1) Expand and protect urban forest cover across all city divisions, (2) Strengthen institutional frameworks, coordination and policy enforcement, (3) Promote community engagement, awareness and ownership in urban greening, (4) Integrate urban forestry into physical planning and infrastructure development and (5) Establish a robust monitoring, evaluation, learning and reporting system. Implementation of the plan will involve actions including guided tree planting in priority areas, tree nursery developments, enforcement of a tree protection ordinance and bye-laws, community sensitization programs, integration of forestry into building permit processes and the development of digital monitoring dashboards. Special emphasis and attention are given to youth, women, cultural institutions and civil society organizations as key actors in the plan's implementation.

The total projected budget for the plan's implementation over the four fiscal years (FY2025/26 to FY2029/30) is UGX 3.453 billion. It is allocated to several budget items including KCCA staff and other categories of personnel, equipment and tools, tree nursery operations, tree planting and maintenance activities, community participation, monitoring and evaluation, logistics and overheads, and a contingency fund. Financing of the implementation of the plan is primarily based on internal KCCA budgetary allocations, mobilizing external donor and private sector funding, forming partnerships with NGOs, CBOs, public and private institutions. A sustainability plan is also embedded in the updated KUFMP and emphasizes, promoting institutional capacities, legal reforms and community stewardship.

PART I

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Urban Forestry and Urban Forests

Urban forestry is the management of trees, green spaces and associated natural ecosystems in and around urban environments, focusing on the benefits these trees provide to the ecosystem. It encompasses planning, planting, protection, maintenance and care of trees, recognizing them as crucial components of the urban environment. Urban forestry also involves engaging citizens and addressing the challenges of retaining trees amidst urban developments.

The aspect of planning involves developing strategies and plans for the sustainable management of urban forests, including tree planting programs, maintenance schedules and protection measures. The planting process involves selecting and planting appropriate tree species in various urban locations, such as streets, parks and residential areas. The protection includes implementing measures to protect existing trees from damage, disease and other threats, including proper pruning, pest and disease management, and addressing issues like vandalism. To maintain existing trees, regularly caring through activities like watering, mulching, fertilization and pruning is essential to ensure their health and longevity.

Community engagement is achieved by involving residents and stakeholders in urban forestry initiatives to foster a sense of ownership and stewardship over the urban forest. Furthermore, due to the significance of urban forestry, trees and green spaces in the overall urban landscape are integrated into the city planning and development.

An urban forest in particular refers to a system of trees and vegetation on both public and private lands found within and around cities or other urban areas. It consists of either and/or patches, individual trees, shrubs and other forms of vegetation growing on streets, parks, wetlands, institutions, residential compounds, infrastructure corridors and peri-urban areas. Unlike traditional forests, urban forests are closely integrated into the built environment and are often influenced and affected by interactions between people, infrastructure and nature.

1.2 Importance of Urban Forestry and Urban Forests

Urban forestry and forests play a crucial role in enhancing the quality of life in urban areas by providing numerous environmental, social and economic benefits. They contribute to cleaner air and water, mitigate the urban heat island effect, reduce stormwater runoff and offer spaces for recreation and community interaction. Additionally, they support biodiversity, improve mental and physical well-being, and can even boost property values.

Environmental Benefits

Urban forests offer critical environmental functions that directly address the impacts of urbanization and climate change. Some of the major environmental benefits include:

- **Improved Air Quality:** Urban trees filter airborne pollutants such as dust, smoke, and harmful gases (e.g., nitrogen dioxide, sulfurdioxide, and carbon monoxide), leading to cleaner air for city residents.
- **Reduced Heat Island Effect:** Trees provide shade and release moisture through transpiration, which can lower local air temperatures and reduce heat stress in built-up areas.

- **Storm water Management:** Urban forests help manage storm water runoff by intercepting rainfall, absorbing water through their roots and facilitating infiltration into the soil. This reduces the risk of flooding and erosion hence lessening the burden on drainage infrastructure in urban areas. Forests also act as natural filters, improving water quality by removing pollutants and sediments from storm water runoff before it enters waterways.
- **Soil stabilization:** The root systems of urban trees bind soil particles, preventing soil erosion on slopes, road reserves and open spaces.
- Trees act as buffers against effect of strong winds in the urban environments.
- **Carbon Sequestration:** Trees absorb carbon dioxide from the atmosphere, helping to mitigate climate change by storing carbon in their biomass.
- **Biodiversity Conservation and Enhancement:** Urban forests provide habitats for various species of plants and animals, contributing to biodiversity within urban ecosystems.

Socio-Economic Benefits

Urban forests provide a wide range of socio-economic benefits that improve the quality of life for city residents and strengthen urban economies. Some key socio-economic benefits include:

- **Enhanced Mental and Physical Health:** Access to green spaces and trees in urban areas is linked to improved mental well-being, reduced stress, enhanced mood and encourage active lifestyle.
- **Recreation and relaxation:** Urban forests offer safe, shaded spaces for leisure activities such as walking, jogging, picnicking, and social gatherings, supporting physical fitness and social cohesion.
- **Aesthetic Value:** Trees and forests enhance the beauty and visual appeal of urban landscapes, contributing to a more pleasant and attractive environment.
- **Educational Opportunities:** Urban forests can serve as outdoor classrooms, providing opportunities for environmental education and promoting awareness about nature.
- **Increased Property Values:** Trees and green spaces can increase property values, making urban areas more desirable and attractive to residents and businesses.
- **Energy Savings:** Trees can reduce energy consumption for heating and cooling buildings, leading to lower energy bills.
- **Tourism and Economic Development:** Attractive urban landscapes with green spaces can attract tourists and contribute to local economic development.
- **Job creation:** Urban forestry programs generate employment opportunities in nursery management, tree planting, maintenance, landscape design and community outreach.
- **Economic incentives to private/individual owners of urban trees** such as those from fruits and timber.
- **Development control incentives to developers' permissions for allowance of additional green spaces** within developable urban plots/parcels.

1.3 Historical Trends of Urban Forestry in Kampala

1.3.1 Pre-Colonial Era.

In the pre-colonial era, the area now known as Kampala was largely dominated by natural forested hills, expansive grasslands and thriving biodiversity. The hills, covered with thick forests and grazing lands, supported diverse wildlife, including the impala antelope, which inspired the name *Kasozi Ka'impala* in Luganda, later simplified to Kampala. These forested hills were vital ecological zones and served as hunting grounds for the Buganda kings (*Kabakas*), supporting both cultural and subsistence needs of the communities.

During the reign of Kabaka Mutesa I in the early 18th century, trade relationships were established with Arab traders through caravan routes, influencing land use patterns around the kingdom headquarters. Kabaka Mwanga later relocated the kingdom's capital to Mengo Hill, intensifying settlement and cultivation activities in the area. The chiefs under the Buganda Kingdom managed extensive pieces of land, enclosed with high reed fences where fruit trees were cultivated. These trees not only supplemented household food supplies but also reflected the early forms of deliberate tree planting and care, laying the foundations for urban greening traditions.

Tree care during this era was mainly functional; providing fruits, shade and aesthetic value within royal compounds and chiefdom enclosures. This traditional custodianship of land and trees by the Baganda set a precedent for valuing trees as part of settlement design and daily life.

1.3.2 Colonial Era

The colonial era led to the transformation of Kampala's landscape and its emerging urban forestry. With the arrival of early European settlers and Arab traders, pressure mounted on the natural forests and grasslands that surrounded the Buganda Kingdom's capital. The colonial administrators, concerned about public health risks such as malaria and plague, which claimed hundreds of lives in areas like Mengo, Mubende, and Masaka saw the need for planned green belts and open spaces to separate settlements and improve sanitation.

The 1903 Uganda Townships Ordinance paved the way for structured urban planning, and Kampala's first town plan was drawn up in 1912. Subsequent plans in 1919, 1930, and 1950 emphasized the creation of green belts, draining of swamps to limit mosquito breeding, and the provision of recreational green spaces. The 1919 plan, guided by Professor Simpson, recommended separating Indian bazaars from European settlements using green buffers. Swamps were drained to reduce disease risks, resulting in open spaces such as the present-day golf course area.

The 1930 town planning scheme built upon these earlier ideas and further expanded the vision for green open spaces. Recommendations included preserving steep slopes as green areas, establishing formal gardens and creating sports grounds. Key landmarks like Makerere University grounds, Kasubi Tombs, Namirembe Cathedral and the Golf Course were protected or designed during this period. These initiatives formalized the concept of urban green infrastructure through planting ornamental trees, designing gardens and ensuring recreational open spaces became integral to Kampala's colonial urban character.

1.3.3 Post Uganda's Independence Period

Uganda's independence in 1962 marked a new era of urban development and planning for Kampala, which continued to build on the foundations laid during the colonial period. The first post-independence urban development missions, notably the 1963–1969 and the second mission in 1994–2004 emphasized structured land use planning to guide Kampala's growth while safeguarding its green spaces. The physical plans produced during this period promoted the "hexagonal planning" concept, where hilltops were reserved for agriculture while low-lying valleys were drained and maintained as open green spaces and playing fields.

These missions recommended a consolidation growth strategy that encouraged development on vacant or underutilized land within city limits, rather than indiscriminate expansion into ecologically sensitive zones. Protecting important ecological areas such as wetlands, forests, shorelines, and watersheds became a critical planning principle. Green spaces were integrated into the urban fabric not only for recreation but also to serve as buffers against flooding and to preserve biodiversity within the rapidly urbanizing capital.

Despite these plans, Kampala's urban forestry faced growing challenges as the city expanded rapidly to accommodate a rising population and increasing commercial demands. Encroachment on designated green spaces became widespread as commercial buildings, car parks and informal settlements sprang up on land originally reserved for gardens, playgrounds and urban forests. Nevertheless, the post-independence policy framework laid the groundwork for continued recognition of urban green infrastructure as an essential part of Kampala's urban planning and sustainability goals.

1.3.4 Formal institutionalization of the Kampala Urban Forestry Management.

The establishment of the Kampala Capital City Authority (KCCA) in 2011 under the Kampala Capital City Act of 2010, marked a significant change in the Kampala's urban forestry practices. The city launched major initiatives to restore, green and beautify open spaces such as Pan Africa Square and Airtel Park. It also targeted planting trees in road reserves and community grounds. In addition, in 2016 KCCA conducted a pilot tree audit in four selected precincts of Nakasero, Kololo, Mulago, and Makerere located in the Central and Kawempe divisions. The audit provided baseline data on the abundance, distribution, sizes, species composition and condition of urban trees. The information obtained from this audit was instrumental in the development of the Kampala's first Urban Forestry Management Plan (KUFMP) for the period 2019–2023/24.

1.4 Biophysical and Socio-Economic Context of the Kampala Urban Area.

The biophysical and socio-economic environment of Kampala plays a critical role in determining the selection, growth and management of urban trees and green spaces in general. Environmental conditions such as rainfall, temperature, humidity, topography, and soil characteristics, in addition to human activities and socio-economic dynamics influence the success and sustainability of urban forestry initiatives in the city.

1.4.1 Size, Location and Population

Kampala, the capital city of Uganda, covers an estimated land area of 189 square kilometers, including its suburban extensions (Brousse et al., 2020). Geographically, the city is located in the central region of Uganda, near the northern shores of Lake Victoria at approximately 0.3476° N latitude and 32.5825° E longitude (Figure 1).

The terrain of Kampala is characterized by a series of gently sloping flat-topped hills such as Mengo, Nakasero, Kololo, Makerere, Namirembe, Naguru, Kibuli, Muyenga and Mbuya which are inter-spaced with low-lying wetland systems. The noted wetlands include Nakivubo, Kinawataka, Kansanga, Lubigi, and Banda which serve important ecological functions such as flood regulation and biodiversity conservation.

Administratively, Kampala is divided into five divisions namely; Central, Nakawa, Kawempe, Rubaga and Makindye (Figure 1). As of 2023, the broader metropolitan area of Kampala was estimated to have a population exceeding 3.7 million, with an annual growth rate of about 4%. The population of the Kampala area was estimated to range between 1.7 and 2 million people in 2024 (Kamukama *et al.*, 2024; UBOS, 2024). This rapid urban population growth continues to intensify demand for housing, infrastructure and essential services, often at the expense of the natural environment. As a result, green spaces, including parks, tree-lined avenues and forest patches, have been increasingly degraded or replaced. Nonetheless, this trend has led to growing interest in urban greening and reforestation initiatives aimed at restoring and expanding Kampala's green infrastructure.

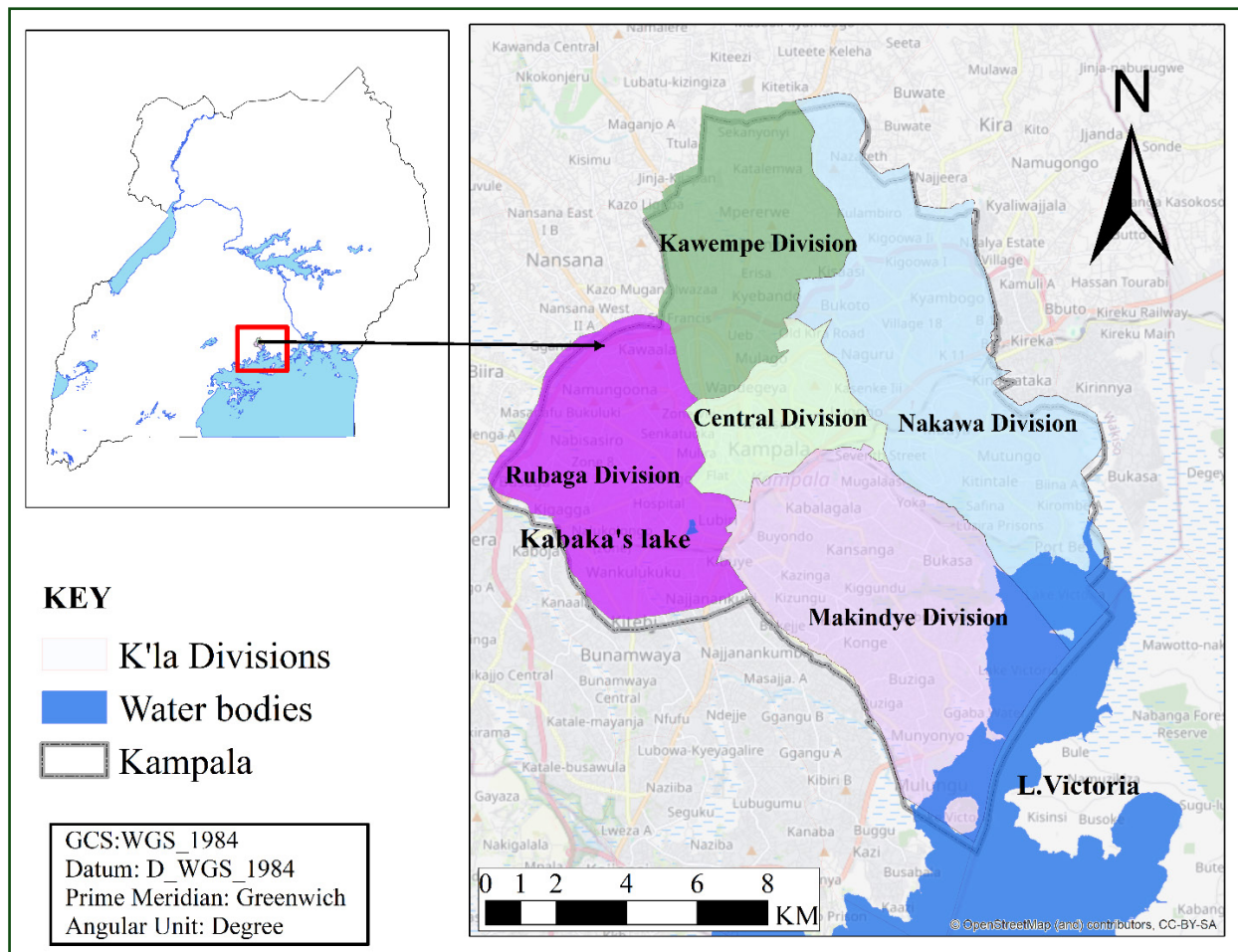


Figure 1: Map of Kampala Capital City illustrating the size and distribution of the five administrative divisions.

Source: Map compiled by Doshnut (U) Ltd

1.4.2 Climate

Kampala experiences a tropical climate. It is characterized by a generally warm and humid, with relatively stable temperature ranges and distinct rainfall seasons. These tropical conditions are generally ideal for growth and survival of indigenous and most exotic trees.

(i) Rainfall

The city receives an average annual rainfall of between 1,200 mm and 2,000 mm (KDMP, 2017). Rainfall is bimodal, with two main rainy seasons; the first from March to May and the second from August to November (KCCA, 2014). Rain events are often intense and short-lived, frequently accompanied by thunderstorms. Rainfall distribution across the city is irregular and does not follow a clearly defined spatial pattern.

(ii) Temperatures and Relative Humidity

Kampala experiences average monthly temperatures of around 21°C, with daily highs reaching up to 28°C and lows dropping to about 17°C. According to the Kampala Climate Change Action Strategy, temperatures in the city have risen by approximately 0.5°C over the last 50 years. In recent dry seasons, daytime temperatures have occasionally exceeded 32°C. Relative humidity varies with the seasons and range between 40% and 50% during dry periods and between 60% and 90% during the rainy seasons.

(iii) Wind and Air Movement

The average wind speed across the city is relatively low, at approximately 18.4 km/h, which contributes to the general calm atmospheric conditions.

1.4.3 Topography, Soils and Hydrology

Kampala's topography consists of rolling hills and intervening valleys, creating a landscape prone to surface water runoff. The low-lying valley areas, especially during the rainy seasons, are susceptible to flooding. Soils on the hilltops are typically fertile, reddish-brown, and loamy, while the valley areas contain light grey clay or sandy soils enriched with alluvial deposits due to stormwater runoff. These valley soils are particularly fertile and support various forms of vegetation.

1.4.4 Vegetation and Wildlife

The vegetation in Kampala is dominated by grasses, shrubs, and a variety of tree species. According to the Kampala Urban Forestry Management Plan (KUFMP, 2019), the city has an estimated tree canopy cover of approximately 15%, equivalent to about 618,000 trees. Despite the current tree numbers, Kampala has been steadily losing its historical identity as the "Garden City of Africa" due to urban expansion and environmental degradation.

The urban forest is largely composed of tree species planted by private property owners and public authorities. In addition to vegetation, the city supports a limited range of wildlife. Common species include small snakes, amphibians (mainly frogs and toads, particularly in wetland areas) and bats various insects. Avian fauna includes species such as the Marabou Stork (*Leptoptilos crumeniferus*), Hadada Ibis (*Bostrychia hagedash*), Pied Crow (*Corvus albus*) and other birds like Bulbuls and *Tauraco* species.

1.4.5 Socio-Economic Environment of the Kampala urban Forest area

Kampala's urban forests/trees exist and grow within diverse socio-economic land uses, including residential, commercial and institutional infrastructure. The city is also inhabited by a population of varying ethnic and cultural backgrounds, which present diverse social dynamics some of which can have an impact on the urban forestry.

Most urban forested areas and potential tree-planting sites lie on privately owned land, either within the several residential neighborhoods and commercial premises across the city. Publicly owned land constitutes a smaller proportion and is primarily located along road reserves, open spaces, schools and other institutional compounds.

1.5 Legal, Policy and Institutional Frameworks Relevant to the Kampala Urban Forestry.

The management of urban forestry in Kampala City is guided by various legal, policy, and institutional frameworks at local, national and international levels. These frameworks aim at promoting sustainable urban development, enhance climate resilience, and promote environmental conservation.

1.5.1 International Legal Policies, Treaties, Conventions, and Other Frameworks

Uganda's commitment to sustainable urban forestry is further reinforced by its participation in various international treaties and conventions that advocate for environmental conservation and climate change mitigation.

The United Nations Sustainable Development Goals (SDGs, 2015). These were ratified by Uganda and provide a global blueprint for achieving a better and more sustainable future. Kampala City's development agenda aligns with several of these goals, notably:

- **Goal 11:** sustainable cities and safe communities through making cities and human settlements inclusive, safe, resilient, and sustainable.
- **Goal 13:** Climate action through taking urgent action to combat climate change and its impacts, achievable through increasing carbon sinks such as urban forests.

- **Goal 15:** Life on Land through protecting, restoring, and promoting sustainable use of terrestrial ecosystems, sustainably managing forests, combating desertification, halting and reversing land degradation, and halting biodiversity loss.

The Convention on Biological Diversity (CBD, 1992). The convention was ratified by Uganda in 1993 and focuses on the conservation of biological diversity, sustainable use of its components, and equitable sharing of benefits arising from genetic resources. Given that forests harbor approximately 70% of the world's plant and animal species, the CBD importance of forest conservation in maintaining global biodiversity.

The United Nations Framework Convention on Climate Change (UNFCCC, 1994). This was ratified by Uganda in 2002 and addresses forestry from a climate change perspective. It promotes the creation, maintenance, and protection of carbon sinks through sustainable forest management practices, afforestation, and reforestation. The **Kyoto Protocol** and the **Paris Agreement (2015)**, both under the UNFCCC framework, further emphasize the role of forests in mitigating climate change, strongly encouraging countries to enhance greenhouse gas sinks and reservoirs, including forests.

The United Nations Convention to Combat Desertification (UNCCD, 1994). The convention became effective from 1996 and seeks to combat desertification and mitigate the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements. Uganda, as a signatory, is committed to implementing measures that prevent land degradation and promote sustainable land management practices, including afforestation and reforestation.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973). The convention aims at ensuring that international trade in specimens of wild animals and plants does not threaten their survival. Of the 16 tree species listed for protection under CITES, at least 12 have been identified in various locations in Kampala, necessitating their consideration in urban forestry management plans.

The Convention for the Protection of World Cultural and Natural Heritage (1972). The convention established a system for the collective protection of cultural and natural heritage of outstanding universal value. Forests are recognized under this convention as natural heritage sites due to their ecological and biological significance, placing an obligation on states to protect and conserve them for future generations.

1.5.2 National Legal, Policies and Institutional Frameworks.

The Constitution of the Republic of Uganda (1995). The constitution is the country's supreme law and is the foundational legal environment for environmental protection and preservation. Article 245 mandates the state to protect the environment from abuse, pollution, and degradation, manage it for sustainable development, and promote environmental awareness. Article 242 empowers the government to regulate land use, facilitating the enactment of policies and laws pertinent to environmental management.

The National Development Plan IV (NDP IV). The NDP IV emphasizes a focus on natural resource and climate change management as key strategies to reduce disaster losses, raise household incomes and enhance overall well-being. The plan highlights key relevant initiatives including tree planting, urban forestry, wetland recovery, and improved land and water governance. These efforts are designed to support livelihoods and sustainable urbanization. In addition, this agenda suggests integration of climate-resilient value addition, enforcing environmental regulations, and mobilizing both public and private investment to realize a greener and more inclusive economy aligned with Vision 2040 and the SDGs.

National Biodiversity Strategy and Action Plan (NBSAP) III (2025-2030). The NBSAP III (2025-2030) provides an emphasis of Uganda's strategic direction towards biodiversity conservation as a pathway for inclusive growth, sustainable development and climate resilience. Developed on a theme "*Conservation and sustainable use of biodiversity for inclusive wealth creation*," the plan promotes ecosystem connectivity, equitable benefit sharing and biodiversity integration into sectoral plans. It aligns with national priorities such as Vision 2040 and the NDP IV, offering a comprehensive framework for addressing forest degradation, habitat loss, and pollution challenges that are particularly relevant for urban ecosystems. This also presents a unique opportunity to mainstream biodiversity targets into urban forestry, especially in enhancing ecological integrity, strengthening stakeholder coordination and mobilizing financing for green infrastructure. As Kampala faces pressure from rapid urbanization, integrating NBSAP III priorities into the KUFMP could play a pivotal role in enhancing ecosystem services, promoting resilience and ensuring biodiversity thrives within the urban landscape.

The National Forestry and Tree Planting Act of 2003. This Act promotes the conservation, sustainable management, and development of forests. It encourages the establishment and maintenance of green belts in urban areas as part of urban land-use planning. The Act also advocates for the development of institutional linkages among the National Forestry Authority (NFA), urban authorities, NGOs, community-based organizations, and the private sector to plan and implement urban forestry initiatives.

The National Environment Act of 2019. The act provides a framework for sustainable environmental management. The 2019 Act provides for the establishment of an Environmental Protection Force, enhanced penalties for environmental offenses, and mechanisms for environmental restoration, reforestation, and afforestation, particularly in hilly and mountainous areas. It also emphasizes the conservation of biological diversity and the management of forests, aligning with emerging environmental issues such as climate change.

The National Climate Change Act of 2021. The act aims at building climate resilience and implementing low-carbon measures across the country. The aims align with the United Nations Sustainable Development Goals (SDGs), particularly Goal 11 on Sustainable Cities and Communities and Goal 13 on Climate Action, thus contributing to sustainable development.

The National Physical Planning Standards and Guidelines (2011). These have been adopted nationally and locally by KCCA and serve as an informational resource for urban planning. The guidelines provide for the landscaping of road and street reserves, parking lots, and the incorporation of green elements such as trees, shrubs, and lawns to enhance visual amenities and environmental quality.

Other significant national policies and legal frameworks relevant to urban forestry include:

- The **Local Governments Act of 1997**, which decentralizes forestry services, assigning responsibilities to district authorities to manage and protect forests.
- The **Uganda Wildlife Act of 2000**, which mandates the Uganda Wildlife Authority (UWA) to collaborate with forest management institutions to conserve wildlife species in forest reserves and promote ecosystem services as incentives for conservation.

1.5.3 Local Legal, Policies and Institutional Frameworks

At KCCA level there are several legal and policy instruments that directly or indirectly influence urban forestry.

The Greater Kampala Metropolitan Area - Integrated Urban Development Master Plan (GKMA-IUDMP) 2024. This provides a coordinated development framework for Kampala and surrounding urban areas, prioritizing compact growth, climate resilience and protection of ecological systems. The plan emphasizes green infrastructure, preservation of wetlands and hill ecosystems, and expansion of urban green spaces. It therefore directly reinforces the KUFMP by guiding integration of urban forestry into land-use planning, metropolitan sustainability and landscape restoration initiatives.

The Kampala Climate Change Action Strategy (2016–2021). The action strategy is currently under revision and was formulated to address the specific climate change challenges facing the city. Complementing this, the Kampala Capital City Authority (KCCA) 5-Year Strategic Plan (2020/21–2024/25) envisions transforming Kampala into a vibrant, attractive, and sustainable city, with urban forestry playing a key role in achieving this vision.

The Kampala Capital City Authority Act of 2010. This Act provides for the development of Kampala City with functions that include preparing comprehensive physical plans and development controls that promote sustainable growth. The Act emphasizing the planning of recreational parks, tree planting, green corridors, and other environmental areas, emphasizing the beautification of the city and the establishment of public parks and gardens.

The Kampala Physical Development Plan (KPDP) of 2012. The plan emphasizes the need for large-scale tree planting and the development of green open spaces within the city. It proposes the transformation of wetlands into urban parks and the reforestation of the city to mitigate climate change impacts and enhance the well-being of Kampala's inhabitants.

The city council ***passed Kampala city Green Infrastructure Ordinance of 2021***, aimed at preserving and promoting green infrastructure within Kampala City. It proposes the protection of all trees, parks, hill tops among other green spaces within the KCCA jurisdiction, recognizing them as integral components of the urban forest.

PART II: STATUS REVIEW AND CONTEXTUAL INSIGHTS FOR KAMPALA URBAN FOREST MANAGEMENT

CHAPTER 2: TREE INVENTORY AND STATUS OF THE URBAN FOREST RESOURCE

This section presents the status of Kampala's urban forest resource based on tree audit findings from all five city divisions of Makindye, Lubaga, Nakawa, Kawempe and Central. For the Makindye division, data was collected in May 2025. Nakawa and Lubaga Divisions' data was collected during the KCCA's Inclusive Cities Kampala and Strasbourg (SLICKS) project carried out between June 2023 and January 2024. The Kawempe and Central Divisions' tree audit data was collected by KCCA under the EU COMSSA project between 2016 and 2020. All the audits covered all trees along road reserves, public spaces and some public institutions. Throughout these audits, information on the current status of trees, including species composition, tree abundance, sizes (DBH, heights and crown diameter), estimated age, spatial distribution and general tree health status were established. The data was analyzed and used to guide the development of strategies for implementing the KUFMP 2024/25-2029/30.

2.1 Tree audit tools and methods used in data collection.

The methodology used to collect data across all the five divisions was similar and below are the tools and methods that were used to obtain data for particular parameters including, single tree locations, ownership status, tree species, stem diameter, tree heights, crown widths, tree age, trees health and its causative agents.

Key Tools

The tools used included the Survey 123 software that was installed on smartphones, tablets and computers to gather the tree audit data both in real-time and batch data collection or periodic data upload. Other tools were diameter tapes to measure stem diameter, clinometers to measure tree height, distance tapes for tree crown width and GPS enabled smartphones or tablets to automatically capture tree locations (Figure 2)



Figure 2: Tree audit data collection tools

Single tree species Location.

GPS internet enabled Android smartphones and tablets were used to geo-reference tree locations on the ArGIS survey 123. In addition, more information describing the physical location was recorded through observations made by data collectors including; The street name, road name, description of the public or private space, the parish and any other nearby feature around a recorded tree.

Ownership status of trees.

The land ownership status for a particular tree and was categorized as follows;

- Road reserve trees being those that were situated within roadside verges, paved and unpaved roads.
- Public spaces trees were located in open public areas, which were easily visible and accessible.
- Private trees were located on private property including gardens, homes and private parking areas.
- Institutional properties trees being; the trees located on government institutional lands

Tree Species identification

Tree species were identified and entered into the survey 123 application, embedded with a comprehensive species database. Tree species which could not be immediately identified in the field by the data collection team even after thorough scrutinization, would then be categorized as unidentified. Their key features would be noted and images captured to ease their identification later on.

Stem Diameter/DBH measurement

Using the diameter tape, stem diameter per encountered tree was measured at 1.3m above ground level and in case of deformations such as buttresses and forks, the DBH was measured at an appropriate height and recorded following the standard forest mensuration guidelines (Figure 3). Forking trees were given special attention of measuring the multiple stems and summing of results to accord it to a single tree.



Figure 3: Measurement of Diameter at Breast Height (DBH) of a *Roystonea regia* (A) and *Eucalyptus grandis* (B) respectively.

Source: Field photo by Doshnut Uganda Ltd

The diameter data were later be categorized into size classes during data analysis as follows;

- 0.0-19.9 cm
- 20.0-39.9 cm
- 40.0-59.9 cm
- 60+ cm

Tree Height Measurement

Clinometers (direct and indirect) were used to measure tree height in meters from the ground to the topmost shoot-tip using the standard tree height measurement procedure (Figure 4).

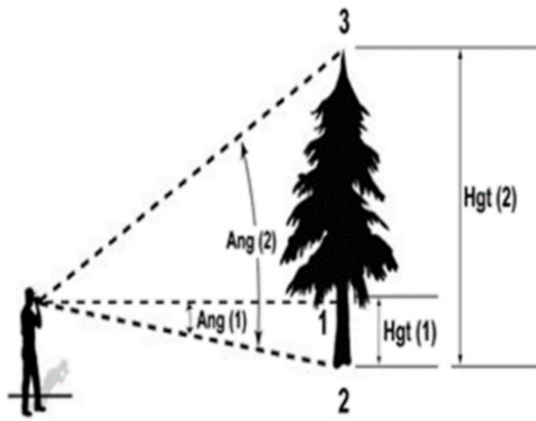


Figure 4: Tree height measurement illustration.



Figure 5: Tree height measurement using a clinometer- Makindye division tree audit

Source: Field photo by Doshnut Uganda Ltd

The height data was further categorized in different classes for analytical purposes as follows;

- a. 0.0-4.9 m
- b. 5.0-9.9 m
- c. 10.0-14.9 m
- d. 15.0-19.9 m
- e. 20.0+ m

Tree crown diameter measurement.

The crown diameter of a single tree was determined by measuring the two sides of the crown spread based on the ground delineation of the reach of the crown using a distance tape. The results were added and divided by two to obtain the average diameter of the crown in meters. The crown data was subsequently classified for analysis in the following categories:

- a. 0.0-4.9 m
- b. 5.0-9.9 m
- c. 10.0-14.9 m
- d. 15.0-19.9 m
- e. 20.0+ m

Tree age estimation.

Through observation, foresters estimated tree age depending on expert judgments and on the species, attributes including growth rate, trunk size, physical appearance and the general tree morphology. The estimates were made and recorded in years as a whole number and later

classified into the following age groups:

- a. <5 years
- b. 5-9 years
- c. 10-14 years
- d. 15-19 years
- e. 20-24 years
- f. 25-30 years
- g. 31-34 years
- h. 35-39 years
- i. 40+ years

Tree health status and causes of any poor health

Trees were assessed for health through taking direct observation. The visual assessment of the trees' health was done based on expert knowledge and experience. The health condition of the encountered trees was categorized as either being healthy, diseased, declining health, dying or dead. Only one option of these was recorded on a single tree.

Poor health causative agents

Visual assessment techniques based on the expertise of the team were used to determine the causative agents for trees' health conditions. Various factors affecting tree health were considered including insects, disease/fungi, fires, animals, humans, climate, age and stranglers.

Visual Documentation Photographs of tree conditions, public spaces and urban forestry management activities were taken to complement the collected quantitative data. These visuals also served as evidence for some of the recommendations made in this updated plan.



Figure 6: Images of Kampala City showing differences in canopy cover in; (a) Central Division, (b) Makerere in Kawempe Division, (c) and (d) Muyenga and Katwe of Makindye Division.

Source: Field photos by Doshnut Uganda Ltd.

Data Collection Teams

The tree audit across Kampala City divisions was conducted by a multidisciplinary team (Figure 7), which was composed mainly of forestry graduates skilled in mensuration, tree identification

and urban forestry. These were supported by IT experts who managed digital tools and data analysts and who ensured accurate cleaning, synthesis and interpretation of results. Field supervisors provided logistical oversight and, in some cases, local guides assisted with site access and navigation.



Figure 7: Makindye division field data collection team composed mainly of forestry graduates and KCCA staff skilled in forest mensuration, tree identification and urban forestry.

Source: Field photos by Doshnut Uganda Ltd.

2.2 Tree Audit Findings for the Five Kampala City Divisions.

The tree audit findings are key to the understanding of the latest status of the Kampala Urban Forest in terms of species, age class, height, canopy size, health location among others, to enable set required interventions for the improvement the tree canopy over the city in next 5 years as well as achieving the long term 20-year plan.

2.2.1 Locations of Audited Trees.

The spatial distribution of the audited trees in the assessed Kampala areas range from dense to sparse and some assessed areas lacked trees, especially the northern parts of the city (Figure 8). The spatial distribution of the audited trees in particular divisions of Kampala City are presented in Appendix 1 (i-v).

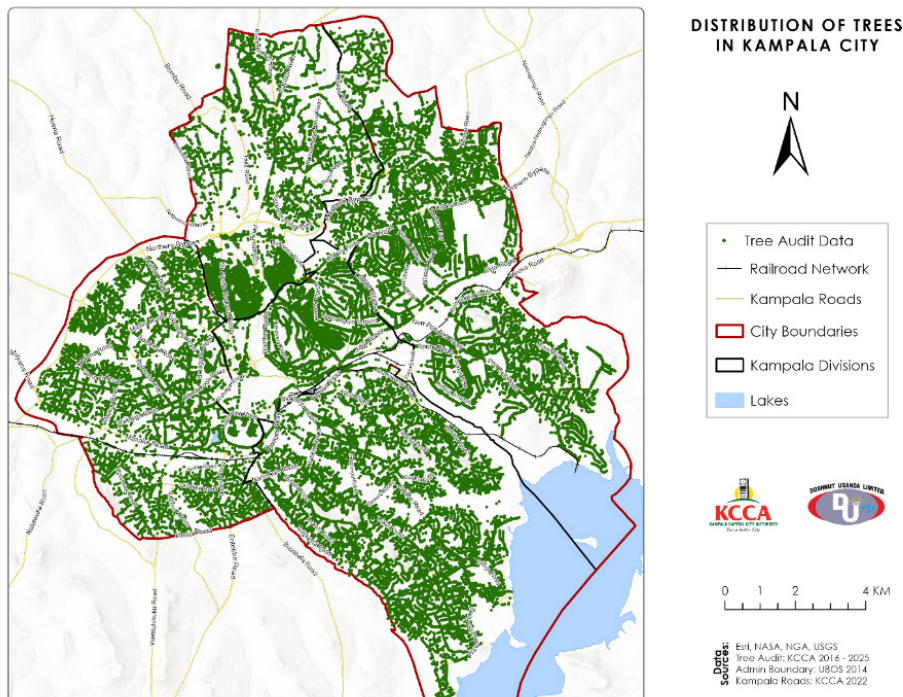


Figure 8: Distribution of Audited trees in Kampala City, 2025.
Source: KCCA 2025.

Of all the audited trees, the vast majority (n = 123526) were audited along road reserves while the least (n = 605) were audited private spaces (Table 1). These variations were influenced by various factors including the fact that the tree audits were focused on easy to reach areas hence road reserves were the most appropriate locations.

Table 1: Location of the audited trees by land ownership status across all divisions of Kampala.

Sn	Area Audited	Number of individual Audited trees					Total
		Central	Kawempe	Nakawa	Rubaga	Makindye	
1	Institutional Premises / Government Property	2033	9815	31	4583	33	16,495
3	Private property	7120	10706	0	156	3146	21,128
4	Public Space	435	0	22	37	111	605
5	Road Reserve	11060	13159	50260	25225	23822	123,526
Total		20,648	33,680	50,313	30,001	27,112	161,754

2.2.2 Tree Abundance, Species Richness and Species origin

Tree abundance and species richness.

Overall, the tree audits have documented 161,754 individual trees and 373 species and both variables (Abundance and the species richness) vary amongst the city divisions (Table 2, Appendix 3). Nakawa division had the highest number of individual trees (n = 50,313) representing 31.1% of all trees audited in the city. Kawempe division recorded the highest species richness (n = 229 species) while Nakawa division had the least number of species (n = 203)

Table 2: Tree abundance and species richness in five divisions of Kampala City.

Division	Number of encountered individual trees (% of the total audited trees in the city)	Total number of species recorded
Central	20,648 (12.8%)	215
Kawempe	33,680 (20.8%)	229
Nakawa	50,313 (31.1%)	203
Lubaga	30,001 (18.5%)	214
Makindye	27,112 (16.8%)	218
Overall Kampala city	161,754	373

Source: Compiled and analysis by Doshnut Uganda Ltd. n = number, 2025

The abundance ten of the most abundant tree species in the city varied amongst the five divisions (Table 3). It was noted that *Persea americana* (Avocado) (n = 12,331) followed by *Roystonea regia* (n = 9,430) were the most dominant trees during the audits. *Persea americana* were most abundant in Kawempe (n = 5,014), Rubaga (n = 2,857) and Makindye (n = 2,290). Other commonly recorded species included *Mangifera indica*, *Artocarpus heterophyllus*, *Markhamia lutea*, and *Dypsis lutescens*

Table 3: Abundance of the ten most dominant tree species recorded in each division of Kampala city.

CENTRAL DIVISION		KAWEMPE DIVISION		NAKAWA DIVISION		RUBAGA DIVISION		MAKINDYE DIIVISION	
Species	Count	Species	Count	Species	Count	Species	Count	Species	Count
<i>Roystonea regia</i>	1342	<i>Persea americana</i>	5014	<i>Roystonea regia</i>	3547	<i>Persea americana</i>	2857	<i>Roystonea regia</i>	2561
<i>Eucalyptus grandis</i>	1170	<i>Mangifera indica</i>	3046	<i>Polyalthia longifolia</i>	2321	<i>Markhamia lutea</i>	2770	<i>Persea americana</i>	2290
<i>Tectona grandis</i>	1138	<i>Artocarpus heterophyllus</i>	2890	<i>Dypsis lutescens</i>	2172	<i>Mangifera indica</i>	2117	<i>Mangifera indica</i>	2155
<i>Ficus benamina</i>	896	<i>Markhamia lutea</i>	2576	<i>Persea americana</i>	2170	<i>Artocarpus heterophyllus</i>	2065	<i>Dypsis lutescens</i>	1886
<i>Grevillea robusta</i>	774	<i>Psidium guajava</i>	1297	<i>Eugenia oleina</i>	1820	<i>Cupressus lusitanica</i>	1432	<i>Polyalthia longifolia</i>	1763
<i>Mangifera indica</i>	702	<i>Cupressus lusitanica</i>	1037	<i>Archontophoenix alexandrei</i>	1795	<i>Roystonea regia</i>	1033	<i>Markhamia lutea</i>	1136
<i>Pinus caribaea</i>	682	<i>Roystonea regia</i>	947	<i>Mangifera inidca</i>	1723	<i>Psidium guajava</i>	947	<i>Artocarpus heterophyllus</i>	1061
<i>Senna siamea</i>	602	<i>Thevetia peruviana</i>	664	<i>Markhamia lutea</i>	1263	<i>Thevetia peruviana</i>	858	<i>Archontophoenix alexandrae</i>	828
<i>Khaya anthotheca</i>	601	<i>Syzygium cumini</i>	603	<i>Artocarpus heterophyllus</i>	1118	<i>Dypsis lutescens</i>	651	<i>Psidium guajava</i>	760
<i>Sapium ellipticum</i>	581	<i>Eucalyptus grandis</i>	597	<i>Thevetia peruviana</i>	822	<i>Grevillea robusta</i>	590	<i>Eugenia oleina</i>	712

Source: Compiled and analysis by Doshnut (U) Ltd, 2025

Origin of the audited tree species

The audited trees belonged to both indigenous and exotic categories of species with most of them (62.3 %, n=277) exotic and the rest (37.7%) were indigenous (Figure 9). A complete list of all tree species categorized by origin status and distribution in the five divisions of Kampala is presented in Appendix 3.

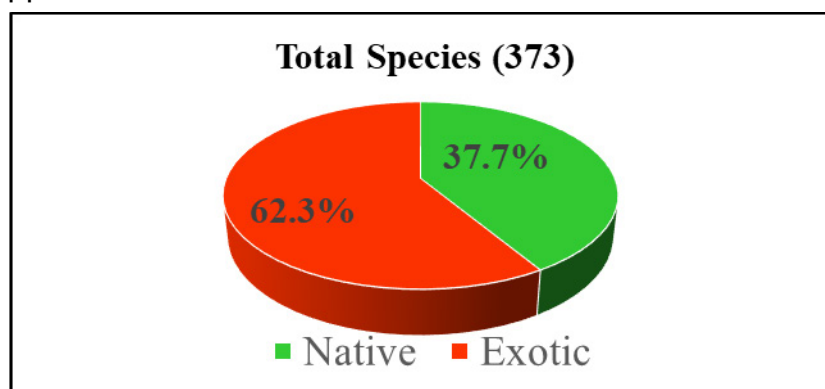


Figure 9: Pie-chart comparison of Native and exotic tree species in Kampala City.

Compiled and analysis by Doshnut Uganda Ltd

2.2.3 Stem diameter/DBH of the audited trees.

The abundance of different diameter size classes of the audited trees varied within each and amongst the different city divisions (Table 4, Figure 10 a-e). Overall, the 0.0 – 19.9 cm was the most abundant diameter size class across all divisions (n=52,898). However, Nakawa and Kawempe divisions had the highest tree counts in the 20.0-39.9 cm DBH class (15,545 and 10,723 trees respectively). In contrast, the number of trees in the largest DBH class (60+ cm) was lowest across all divisions, especially in the Makindye (n = 889). It is probable that the noted variations in the DBH size classes among divisions could be due to differences in urban land use pressures, past and current tree management practices, and local population densities.

Table 4: Tree stem size (DBH categories) and their corresponding abundances in the five divisions of Kampala (Central, Kawempe, Nakawa, Lubaga and Makindye)

DBH Category	Number of Trees					Total
	Central	Kawempe	Nakawa	Lubaga	Makindye	
0.0-19.9 cm	9,568	12,584	9,579	7,379	13,788	52,898
20.0-39.9 cm	5,642	10,723	15,545	10,416	10,076	52,402
40.0-59.9 cm	2,440	3,962	6,586	3,229	2,359	18,576
60+ cm	1,520	2,129	1,443	1,189	889	7,170
Total	19,170	29,398	33,153	22,213	27,112	131,046

Source: Compiled and analysis by Doshnut Uganda Ltd, 2025



Figure 10: (a-e): Abundance of trees of different size (DBH) classes in five divisions of Kampala

2.2.4 Heights of the audited trees.

The 5.0-9.9 m height class was consistently the most abundant height-class among the audited trees in each of the divisions with Nakawa contributing the highest number of trees ($n = 23,344$) in this height category. On the other hand, for each division, the 20.0+ meters height-class had least number of recorded trees. Compared to other divisions, the Central division had a relatively higher number of individual trees ($n = 2648$) in the tallest Height class (20+ meters) indicating a higher number of mature tall trees (Figure 11 a-e).



Figure 11: (a-e) Abundance of trees of different height classes in the five divisions

2.2.5 Tree Crown Spread (Diameter)

For each of the five divisions, the 0.0-4.9 m crown diameter class was the most dominant and the 20+ m class had the least tree counts (Table 5). Nakawa division had the highest number of trees ($n = 32,083$) in the smallest crown category (0.0-4.9 m). The variations in crown diameter within and amongst the city divisions may be due to differing urban land use patterns, with densely built-up areas limiting tree growth. It can also be a result of certain management practices such as regular trimming.

Table 5: Tree Crown diameter class (meters) in Kampala City Divisions.

Crown Category	Number of Trees				
	Central	Kawempe	Nakawa	Lubaga	Makindye
0.0-4.9 m	8,407	14,589	32,083	19,743	19,971
5.0-9.9 m	7,388	11,608	16,206	8,123	6,450
10.0-14.9 m	2,287	3,070	831	1,113	556
15.0-19.9 m	797	881	155	180	71
20.0+ m	291	316	36	84	64
Total	19,170	30,464	49,311	29,243	27,112

Source: Compiled and analysis by Doshnut Uganda Ltd, 2025

2.2.6 Tree age

Across all the divisions, the younger trees (> 5.0 - 9.0 years) were the most abundant with Nakawa recording the highest counts in the younger tree categories (Table 6). In each of the Divisions, the tree counts progressively reduced with increasing age up to the 30 - 40 age group and then showed elevated numbers for the case of the 40+ age group. Accordingly, the findings demonstrate that the city has a generally youthful urban forest structure with limited representation of older age classes.

Table 6: Tree Estimated age group Kampala city Divisions

Age Category	Tree Count				
	Central	Kawempe	Nakawa	Lubaga	Makindye
<5 Yrs	4712	6705	13628	5481	6323
5-9 Yrs	3400	5416	10536	5429	7190
10-14 Yrs	2752	4977	9298	5493	5146
15-19 Yrs	2670	3717	6655	4043	3145
20-24 Yrs	1904	3355	4642	2947	2167
25-29 Yrs	1246	2237	1912	2142	1346
30-34 Yrs	793	1558	1226	1607	904
35-39 Yrs	637	807	757	628	419
40+ Yrs	1056	1785	1117	1848	472
Total	19,170	30,557	49,771	29,618	27,112

Source: Compiled and analysis by Doshnut Uganda Ltd

2.2.7 Tree health status and causes of the noted poor health amongst some trees

Poor health amongst divisions and tree species

The vast majority (> 85.0%) of the audited trees in each division were healthy with Nakawa having the highest percentage numbers (98%) and Central division the lowest (88.0%) (Table 7). The poor health categories (dead, dying and diseased) varied amongst the divisions with Kawempe having the highest number of dead (n = 115) and dying (n = 116) trees. Nakawa had the highest number of diseased trees (n = 1,437) while Makindye had the lowest numbers of dead (n = 46), dying (n]= 37) and diseased (n = 49) trees. Figure 10 illustrates different categories of health conditions of a few encountered trees.

Table 7: Health status of the audited trees in each Kampala city division.

Health Status	Number of Trees (Percentage of the total)				
	Central	Kawempe	Nakawa	Lubaga	Makindye
Dead	0.05%	0.38%	0.18%	0.3%	0.17%
Declining	3.6%	5.1%	2.0%	5.4%	3.4%
Dying	0.5%	0.38%	0.15%	0.3%	0.14%
Healthy	88%	90%	98%	92%	96.2%
Unhealthy/Diseased	7.5%	4.2%	0.1%	2.0%	0.18%
Total	19,170	30,478	49,771	29,618	27,112

Source: Compiled and analysis by Doshnut Uganda Ltd

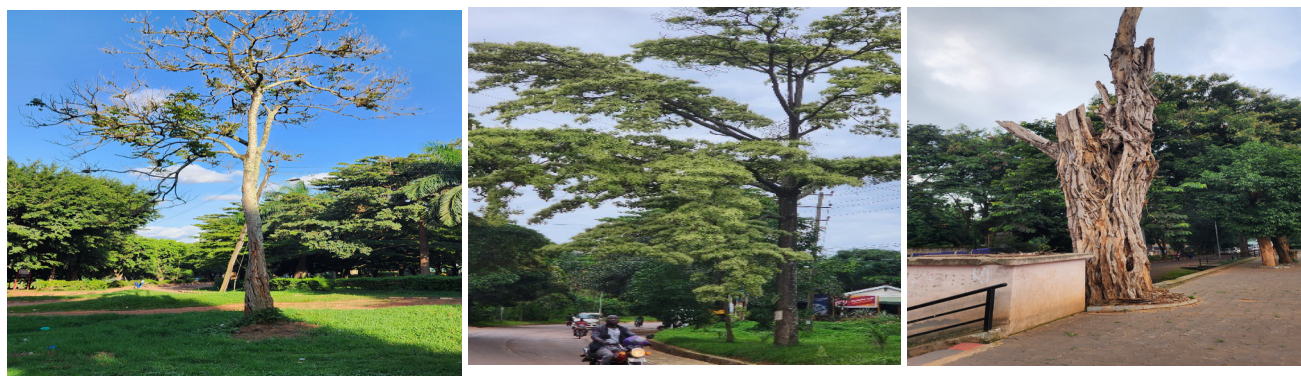


Figure 12: Images illustrating different levels of tree health (poor health, healthy and dead).

Source: Field photos by Doshnut Uganda Ltd

Tree species with most abundant unhealthy individuals varied amongst the different Kampala city divisions (Table 8-12). *Mangifera indica* had the highest counts in Makindye and Nakawa divisions, while *Persea americana*, *Eucalyptus grandis*, *Markarmia lutea* and *Persea americana* had the highest counts of unhealthy individuals in Kawempe, Central, Rubaga and Makindye divisions respectively.

Table 8: Top 20 Species count of Unhealthy Trees in Kampala Central Division

Sn	Tree Species	Health Status				Total
		Dead	Declining	Dying	Unhealthy/ Diseased	
1	<i>Eucalyptus grandis</i>	13	48	8	111	180
2	<i>Sapium ellipticum</i>	4	19	8	94	125
3	<i>Ficus benjamina</i>	1	47	1	93	142
4	<i>Mangifera indica</i>	0	22	1	89	112
5	<i>Jacaranda mimosifolia</i>	3	19	2	84	108
6	<i>Senna siamea</i>	13	89	1	79	182
7	<i>Senna spectabilis</i>	12	33	10	65	120
8	<i>Tabebuia rosea</i>	0	9	2	62	73
9	<i>Tectona grandis</i>	1	18	1	53	73
10	<i>Thevetia peruviana</i>	0	12	3	50	65
11	<i>Grevillea robusta</i>	0	40	4	47	91
12	<i>Roystonea regia</i>	1	24	1	44	70
13	<i>Cupressus lusitanica</i>	5	8	7	35	55
14	<i>Toona ciliate</i>	4	4	1	35	44
15	<i>Spathodea campanulate</i>	1	1	1	24	27
16	<i>Aleurites moluccana</i>	0	9	0	22	31
17	<i>Cedrela odorata</i>	1	8	0	19	28
18	<i>Persea americana</i>	1	3	4	18	26
19	<i>Elaeis guineensis</i>	1	9	2	17	29
20	<i>Markhamia lutea</i>	0	4	3	17	24

Table 9: Top 20 Species count of Unhealthy Trees in Kampala Kawempe Division

Sn	Tree Species	Health Status				
		Dead	Declining	Dying	Unhealthy/Diseased	Total
1	<i>Persea americana</i>	16	182	18	186	402
2	<i>Artocarpus heterophyllus</i>	4	181	14	125	324
3	<i>Mangifera indica</i>	5	140	8	152	305
4	<i>Markhamia lutea</i>	7	90	3	88	188
5	<i>Cupressus lusitanica</i>	0	81	9	28	118
6	<i>Sapium ellipticum</i>	4	60	3	39	106
7	<i>Senna siamea</i>	14	55	4	34	107
8	<i>Eucalyptus grandis</i>	4	42	3	35	84
9	<i>Senna spectabilis</i>	9	41	1	29	80
10	<i>Ficus natalensis</i>	1	40	2	37	80
11	<i>Citrus sinensis</i>	2	39	2	18	61
12	<i>Thevetia peruviana</i>	0	38	1	18	57
13	<i>Jacaranda mimosifolia</i>	3	36	1	20	60
14	<i>Psidium guajava</i>	1	28	1	29	59
15	<i>Cedrela odorata</i>	2	26	0	13	41
16	<i>Delonix regia</i>	0	23	4	14	41
17	<i>Aleurites moluccana</i>	1	20	0	23	44
18	<i>Callistemon citrinus</i>	3	19	1	17	40
19	<i>Grevillea robusta</i>	0	19	1	13	33
20	<i>Citrus limonia</i>	2	18	2	18	40

Table 10: Top 20 Species count of Unhealthy Trees in Kampala, Nakawa Division

Sn	Tree Species	Health Status				
		Dead	Declining	Dying	Unhealthy/Diseased	Total
1	<i>Mangifera indica</i>	4	95	1	0	100
2	<i>Persea America</i>	9	87	13	2	111
3	<i>Markhamia lutea</i>	0	61	5	1	67
4	<i>Artocarpus heterophyllus</i>	0	60	2	0	62
5	<i>Roystonea regia</i>	16	41	0	3	60
6	<i>Eucalyptus grandis</i>	22	40	16	4	82

7	<i>Grevillea robusta</i>	0	39	0	3	42
8	<i>Caryota urens</i>	4	37	7	1	45
9	<i>Tabebuia rosea</i>	0	30	1	0	31
10	<i>Archontophoenix alexandrae</i>	3	26	0	2	31
11	<i>Ficus talensis</i>	1	25	0	1	27
12	<i>Casuari equisetifolia</i>	0	23	1	1	25
13	<i>Cupressus lusitanica</i>	3	23	2	0	28
14	<i>Callistemon citrinus</i>	4	21	0	0	25
15	<i>Jacaranda mimosofolia</i>	0	19	3	0	22
16	<i>Sapium ellipticum</i>	1	17	0	0	18
17	<i>Thevetia peruvia</i>	3	17	1	0	21
18	<i>Elaeis guineensis</i>	0	16	0	0	16
19	<i>Spathodea campanulate</i>	0	16	0	0	16
20	<i>Syzygium cumini</i>	1	16	0	0	17

Table 11: Top 20 Species count of Unhealthy Trees in Kampala Rubaga Division

Sn	Tree Species	Health Status				Total
		Dead	Declining	Dying	Unhealthy/Diseased	
1	<i>Markhamia lutea</i>	5	199	8	58	270
2	<i>Persea americana</i>	10	195	13	40	258
3	<i>Mangifera indica</i>	2	169	7	38	216
4	<i>Cupressus lusitanica</i>	23	141	12	26	202
5	<i>Artocarpus heterophyllus</i>	3	118	9	44	174
6	<i>Thevetia peruviana</i>	0	87	2	28	117
7	<i>Ficus natalensis</i>	7	80	3	24	114
8	<i>Grevillea robusta</i>	2	46	1	17	66
9	<i>Psidium guajava</i>	1	34	0	5	40
10	<i>Vangueria apiculata</i>	0	31	1	17	49
11	<i>Delonix regia</i>	1	25	0	9	35
12	<i>Ficus ovata</i>	0	24	0	6	30
13	<i>Senna spectabilis</i>	0	24	4	3	31
14	<i>Sapium ellipticum</i>	0	23	2	9	34
15	<i>Senna siamea</i>	0	23	8	3	34

16	<i>Callistemon citrinus</i>	3	22	1	12	38
17	<i>Syzygium cumini</i>	0	20	1	4	25
18	<i>Vernonia amygdalina</i>	0	20	1	9	30
19	<i>Tabebuia rosea</i>	0	19	1	8	28
20	<i>Aleurites moluccana</i>	0	17	1	5	23

Table 12: Top 20 Species with the most count of Unhealthy Trees in Makindye Division

Sn	Tree Species	Health Status				Total
		Dead	Declining	Dying	Unhealthy/Diseased	
1	<i>Mangifera indica</i>	1	100	4	2	107
2	<i>Persea americana</i>	1	96	5	5	107
3	<i>Roystonea regia</i>	14	51	9	4	78
4	<i>Cupressus lusitanica</i>	4	49	2	6	61
5	<i>Markhamia lutea</i>	1	58	1	0	60
6	<i>Artocarpus heterophyllus</i>	0	53	2	1	56
7	<i>Thevetia peruviana</i>	0	45	2	1	48
8	<i>Polyalthia longifolia</i>	1	24	2	1	28
9	<i>Ficus benjamina</i>	0	25	1	1	27
10	<i>Tabebuia rosea</i>	0	24	1	0	25
11	<i>Grevillea robusta</i>	0	22	0	0	22
12	<i>Senna siamea</i>	1	20	0	0	21
13	<i>Casuarina equisetifolia</i>	1	17	0	1	19
14	<i>Caryota urens</i>	0	17	0	1	18
15	<i>Ficus natalensis</i>	1	16	0	1	18
16	<i>Elaeis guineensis</i>	0	17	0	0	17
17	<i>Archontophoenix alexandrae</i>	0	16	1	0	17
18	<i>Psidium guajava</i>	0	12	1	0	13
19	<i>Dyopsis lutescens</i>	0	11	1	0	12
20	<i>Citrus limonia</i>	0	11	0	1	12

Causes of poor health amongst divisions and tree species

The tree poor health was due to diverse causes with insects and humans being the most common causes (Table 13). On the other hand, animals and fire were noted to have the least effect on the health of the audited trees.

Table 13: Unhealthy Tree causative in Kampala city divisions

Causative Agent	Central	Kawempe	Makindye	Nakawa	Rubaga	Total
Age	344	224	282	482	688	2020
Animals	11	17	18	62	221	329
Diease/fungi	457	191	0	193	278	1119
Fire	13	35	9	14	51	122
Humans	237	283	436	390	733	2079
Others	423	118	43	185	419	1188
Stranglers	68	38	107	127	271	611
Climate	183	56	139	41	107	526
Insects	859	162	220	529	563	2333

2.3 Findings from Stakeholder Engagements.

Various stakeholder engagements were conducted including a workshop and holding in-depth interviews with key informants. The stakeholder workshop in particular brought together over 50 participants from government agencies including KCCA staff, NEMA, NFA, MoKCCMA, MWE, civil society organizations (CSOs), academia, the private sector and community groups. The engagements were a critical step in ensuring that the updated KUFMP (2024/25–2029/30) adequately responds to local priorities and expectations of institutions and communities. The workshop provided an opportunity to review the KUFMP 2019-2023/24, discuss emerging urban forestry challenges and co-develop practical proposals under four thematic areas namely; (1) Tree Planting, Biodiversity and Climate Change, (2) Policy, Regulation and Enforcement in relation to Urban Forestry, (3) Integration of Urban Forestry in the City's Infrastructure and Green City Design, and (4) Public Awareness about and Community Engagement in Urban Forestry. Descriptions of the key findings from the stakeholder engagements under each of the considered thematic areas are given in sections 3.2.1 to 3.2.5.

2.3.1 Tree Planting, Biodiversity and Climate Change

The stakeholders emphasized that there is an urgent need to increase Kampala's urban tree cover by at least 10% by 2029/30, with a targeted restoration of degraded urban green spaces to strengthen biodiversity and climate resilience. They also strongly recommended prioritizing the planting of indigenous species that combine aesthetic appeal, have appropriate rooting structures and adaptability to changing climatic conditions. Specific sites identified for priority greening included taxi parks, high-density settlements and shoreline areas along Lake Victoria.

It was also proposed that clear indicators for monitoring success of the planted trees such as planted tree survival rates, health status, crown diameter and mapped canopy coverage using GIS and mobile applications to be considered. Suggested practical strategies to enhance survival of the planted trees included species-site matching, planting slightly mature trees and aligning planting schedules with rainfall patterns. Seasonal planting was recommended for March-May and August-November to coincide with expected peak rainfall seasons, with year-round maintenance.

Community participation was highlighted as essential, with stakeholders recommending the establishment of community surveillance teams to monitor tree care and prevent vandalism. Emphasis was also placed on empowering local residents through capacity building in nursery management, species selection and tree maintenance.

2.3.2 Policy, Regulation and Enforcement in relation to Urban Forestry.

The stakeholders stressed the importance of strengthening the legal and regulatory framework to safeguard Kampala's urban forest resource. They pointed out that although the city has guidelines and policies in place, weak enforcement and limited public awareness have hindered their effectiveness. Key proposals included the urgent finalization and enactment of the Kampala Green Infrastructure Ordinance to clearly define tree ownership, protection status, permitted activities, penalties for illegal tree felling and mandatory tree replacement obligations. It was also recommended that the ordinance should be widely disseminated, translated into the Luganda dialect and other local languages, and be integrated into urban development permit conditions.

In order to enhance the implementation of the Kampala Urban Forestry plans, it was suggested that institutions including KCCA's environment enforcement unit, the physical planning directorate and the Directorate of Public Health and Environment work closely with local councils, police and the judiciary so as to effectively implement and/or enforce the policies. Regular joint inspections, routine penalties for non-compliance and a dedicated budget for enforcement operations were also emphasized.

Furthermore, the stakeholders proposed establishing clear operational procedures for tree licensing and felling permits, supported by standardized templates and accessible grievance rectification systems. Training for urban forestry officers, local enforcement agents and community leaders on legal provisions and evidence collection was also pointed out as a requirement that should be addressed under this updated forestry plan.

2.3.3 Infrastructure Integration and Green City Design

The stakeholders emphasized that some elements of inadequate planning, encroachment on green spaces and uncoordinated infrastructure projects have historically resulted in tree loss, reduced green corridors and conflicts between utilities and urban trees. They strongly recommended mainstreaming urban forestry into physical planning and engineering designs for roads, construction of buildings, drainage, street lighting and urban renewal projects. It was further proposed that all new road designs include designated tree planting strips, sufficient root space and coordinated underground utility mapping to avoid conflicts during maintenance works.

The engagements proposed that urban green design should also prioritize climate-smart landscaping for public buildings, commercial complexes and residential developments. Minimum greening standards such as percentage plot coverage for green space and species diversity should be incorporated into building approvals and environmental impact assessments. It was also highlighted that there is need to consider innovative green infrastructure solutions such as vertical gardens, rooftop greening and bioswales (Vegetated shallow channels), especially in high-density areas where open space is limited. Furthermore, it was suggested that maintenance considerations must be factored into all design phases to ensure that planted trees survive and continue providing environmental benefits throughout their lifespan. Additionally, developers and contractors should be held accountable for any damage to existing urban trees during construction, with clear guidelines for tree protection, penalties and, mandatory compensation planting and nurturing of the planted trees.

2.3.4 Public Awareness and Community Engagement in Urban Forestry

The stakeholders pointed out that without sustained community ownership and high-level public awareness, the city's urban forestry initiatives risk falling short of their intended impact. It was noted that while KCCA and partners have made efforts to raise awareness in schools and institutions, gaps remain in reaching more institutions, informal settlements and other community groups. Accordingly, it was recommended that focus should be put on strengthening civic education and sensitization campaigns that promote a culture of tree stewardship at

household, neighborhood and institutional levels. It was also proposed that the *Green Schools Kampala Program* be expanded and integrated into the city schools' curriculum, encouraging school clubs to adopt sections of green corridors or public parks.

Faith-based organizations, local cultural institutions and community-based organizations were identified as influential partners to mobilize citizens, organize tree planting days and deliver urban greening messages through places of worship, cultural gatherings and community meetings.

The stakeholders also called for interactive platforms such as community radio talk shows, door-to-door campaigns, street theatre and social media challenges to reach various audiences including the youth. The use of digital tools like the "*Kampala Tree Watch App*" was encouraged to empower citizens to report tree damage, illegal felling and gaps in maintenance. Additionally, recognition and incentive mechanisms such as community greening awards, branded certificates and youth competitions were recommended to motivate sustained public participation and build pride in urban forestry stewardship.

2.3.5 Cross-Cutting Priorities and Recommendations

In addition to the specific thematic inputs, the stakeholders identified several cross-cutting priorities that can strengthen the development of the updated KUFMP 2024-2029/30. These priorities emphasize the need for an integrated, well-resourced and inclusive approach to urban forestry governance and practice. The following cross-cutting priorities and recommendations were emphasized:

- A critical need for adequate and predictable funding, both from the city's budget and external development partners so as to sustain planting, maintenance, monitoring, and community mobilization activities. The stakeholders recommended establishing a dedicated urban forestry fund within KCCA, supported by public-private partnerships and corporate social responsibility contributions.
- Capacity building across all levels from senior policymakers to on-the-ground tree care teams and community volunteers. Continuous training in modern arboricultural practices, legal procedures, digital tools and community facilitation was viewed as essential to bridge current skill gaps.
- Regular utilization of relevant data and technology as bases for improving planning, reporting, accountability and adaptive management. Regular citywide tree audits, real-time GIS-based canopy monitoring and public dashboards should be prioritized and adequately funded.
- Strong collaboration and accountability frameworks to align efforts between KCCA departments, MDA's local councils, civil society, academic institutions and the private sector. Memoranda of Understanding, multi-stakeholder urban forestry committees and routine progress reviews were proposed to ensure that the plan's vision is realized collectively and transparently.



Figure 13: A stakeholder engagement workshop for updating the Kampala urban forestry management plan, held at Hotel Africana-Kampala on 17th June 2025.

2.4 The Current Kampala Urban Forest Management structure and Practices

2.4.1 An Overview of the Management Structure

The current management structure for Kampala's urban forestry function operates within KCCA's Directorate of Physical Planning and is directly overseen by the Deputy Director Landscape and Environmental Management (Figure 14). The department's mandate is to protect the urban environment, maintain public green infrastructure and promote the sustainable use of the city's natural resources.

As outlined in the KCCA functional analysis report 2014, the directorate of landscape and environmental management is responsible for the following key functions;

1. Providing compliance technical support for the proposed city development projects
2. Developing guidelines and promoting sustainable use of natural resources and ecosystems in the city
3. Monitoring and enforcing guidelines for city development/projects and control of pollution in neighborhoods
4. Developing, reviewing and implementing a public/community participation action plan in environment management
5. Carrying out applied research in environmental and land use management in the city
6. Providing technical support in integrating best practices of environmental management, landscape management and city climate change strategy in development
7. Beautifying of the city streets and public spaces,
8. Maintaining and managing public parks, plants, trees and public green spaces
9. Designing and implementing wetland restoration, urban landscaping and urban forestry projects in public spaces

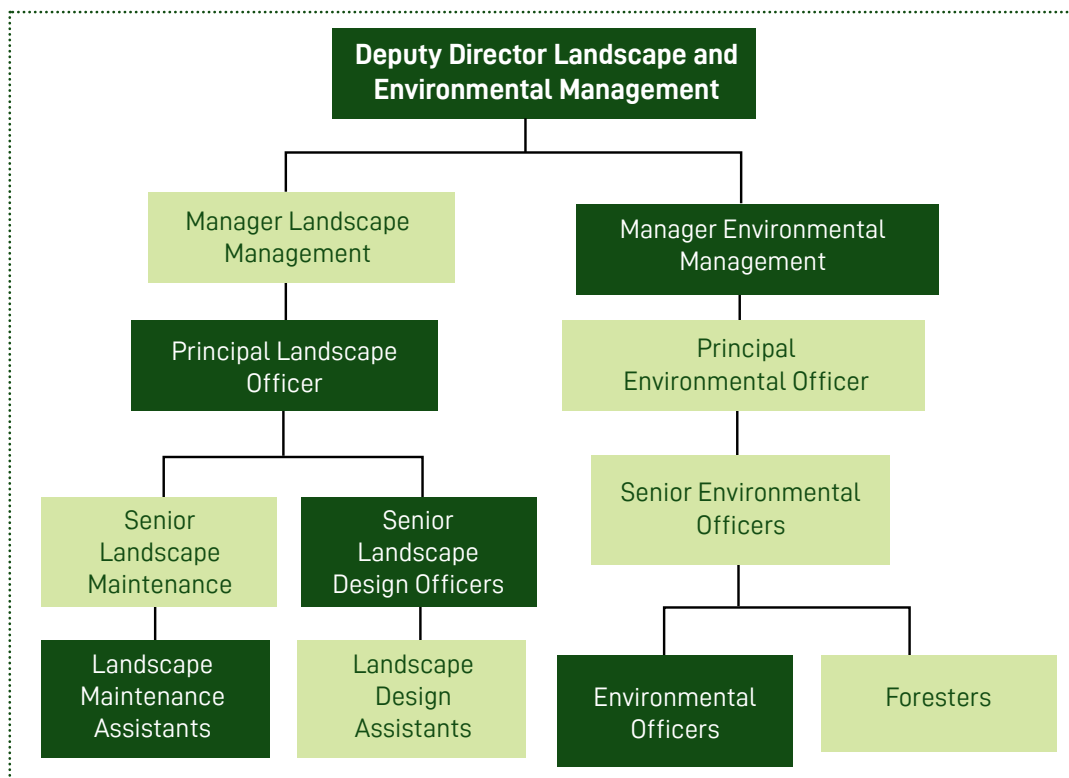


Figure 14: The current Kampala Urban Forestry Management Organizational Structure.

Source: KCCA Functional Analysis Report, August 2024

2.4.2 The Urban Forest management Team

The Urban Forest management team form the operational backbone of Kampala’s urban forestry in the KCCA Department of Landscape and Environmental management. It is responsible for tree pruning, pollarding and removal of dead trees and occasional beef up of tree planting activities throughout the five city divisions.

The team is composed of professional foresters who function as divisional technical officers with overall responsibility for the planning, coordination, and supervision of urban forestry activities. Their mandate includes conducting seedling survival assessments, updating and managing tree inventory data, processing tree management permits, undertaking dangerous tree assessments, and ensuring compliance with approved urban forestry standards and guidelines, as well as reporting on implementation progress. They are supported by drafting technicians who provide technical support through mapping, tree tagging, spatial data collection and preparation of site-specific technical plans. Implementation at field level is further supported by tree nursery operators responsible for the establishment, propagation, and management of seedlings in KCCA nurseries, alongside a field-based casual tree management workforce engaged through SACCO schemes to carry out routine operational activities such as planting, maintenance, watering, pruning, and general tree care under the supervision of the foresters.

2.4.3 Urban Forest Management Practices, Equipment and Tools

The management practices

Kampala's urban forest management practices encompass a range of activities, which include the following;

1. **Tree Nursery Management:** Currently, one tree nursery exists and diverse tree species seedlings including indigenous and ornamental species are raised for the city's planting and growing needs (Figure 15). The required activities cover seed sourcing and selection, propagation, potting, watering, pest and disease management and hardening-off.



Figure 15: KCCA Tree nursery in Bugolobi, Nakawa Division.

Source: Field photos by Doshnut Uganda Ltd

2. **Tree Planting and Establishment:** The activities involve coordinated species-site matching, planting along road reserves, in public open spaces, institutional compounds and degraded sites. They also include site preparation, soil improvement, planting alignment, staking and mulching.
3. **Tree Maintenance and Care:** Includes routine watering, pruning, trimming, pollarding for shape and safety, removal of diseased or dead tree parts, adding fertilizers/manure where necessary, pest and disease management and replacing failed seedlings and dead trees.
4. **Tree Risk Management:** Involves a forester's inspection and assessment report of trees posing hazards to pedestrians, infrastructure, or traffic. Hazardous trees are pruned, braced or removed when necessary, following safety protocols.

5. **Inventory and Monitoring:** Continuous field audits to update species records, canopy cover assessments and spatial mapping are carried out so as to ensure informed planning and reporting.
6. **Community Engagement and Stewardship:** This involves mobilizing local communities, schools, institutions, and the private sector to plant and care for planted trees, report damage or illegal tree cutting and removal, and participate in annual community tree planting drives.

Essential Equipment and Tools

To effectively deliver the forestry practices, the teams rely on a range of basic and specialized tools and equipment. Based on the recent evaluation, the following summary of the key tools currently in use and highlights about the existing critical gaps are given in Table 14.

Table 14: Key tools noted to be currently in use and highlights about the existing critical gaps.

Equipment / Tool	Current Status	Observed Gaps
Pruning tools (pruners, saws)	Limited stock, mostly hand tools	Insufficient for large mature trees
Site clearing equipment (slashers, pangas)	Available	Basic, no mechanized options
Watering cans and hoses	In use	Insufficient for larger sites
Transportation (trucks, crane truck, pickups)	Shared between directorates	Often unavailable for urgent tree work
Nursery tools (spades, pots, wheelbarrows)	Operational	Need upgrades for larger production volumes
Safety gear (helmets, gloves, harnesses)	Provided for some staff	Not enough for all field workers
GIS and GPS units	One unit per core team	More handheld devices needed for live mapping
Transplanters or mechanical lifters	Not available	Major gap for moving large trees
Tree tagging and QR code systems	Partially piloted	Requires full-scale rollout
Resistograph and tomograph for tree disease internal diagnosis	Not available	Major gap for full-scale pest and disease diagnosis and management in large old tree preservation and conservation

Source: Compiled by Doshnut Uganda Ltd

CHAPTER 3: AN EVALUATION OF THE KAMPALA URBAN FORESTRY MANAGEMENT PLAN (KUFMP) 2019–2023/24

The evaluation of the 2019-2023/24 KUFMP focused on the plan's structure, relevance and implementation strategies. It covered the key aspects of the plan and highlighted the noted strengths, weaknesses, opportunities and threats, and suggested recommendations to guide the updating of the current KUFMP.

3.1 An Evaluation of the First Five-Year Objectives in the KUFMP (2019 -2023/24)

In 2019 KCCA developed its first 20-year Urban Forest management plan (2019- 2039), with quarterly 5-year implementation objectives. The first five (5) year objectives for the period 2019–2023/24 was due for review and update. This plan represented a major milestone in formalizing urban forestry as a key aspect of the city's sustainable development strategy. Its vision is *"By 2039, Kampala's Urban Forest will be abundant, diverse, healthy, self-reliant, and cared for by all and will contribute to the safety of our community and the creation of a lush green attractive, and livable city across the region"*.

The stated goal of the KUFMP 2019-2039 is to "Enhance, maintain, conserve and protect Kampala urban tree canopy cover" and through achieving four (4) objectives with short term targeted actions (Table 15). KCCA urban forestry first five-year objectives and targeted actions performance were proposed to be measured using Clark et. Al (1997) Urban sustainability model.

Table 15 Kampala Urban Forest Management Plan (2019- 2023/2024) 5-year objectives and Targeted actions

OBJECTIVE	TATED ACTION	Time frame
Increase urban forest Tree density	Recruit qualified forester in green spaces and public works for each division to coordinate species-site match, Plant, maintain & protect existing and new trees	Short term*
	Procurement of care operations equipment	
	Review new development plans/proposals to maximize tree planting and protect existing trees	
	Develop a Kampala tree management system	
	Periodically update & analyse Kampala tree cover	Medium term**
	Plant more trees at a ratio of 50 trees per acre	
	Develop a sustainable system for the use of wood, timber and prunes	Long term ***
	Partner with Private sector for tree planting & best management framework	Long term***
	Control free range animals (Goats, cattle and sheep) in the city	Short term*

OBJECTIVE	TATED ACTION	Time frame
Develop Kampala Urban Forest Management Framework	Develop an annual carbon sequential model to quantify the city carbon stock and sequestration potential	Short term*
	Develop the KCCA tree planting and care guidelines	Short term*
	Develop Kampala tree valuation model to quantify the monetary environment, social and economic value of Kampala city trees	Short term*
	Develop a tree care training programme for both the private and public sector operating in Kampala	Medium term**
	Conduct Kampala tree canopy assessment, to update KUFMP every 5 years	Short term*
	Develop a stakeholder map highlighting the role of each key stakeholder	Medium term**
	Adopt an Urban Sustainability model for evaluating the performance of the Kampala Urban Forest	Medium term**
Increase the diversity of native and abundance of protected trees species	Establish a KCCA tree seedling nursery for the production tree seedlings	Short term*
	Develop an eco-tourism map indicated the location of protected and native city trees	Short term*
	Promote the planting of native and protected trees species	Long term***
Increase awareness of the Urban Forest management	Develop and maintain an urban forestry portal as a comprehensive & dynamic information source	Short term*
	Develop information story telling materials for urban forest & its benefits	Short term*
	Establish a recognition programme for developers and contactors who have exemplified project for tree preservation and longevity of the urban forest	Short term*
	Promote community tree planting drives through various platforms	Short term*

Key: * 1-5 years. ** 6-10 years. ***11- 20 years

**Performance evaluated using the Clark et.al Urban sustainability model*

Under the KUFMP 2019-2023/24, KCCA embarked on short term targets of the Plan's 20-year objectives, with various activities including enhancing nursery production capacity, developing tree planting schedules and engaging communities such as schools, private developers and civil society organizations in tree planting and care among others. The plan also emphasized the need for periodic tree audits, integration of urban forestry into local physical development plans and coordination with other city departments to ensure that greening was not an isolated effort but a cross-cutting urban agenda. Accordingly, the following were achieved during the plan implementation period and the performance was to be measured using the Clark et.al (1997) Urban forestry sustainability model;

- The KUFMP 2019–2024 set a baseline for the management of Kampala's urban forest, and as the first management plan, it marked the beginning of structured urban forest planning.
- Tree audit exercises were expanded to cover previously un-audited areas, increasing tree species diversity from 328 in the initial audits to over 373 species in the SLICKS and World Bank GKMA tree audits.
- Periodic assessments of the canopy cover were conducted using ArcGIS to track progress and guide planning.
- There was transition in tree audit data collection tools from use of paper and hand-held GPS in the 2016 pilot audit, to Open Foris in the 2017-2019 EU-CoMSSA audit, and later to Survey123 in the 2023-2024 SLICKS audit. Survey123 was subsequently adopted for

the 2025 Makindye tree audit of the World Bank GKMA- UDP undertaken by DOSHNUT (U) Ltd and FAO GCI project.

- A tree management system was initiated and is currently under development. This is embedded with tree audit data hosted in Esri and it include geo-referenced tree database for Kampala public trees
- Annual tree planting targets were increased from 1,200 to 1,500 per division to boost canopy cover per acre.
- Increased public demand for tree permits emerged, with tree clearance becoming a prerequisite for development in the city.
- Partnerships were strengthened to increase urban forest awareness and tree cover, with support from Total Energies, ABSA Bank, Kampala Pharmaceuticals Ltd., Tree Adoption Uganda, Ministry of Water & Environment, Grant Thornton and other commercial banks and MDAs.
- During the plan tenure, there was recruitment of five qualified foresters to manage the urban forests and these are now part of the KCCA structure (Figure 14)
- The institution procured key urban forestry tools, including pruners, tree assessment hammers, chainsaws, and nursery tools such as shovels, wheelbarrows and watering cans.
- During the plan period, training of landscape staff was emphasized, with eight capacity-building sessions conducted per annum to improve urban forest management skills.
- A tree valuation model was developed to support tree conservation, planning, and compensation efforts.
- Incidences of fallen trees, pests and diseases were consistently compiled through field reports to aid in mapping causes and identifying rapid responses.

The plan also helped reveal critical challenges such as vandalism from billboard installations, free range grazing animals. However, measures were put in place to control vandalism on trees, including caging of vulnerable trees, enforcement actions such as arresting animals, and there are plans to engage Town Clerks in community awareness drives.

Table 16: A Summary evaluation Score of 2019-2023/24 Kampala Urban Forest Management objectives using Clark et.al Urban sustainability model

OBJECTIVE	ACTION	TIMELINE (Period)	Responsible Directorate	Implémentation Status (%)
Increase urban forest Tree density	Recruit qualified forester in green spaces and public works for each division (Species-site match, Plant, maintain & protect existing and new trees	Short term	DPP	Good (50%) 7 Temporary staff (Foresters) recruited. The KCCA staff current structure 2025, creates position for 5 Foresters.
	Procurement of tree care operations equipment		DPP	Moderate (40%). There is no dedicated crane truck and the available garbage collection truck is in poor mechanical condition for urban tree management.
	Review new development plans/proposals to maximize tree planting and protect existing trees		DPP	Low (10%) The current building control regulations encourage the preservation for existing trees. However, it does not specify the endangered tree species which must be preserved.
	Develop a Kampala tree management system		DPP	Low (25%) The city has mapped all public street trees, a key component of the urban forest management system. It has also documented survival assessment for newly planted trees
	Periodically update & analyse Kampala tree cover		DPP	Optimal (80%) – Citywide public tree audit completed (Kampala 5 divisions)
	Plant more trees at a ratio of 50 trees per acre	Medium term	DPP	Moderate (45%) - 40,000 trees planted in public spaces in the city over the last 5 years. The biggest number planted during the NAM SUMMIT preparations. However, several trees cut down for public infrastructure and private real estate development
	Develop a sustainable system for the use of wood, timber and prunes	Long term	DPP	Low (10%) The National Forestry regulations guide on the permitted sustainable use of wood. KCCA has developed a tree management application form to be used in the Green Infrastructure ordinance.
	Partner with Private sector for tree planting & best Management framework	Long term	DPP	Moderate (10 MoUs) the city has signed a number of Memorandum of understanding with Private sector.
Control free range animals (Goats, cattle and sheep) in the city	Short term	DPP	Low (20%) There is continued sensitization of the community prior to tree planting and the dangers to tree survival in the community	

OBJECTIVE	ACTION	TIMELINE (Period)	Responsible Directorate	Implementation Status (%)
Develop Kampala Urban Forest Management Framework	Develop an annual carbon sequential model to quantify the city carbon stock and sequestration potential	Short term	DPP	Moderate (40%). Draft 1 is waiting the gazettelement of the Kampala Green infrastructure ordinance (2021). The ordinance gives policy guidance to it
	Develop the KCCA tree planting and care guidelines	Short term	DPP	Good (50%). Some of these guidelines have been incorporated in the Kampala Green Infrastructure ordinance.
	Develop Kampala tree valuation model to quantify the monetary environment, social and economic value of Kampala city trees	Short term	DPP	Moderate (40%). Draft 1 is waiting the gazettelement of the Kampala Green infrastructure ordinance (2021). The ordinance gives policy guidance to it
	Develop a tree care training programme for both the private and public sector operating in Kampala	Medium term	DPP	Good (60%) – Tree care training manual developed under the pilot Green Cities Initiative and KCCA staff were trained by NaFORRI technical officers
	Conduct Kampala tree canopy assessment, to update KUFMP every 5 years	Short term	DPP	Optimal (80%) - Complete inventory of public trees citywide. The Central division and Kawempe division data will need to be updated
	Develop a stakeholder map highlighting the role of each key stakeholder	Medium term	DPP	Low (0%) - A stakeholder map has not been developed
	Adopt an Urban Sustainability model for evaluating the performance of the Kampala Urban Forest	Medium term	DPP	Good (60%) Adopted
Increase the diversity of native and abundance of protected trees species	Establish a KCCA tree seedling nursery for the production tree seedlings	Short term	DPP	Moderate (30%) Enhanced the production KCCA tree nursery
	Develop an eco-tourism map indicated the location of protected and native city trees	Short term	DPP & Gender (Tourism department)	Good (68%) - No eco-tourism map developed. However, Urban tourism tree audit was undertaken in 70% in the eco-tourism sites in Kampala
	Promote the planting of native and protected trees species	Long term	DPP	Good (70%) of the species planted last 5 years were native trees

OBJECTIVE	ACTION	TIMELINE (Period)	Responsible Directorate	Implementation Status (%)
Increase awareness of the Urban Forest management	Develop and maintain an urban forestry portal as a comprehensive & dynamic information source	Short term	DPP & ICT	Low (25%) - No Urban forestry portal. However, there exists an online tree directory, an online/ Georeferenced tree database among other reports both published and non-published reports
	Develop information story telling materials for urban forest & its benefits	Short term	DPP & PCA	moderate (30%). Only one published video published about Kampala trees and its beauty (Tabebuia rosea) by KCCA PCA team and Information boards under SLICKS project were placed within City hall
	Establish a recognition programme for developers and contractors who have exemplified project for tree preservation and longevity of the urban forest	Short term	DPP & PCA	Moderate (30%). No recognition programme initiated specifically for urban forestry. However, the Weyonje awards under DPHE added tree maintenance as part of their assessment of outstanding divisions.
	Promote community tree planting drives through various platforms	Short term	DPP & PCA	Moderate (30%). A few community tree planting drives were undertaken

- **Key:** * 1-5 years. ** 6-10 years. ***11- 20 years
- **Kampala Urban Forest Performance Measures (Clark, et al):** Low = 0-25%; Moderate = 25- 49%; Good = 50- 75%; Optimal= 75+

3.2 Other evaluations of the Kampala Urban Forestry Plan (2019-2023/24)

3.2.1 Legal, policy and institutional frameworks

This section appropriately provides a listing of various and key national, and international laws, policies and frameworks relevant to urban forestry. It also shows that the plan was developed in alignment with the international policy structure and relevant frameworks like the United Nations SDGs and UNFCCC. However, the listed laws and policies are not evaluated on how mandates are applied by various relevant institutions in urban forestry management. Additionally, the plan does not identify any policy implementation failures despite this likely being a major reason for continued tree and green space loss in Kampala.

For a more appropriate and feasible KUFMP, it is recommended that responsibilities of particular players especially regarding enforcement of urban forest protection be shown in the new plan, and an evaluation of the effectiveness of the laws and policies in Kampala's urban forestry management be done.

3.2.2 2019 KUFMP Tree Audit Data

The plan demonstrates a good methodological approach in conducting a tree audit across four precincts of Kampala (Kololo, Nakasero, Mulago and Makerere). However, the scope of the tree audit was limited and it was not an adequate representation of the whole city. Accordingly, it is recommended that all tree audit datasets including the Nakawa and Lubaga data (2023-2024 Slicks project), and Makindye data (GCI and GKMA tree audit, 2025) be integrated and analyzed to inform the updating of Kampala Urban Forest management plan. However, a comprehensive update of the data will be need when updating the next new plan (2024/25 -2029/30).

3.2.3 Situation analysis and urban forest inventory.

The section rightly identifies major threats to Kampala's urban forest including land encroachment, illegal cutting of trees, infrastructure development and weak law enforcement. However, this was limited, as the data presented in the KUFMP 2019-2023/24 was a partial segment of the city and not representative enough for a city-wide planning strategy and the uniqueness of every division. In addition, there was inadequate integration with current appropriate management technologies such as, drones, Lidar, GIS and remote sensing, even though these are currently outstanding in global urban forest monitoring.

It is hence recommended that a fresh comprehensive tree inventory in all areas of the city be conducted using modern technological tools to map existing tree cover, biodiversity hotspots and canopy gaps. This should be accompanied by an assessment of the current urban forest ecosystem services to quantify the prevailing environmental and economic value of trees in Kampala.

3.2.4 Strategic interventions and implementation proposals missing in KUFMP 2019-2023/24

The section presents practical interventions for the Kampala's Urban forestry. Despite these strengths, the 2019-2023/24 plan had an inadequate implementation strategy. The plan had no costing framework to show how much funding would be required to meet the proposed targets, nor is there a timeline or detailed assignment of roles and responsibilities. Additionally, the plan does not anticipate key implementation risks such as disputes over land tenure or climate-related threats like droughts and floods, several public and private infrastructural, pest and diseases, invasive plant which could significantly hinder tree survival

For a more appropriate and feasible KUFMP, a more detailed implementation plan including actions, timeframes, financial budgets and key performance indicators should be developed. The potential funding sources should be highlighted, as well as a risk analysis framework should be developed to identify and mitigate possible threats.

3.2.5 Monitoring and Evaluation missing in KUFMP 2019- 2023/24

The section recognizes the need to track progress of urban forestry activities. However, the 2019-2023/24 plan had inadequate monitoring and evaluation framework with indicators, assigned responsibilities and reporting plan. To address these gaps, it is recommended that a detailed monitoring and implementation plan should be developed as part of the revised KUFMP. This should include clearly defined indicators, baseline data and reporting tools that support annual reviews and midterm evaluations. The use of relevant digital tools to facilitate public participation in monitoring the Kampala urban forestry such as a tree-reporting mobile app or a web-based dashboard to regularly capture the city's tree canopy details should be emphasized. Hence promote online user-friendly monitoring tools, which are open to the public and can enable real-time sharing of information.

3.3 Noted challenges faced in implementing the KUFMP 2019- 2023/24.

Despite historical efforts, gains in first 5 years of implementing the policy frameworks, Kampala's urban forestry continues to face several challenges including;

- **Rapid urban Expansion:** High population growth and demand for land have led to the conversion of green spaces into residential, commercial and infrastructural developments.
- **Encroachment and Degradation:** Public parks for example Pan African square and upper constitutional square for civic development and road infrastructure expansion, wetlands, and green belts have been encroached upon or degraded, diminishing their ecological functions.
- **Climate Change Impacts:** Increased flooding, prolonged dry spells and urban heat island reduce tree survival and ecosystem stability.
- **Inadequate Comprehensive Database:** The existing tree inventory has old dataset especially Central and Kawempe division that will need to be prioritized as and when the update of tree geo-referenced database is done. This improves on the effective planning and decision making for the management of the Kampala tree canopy.
- **Limited Public Awareness and Participation:** Many city residents and developers are unaware of the value of urban trees, urban forests and other green spaces, with few involved in the current urban tree conservation effort.
- Low budget appropriation for the implementation of the Kampala Urban Forestry plan
- Delayed gazettelement of Kampala Green infrastructure ordinance (2021) that provides legal backing for the operationalization of the Kampala Urban forestry plan and its key specific targets

3.4 Justification for Updating the Kampala Urban Forestry Management Plan

The update of the Kampala Urban Forestry Management Plan is both timely and of critical importance based on the following considerations:

- **The KUFMP was due for revision by 2024 and was limited in spatial coverage:** The 2019 KUFMP was expected to have been revised in 2024. In addition, the plan only covered the precincts of Makerere, Kololo, Mulago and Nakasero.

- **Climate Resilience Needs:** The increasing exposure of the Kampala area to climate-induced risks necessitates a revised strategy that prioritizes resilience through increased urban greening. The 2019 KUFMP does not adequately address emerging environmental pressures such as the increasing devastating effects of extreme weather events such as floods resulting from climate change.
- **Rapid Urban population increase and the associated city's transformations:** Kampala's built environment has rapidly evolved largely due to the rapid population increase thus requiring adaptive and forward-looking green infrastructure strategies.
- **Adequate alignment with prevailing National and Global policies:** The revised plan adequately aligns with the prevailing local and international legal and policy frameworks.
- **Improved stakeholder engagement:** The updated plan offers an opportunity to engage more stakeholders in its development and participation in urban forestry management.
- **Enhanced Data and Technology Use:** Advances in GIS mapping, satellite imagery, remote sensing and other technologies provide opportunities for multiple validation of urban canopy, detailed tree inventories and planning.
- **Inadequate incorporation of Urban Forests in the city physical development** e.g., Major infrastructure. Furthermore, the current urban forestry has been limited by weed infestation, Pests and diseases, and Inadequate funding, etc.

CHAPTER 4: BENCHMARKING THE KUFMP 2024/25-2029/30 WITH OTHER CITIES' FORESTRY STRATEGIES.

4.1 Case Studies of cities for Benchmarking with the KUFMP 2024/25-2029/30

In order to ensure that the KUFMP aligns with appropriate practices and global standards, it was important to benchmark it with established urban forestry strategies in other cities of other countries. The benchmarking process enabled an assessment of the KUFMP's strengths and weaknesses, opportunities and threats while learning from diverse urban forestry contexts. Five cities namely; Cape Town, Helsinki, London, Paramount and Canberra were selected for the benchmarking. The cities offer a wide range of ecological, socio-economic and governance conditions for comparison and were selected in such a way that they represent different climate zones, urbanization histories and policy frameworks, thus providing a rich foundation for adaptable strategies. Additionally, each city has demonstrated commendable progress in managing urban forests through inclusive planning, climate resilience, and community engagement.

The benchmarking focused on key aspects including **vision, mission and objectives, status of the urban forest, tree planting priorities, climate resilience, biodiversity enhancement, monitoring and evaluation, community stewardship, governance, and tree risk management.** These elements provide a wider scope through which Kampala's urban forestry strategy can be strengthened. The purpose of this benchmarking exercise is to guide Kampala in adopting context-relevant, innovative, and sustainable urban forestry practices. The following case studies present key lessons and strategic approaches from each of the selected five cities considered:

4.1.1 City of Cape Town - South Africa

Vision, Mission and Objectives

The City of Cape Town's Urban Forest Policy (2023) envisions an urban environment where trees are integral to livability, identity and sustainability. The policy's mission emphasizes conserving, managing and enhancing the urban forest to deliver ecological, aesthetic, cultural, and climate benefits. The specific objectives of the policy include.

Grow the urban forest through new planting to maximize benefits of trees and urban greening; Protect the urban forest from threats and loss by preserving the city's existing trees; Manage and maintain the urban forest to ensure sustainability; Stakeholder engagements and awareness campaigns; Tree monitoring and valuation

Status of the Urban Forest

Cape Town's urban forest comprises of native, endemic and exotic species. While there is no quantified total tree population or canopy percentage given in the policy, the city's green infrastructure is spatially integrated across its landscape.

Tree Planting Priorities and Silvicultural Actions

Tree planting efforts focus on strategic infill and blanking (replacing lost trees), guided by biodiversity zones and heat island mapping. Priority planting zones include underserved urban areas and road reserves. Silvicultural actions include structured pruning, aftercare for new trees (minimum three years) and avoidance of inappropriate topping practices. Emphasis is placed on indigenous and endemic trees suited to local biomes such as fynbos.

Climate Resilience and Ecosystem Services

Cape Town's urban forest plays a critical role in climate change mitigation and adaptation. Trees are deployed to regulate urban microclimates, reduce the heat island effect, improve air quality, aid flood mitigation and provide carbon sequestration.

Biodiversity and Habitat Enhancement

Urban trees are recognized as supporting pollinators, birds and small mammals. Retaining deadwood and mature trees is encouraged to sustain urban biodiversity.

Monitoring and Evaluation

The city implements monitoring with a focus on maintaining ecosystem services and ensuring tree survivability post-planting based on documented in city-wide guidelines for public spaces.

Community and Urban Forestry Stewardship

Cape Town promotes collaborative stewardship through community planting programs, educational outreach and partnerships with NGOs.

Governance and Stakeholder Coordination

Urban forest governance falls under the City's Recreation and Parks Department, coordinated through interdepartmental collaboration with Planning, Environmental Management, and Transport. Private sector and civil society actors are also involved, particularly in greening developments and restoring public open spaces.

Risk Management in Urban Forestry

The policy incorporates proactive risk assessment related to storm damage, disease outbreaks and urban development pressure. Mitigation strategies include species diversity, pruning regimes and legal protection for significant trees and green corridors.

4.1.2 City of Helsinki - Finland***Vision, Mission and Objectives***

Helsinki's Urban Forestry Management Plan (2025–2027) is aligned with the city's long-term vision of becoming carbon-neutral by 2030 and climate-negative by 2040. Its mission is to integrate resilient, biodiverse and multifunctional forests into the urban fabric for ecological, recreational and climate-regulatory functions. Objectives include increasing canopy cover, enhancing biodiversity and improving the ecological value of urban green areas.

Status of the Urban Forest

Urban forests in Helsinki are extensive and diverse, covering approximately 43% of the city's land area, including street trees, urban parks and remnant natural woodlands. The forest is structured into mixed-age classes, dominated by native species and maintained in good ecological health. Inventories are regularly updated to reflect tree density, species composition, age and canopy coverage.

Tree Planting Priorities and Silvicultural Actions

Tree planting is prioritized in neighborhoods with low green density, climate-vulnerable zones, and recreational corridors. Silvicultural actions include selective thinning to enhance species and structural diversity, controlled felling of windthrow-prone and drought-damaged trees, natural regeneration of understories and woodland gaps, supplemental planting using native saplings, especially in <0.3 ha gaps and street tree expansion in densely built and canopy-deficient urban cores.

Climate Resilience and Ecosystem Services

Helsinki's forests are vital for climate resilience, helping to buffer heatwaves, absorb stormwater, sequester carbon and filter air pollutants. In anticipation of drier summers and windier winters, the city adapts forest management practices through species selection optimized for resilience, integration of vegetated stormwater systems (e.g., bioswales, tree pits), Urban Forest-carbon interaction studies to inform design and spacing. Forests are treated as living infrastructure supporting both mitigation and adaptation.

Biodiversity and Habitat Enhancement

The plan encourages retention of deadwood and snags to support insects, fungi, birds and mammals, promotion of native, mixed-species plantings to boost pollinators and formation of ecological corridors linking larger forests and fragmented green spaces.

Monitoring and Evaluation

Monitoring employs both remote sensing and field surveys (e.g., regeneration, carbon sequestration). Monitoring and evaluation metrics include biodiversity indices, forest health indicators and resilience parameters. Data feeds into the city's sustainability dashboards and informs adaptive forest management.

Community and Urban Forestry Stewardship

The city actively engages citizens through guided forest walks, planting events, and citizen science projects such as species inventories and canopy mapping. Education programs raise awareness of forests' role in climate and health, fostering stewardship and long-term public support.

Governance and Stakeholder Coordination

The Urban Environment and Traffic Division spearhead urban forest governance in partnership with local academic institutions like HELSUS, neighborhood groups and environmental NGOs.

Risk Management in Urban Forestry

The plan outlines several risk scenarios including climate extremes, pest outbreaks, vandalism, and budget shortfalls. To mitigate them, Helsinki employs Climate-tolerant species mixes, early thinning to improve resilience, ecosystem-based insurance models, and adequate budgeting and co-management with community groups.

4.1.3 City of London - United Kingdom***Vision, Mission and Objectives***

London's Urban Forest Plan (2020), developed by the London Urban Forest Partnership and coordinated by the Greater London Authority and Forestry Commission, articulates a collective vision: *"To protect, grow and enhance London's urban forest for the benefit of people, wildlife and climate."* The mission emphasizes managing and expanding London's trees and woodlands to deliver multiple social, environmental, and economic benefits. Key objectives include Increasing canopy cover by 10% by 2050, Enhancing the ecological diversity of the urban forest, promoting active community involvement, and embedding tree protection into city planning and green infrastructure strategies.

Status of the Urban Forest

London's urban forest comprises over 8 million trees, covering approximately 21% of the city's land area. These include ancient woodlands, street trees, parklands, and private gardens. Species diversity is moderate to high, dominated by sycamore, oak, and birch, though some areas have low species and age diversity, increasing susceptibility to pests and diseases. Ownership is mixed, with over 43% of trees being publicly owned and a significant share residing in private gardens. Over 20% of woodlands are classified as ancient, covering about 13,300 ha or 8% of London.

Tree Planting Priorities and Silvicultural Actions

Planting priorities target areas with low canopy cover, including underserved boroughs and heat-vulnerable zones. Planting interventions include new woodland creation, especially in the Green Belt and brownfields, Expansion of street trees, particularly in deprived and canopy-deficient areas, natural regeneration, adjacent to existing woodlands and promotion of "right tree, right place" principles for climate suitability and biosecurity. Bio secure sourcing (favoring

UK-grown stock) and species-rich planting are essential to silvicultural actions. Boroughs are encouraged to develop local urban forest plans as part of broader green infrastructure strategies.

Climate Resilience and Ecosystem Services

London's urban forests significantly contribute to resilience and environmental health by regulating microclimates (shade, cooling), improving air quality and sequestering carbon, reducing flood risks via rainwater interception and supporting thermal comfort and reducing energy costs.

Biodiversity and Habitat Enhancement

The plan prioritizes ecological connectivity by protecting veteran and ancient trees, increasing species diversity in new plantings, promoting natural regeneration to create structurally rich habitats and creating and managing urban orchards and community woodlands.

Monitoring and Evaluation

Monitoring is facilitated through I-Tree Eco assessments, Canopy cover mapping (such as Curio dataset), Borough-level reporting tied to green infrastructure strategies and Key Performance Indicators (KPIs) aligned with 5-year review cycles. These tools help evaluate changes in cover, health, biodiversity, and carbon benefits, driving adaptive management.

Community and Urban Forestry Stewardship

Londoners actively contribute to urban forestry through Community planting events, urban orchard management, Local stewardship groups, educational programs targeting schools, youth, and marginalized groups. Volunteerism and local ownership are key mechanisms of sustainability. Special efforts are made to engage groups less likely to access green spaces, including the youth, disabled, and low-income populations.

Governance and Stakeholder Coordination

The London Urban Forest Partnership is a multi-sectoral alliance involving over 30 organizations, including municipal governments, charities (e.g. Trees for Cities), boroughs, and developers. The Greater London Authority and Forestry Commission coordinate delivery, with boroughs required to integrate urban forestry within their Local Plans and development processes.

Risk Management in Urban Forestry

The plan acknowledges threats such as Climate change (heat, drought), Pest and disease outbreaks urban development pressure, and Limited funding and management resources.

Mitigation actions for the risks include Tree diversity targets, Woodland management expansion, Community co-ownership, better data and decision-support tools and increased advocacy for public investment.

4.1.4 City of Paramount, California - United States of America

Vision, Mission and Objectives

The City of Paramount's Urban Forest Management Plan articulates a vision of "a future where trees are abundant throughout the city and accessible to the whole community." The goal is to create immersive green spaces across all neighborhoods, enhance shade and outdoor recreation, and promote community health and climate resilience. Key strategic objectives include Expanding tree canopy equitably across land uses, enhancing tree benefits for mental health, shade, and biodiversity, prioritizing community involvement and stewardship and ensuring long-term maintenance and risk mitigation.

Status of the Urban Forest

Paramount has an existing urban tree canopy of 12%, which is unevenly distributed across the city's neighborhoods. Canopy cover is highest in parks, moderate in residential zones, and lowest in industrial and commercial areas. The city's urban forest includes over 200 species, with no single species dominating (none exceeding 10% of the population), ensuring genetic diversity and resilience. A high proportion of trees are mature and in good health (90%), although there is a notable lack of young trees for succession.

Tree Planting Priorities and Silvicultural Actions

Tree planting is guided by specific canopy targets by land use namely; 30% in public parks and school zones, 25% in residential areas and along rights-of-way, 15% in commercial areas, and 10% in industrial zones. Planting priorities focus on School properties, streets, and public parks, Low-canopy neighborhoods and modified paved and hardscape areas to accommodate more trees.

The silvicultural strategies employed in the city emphasize planting large-statured trees for maximum canopy gain, adjusting zoning codes to require or allow tree planting in private and public developments and designing right-of-way improvements to accommodate root space and reduce tree sidewalk conflicts.

Climate Resilience and Ecosystem Services

The urban forest is treated as critical green infrastructure, addressing hot, dry summers and climate extremes, stormwater capture, urban cooling, and air purification, increased shading for vulnerable populations, especially older adults and low-income households, carbon sequestration and reduced energy demand. The city's forest planning integrates trees into climate adaptation strategies, prioritizing drought-tolerant species and infrastructure retrofitting.

Biodiversity and Habitat Enhancement

Despite its urban nature, Paramount supports efforts to enhance biodiversity by using diverse species palettes and avoiding monocultures, creating food forests that provide culturally relevant fruits and nuts, enhancing pollinator and wildlife habitats, particularly in parks and schools and retaining and planting species that support birds, beneficial insects, and small mammals.

Monitoring and Evaluation

Implementation of the plan is supported by a 10-year update cycle with review milestones, Tree inventory and canopy mapping, an evaluation of tree health, growth rates, canopy expansion, and community engagement metrics, and adjustments based on periodic surveys and remote-sensing analysis. Canopy goals are directly tied to baseline metrics, and operations are guided by measurable targets across city departments.

Community and Urban Forestry Stewardship

The Paramount plan is uniquely community-driven. Public engagement activities included workshops with interactive surveys (English and Spanish), events like the Eco-Friendly Fair and Arbor Day tree giveaways, tree planting demonstrations, citizen participation in canopy planning and feedback. Mental health, outdoor activity, and shading were identified as the top benefits by residents, and maintenance was their leading concern. The plan emphasizes equity, ensuring green space access for all demographics.

Governance and Stakeholder Coordination

Governance is shared across multiple departments including Public Works which oversees tree maintenance and planting, planning integrates forestry into land use regulations, and external partners include TreePeople (technical assistance), West Coast Arborists, and local community leaders.

Risk Management in Urban Forestry

Paramount has identified key risks, including climate extremes and drought, tree-related infrastructure conflicts, maintenance gaps and Environmental burdens in vulnerable communities.

Risk management actions include climate-resilient species selection, modified right-of-way designs to reduce damage, Strategic planning to address equity gaps and strong emphasis on ongoing community education and ownership to build social resilience.

4.1.5 City of Canberra - Australia

Vision, Mission and Objectives

The Urban Forest Strategy 2021–2045 envisions “a resilient and sustainable urban forest that supports a liveable city and the natural environment and contributes to the wellbeing of the community in a changing climate.”

Canberra's mission is to manage the urban forest as critical green infrastructure, fostering community wellbeing, biodiversity, climate resilience, and equity. Among the six strategic objectives include;

- Protect the existing urban forest
- Grow a resilient forest
- Balance and diversify the forest
- Support biodiversity;
- Integrate infrastructure and canopy
- Partner with communities for stewardship

Status of the Urban Forest

As of 2015, tree canopy cover was 19.05%, with a target to increase this to 30% by 2045. Older suburbs have over 40% canopy cover, while newer suburbs may be below 10%. The city's urban forest comprises over 370 tree species, but is aging with over 55% of public trees are mature or senescent. The dominant species, Red Spotted Gum (*Eucalyptus mannifera*), comprises 25% of the urban tree population, indicating poor species diversity. The forest exists across both public and leased lands, supported by historical large-scale planting programs dating back to the 1920s.

Tree Planting Priorities and Silvicultural Actions

The ACT Government estimates that to reach the 30% canopy target, over 450,000 trees need to be planted over 25 years. Planting priorities are based on gaps in tree presence, social vulnerability, urban heat mapping, and existing low-canopy suburbs. Silvicultural actions include seasonal but climate-adaptive planting, five-year aftercare for new trees (watering, pruning), climate-resilient species selection and site-specific species matching (e.g., arterial roads, pavements).

Climate Resilience and Ecosystem Services

Canberra's trees are integral to Heat Island mitigation, Stormwater filtration and flood control, Air purification and carbon sequestration and UV exposure reduction (shade reduces radiation by 75%).

Biodiversity and Habitat Enhancement

The Strategy emphasizes Retention of remnant native trees, especially hollow-bearing trees, Strategic planning for pollinators and birds, Use of locally suitable and diverse species including spotted gum, silky oak, establishment of no-mow zones, understory planting, and microhabitat creation (e.g., rocks, branches) and Plans for urban wood reuse (e.g., furniture, school carpentry, mulch).

Monitoring and Evaluation

Monitoring tools include LiDAR scanning every 5 years for canopy and permeability analysis, Urban Forest age-class analysis (aligned with industry best practice), canopy cover mapping by suburb to guide equity and tree audit updates and biodiversity impact assessments.

Community and Urban Forestry Stewardship

Canberra enjoys strong public support for trees and the engagements include volunteer tree-planting programs, education about tree care (e.g., parking restrictions to avoid root damage), strategic empowerment of community groups, incentives for private land greening and citizen reporting.

Governance and Stakeholder Coordination

Governance is led by the Transport Canberra and City Services Directorate. Tree protection legislation includes Tree Protection Act 2003, public Unleased Land Act 2013, planning and Development Act 2007 and Nature Conservation Act 2014. Urban forest planning is integrated with biodiversity, heritage, land use, and infrastructure policies. Notably, inter-agency collaboration (with EPSDD, ANU, community councils) drives implementation.

Risk Management in Urban Forestry

Identified risks include climate stress (drought, bushfire, storms), aging tree populations, low species diversity and urban densification and development pressure. Responses to the risks include review and reform of legal protections (e.g., stronger tree removal criteria), tree replacement bonds and offsets, fire-resilient species selection and fire-zone zoning and development of a canopy contribution framework for removed trees.

4.2 Benchmarking Kampala's Urban Forestry Strategy against other Urban Forestry Plans

The comparative analysis of urban forestry strategies from Cape Town, Helsinki, London, Paramount, and Canberra provides valuable insights for consideration in updating the KUFMP. One of the most instructive lessons is the emphasis these cities place on setting and tracking urban tree canopy cover targets. Canberra, for example, with a relatively high current canopy cover of 19.05%, aims to reach 30% by 2045. London also targets a 10% increase in canopy cover by 2050 from its already established urban forest base, while Helsinki aspires to maintain and gradually expand its green cover as part of its climate adaptation plan. The noted high canopy cover targets provide the KUFMP with a realistic benchmark, especially as the city also seeks to increase its tree canopy cover.

Another key lesson from the benchmarked cities is the deliberate alignment of tree planting efforts with biodiversity goals and ecological restoration. For instance, Cape Town and Canberra prioritize indigenous, climate-resilient species to be planted in degraded areas and support ecosystem health. Such an approach is reflected in Kampala's commitment to guided planting zones and native tree species prioritization during planting. Helsinki's biodiversity corridors and London's biodiversity-sensitive planting guidelines highlight how urban forests can enhance habitat connectivity and support urban fauna and flora. These cities also apply site-specific silvicultural actions such as pruning, thinning and soil conditioning to ensure tree survival and health. KUFMP adopts similar practices, with an aim to promote long-term tree viability while enhancing biodiversity, ecosystem services, and urban resilience.

Institutional coordination, supportive legal frameworks and policy integration emerged as key strengths across most case studies. For example, London and Helsinki cities have integrated urban forestry into land use policies, transport planning and climate agendas. Furthermore, Paramount city's local-level focus on community empowerment and school greening complements the institutional coordination by emphasizing grassroots engagement

an approach that Kampala Urban area has also adopted through local partnerships and expanded community awareness programs.

Technology, data and adaptive monitoring were another cross-cutting theme across the benchmarked cities. Helsinki and Canberra, in particular, employ advanced digital tools satellite data, urban forest dashboards and canopy mapping to guide strategic decisions and track urban forestry progress. Kampala's integration of similar tools, including using the Arc GIS Survey 123 and other GIS mapping tools, the suggested "*Kampala Tree Watch App*", and planned Urban Forestry Dashboard shows a clear shift toward smart urban forestry management. Drawing from these best practices reinforces the updated Kampala urban forestry plan's focus on evidence-based planning, real-time citizen engagement, and continuous learning. Overall, benchmarking has not only guided Kampala in aligning with global best practices but has also validated its ambitious vision to create a greener, more inclusive, and climate-resilient urban future

PART III

CHAPTER 5: STRATEGY FOR KAMPALA URBAN FOREST MANAGEMENT PLAN (KUFMP) 2024/25–2029/30

5.1 Vision and Mission

Vision:

By 2040, the Kampala urban forest area will be greener, healthier, climate-resilient and integrated in Kampala urban planning for urban sustainably, community well-being, ecosystem services.

Mission:

To enhance, coordinate and implement inclusive, evidence-based and participatory urban forestry actions that increase tree cover, restore degraded green spaces, increase climate resilience and promote stewardship of urban forests and green spaces.

5.2 Pan Overview

The KUFMP 2024/25-2029/30 outlines a strategic and coordinated approach to restoring, managing, and expanding the city's urban forest resource over a five-year period. It is guided by the lessons of the KUFM 2019-2023/24 and informed updated tree audit findings, stakeholder input and global urban forestry practices in other cities. This approach aligns the Kampala's strategic plan (2026- 2030), Kampala urban forestry 20-year plan (2019- 2039) and global and continental-level urban forestry goals like the Global Washington declaration (2023) and Continental Johannesburg declaration (2025) on urban forestry including climate resilience, biodiversity conservation, inclusive green growth and sustainable urban planning. It provides a guide for tree planting, maintenance, legal enforcement, institutional coordination and public engagement in order to ensure that urban forestry becomes a pillar of Kampala's transformation into a livable, ecologically functional and socially inclusive urban area.

5.3 Framework

The KUFMP 2024/25-2029/30 acts to serve as a tool to guide the implementation of the Kampala city's urban forestry agenda over the next 5 years. The plan also articulates a 15-year vision of up 2040. The implementation and oversight of the Plan are led by the Directorate of Physical Planning. Operating under the directorate, the Landscape and the Urban Forestry Management units are responsible for operational execution, including day-to-day management of urban forestry activities. The units ensure that relevant urban forestry activities are well coordinated across divisions and that consistency is maintained with city development goals and environmental standards.

Progress toward achieving the Plan's vision, goals and actions will be assessed at the end of each five-year management cycle. Monitoring and evaluation will be based on key performance indicators including number of trees planted and surviving, changes in canopy cover, extent of public participation, enforcement actions and institutional performance. The indicators will be reviewed and updated every five years in consultation with stakeholders including NEMA, MWE, Makerere University, MoH, MoHLUD, NFA, Physical Planners and the Institute of Surveyors. Public input will be gathered through citizen surveys, focus group discussions and review of existing data to support inclusive and evidence-driven evaluation. Lessons learned, both successes and shortcomings, will be incorporated into future planning cycles. This approach allows for adaptive, successive five-year planning cycles, ensuring that the plan remains responsive to evolving priorities, indicators and city dynamics.

Based on the Plan's findings and recommendations, KCCA will develop and implement specific policies, plans and operational tools to meet the stated goals, objectives and action targets. These shall be framed within the city's political and managerial structures, while actively engaging local communities and international partners. Each phase of implementation will be supported by clearly defined budgets, staffing frameworks, timelines and performance measures to ensure transparency, accountability and impact.

The strategic framework of the KUFMP 2024/25-2029/30 integrates ecological, institutional, socio-economic and spatial dimensions to ensure that urban trees and forests are not only planted and maintained but also valued as critical infrastructure for the city's sustainable development agenda. It builds upon international, national and local legal and policy frameworks including UN Sustainable Development Goals (SDGs) and the 2012 Kampala physical development plan.

5.4 Issues and Needs

The development of the KUFMP 2024/25-2029/30 responds to several issues that continue to affect various aspects of Kampala's urban forestry management. While some progress was made under the 2019-2023/24 plan, various aspects of the plan have been implemented. The following issues and needs have been identified in relation to updating the KUFMP:

1. Declining urban tree cover and limited planting space as a result of infrastructure expansion, real estate development and encroachment on existing green spaces. Despite ongoing planting efforts, tree survival rates remain low due to inadequate maintenance and limited community stewardship.
2. Kampala still faces a challenge of timely update of the existing datasets as a result of built central digital tree management system, especially central and Kawempe division tree datasets that date between 2016 -2020, limiting the ability to plan and manage tree resources effectively.
3. Limited public awareness and participation in tree care and protection. While communities may desire to engage in greening the city, there is a knowledge gap regarding the value of trees, appropriate planting practices and legal responsibilities. Furthermore, the potential for schools, religious institutions and the private sector to act as champions of greening remains largely untapped. Additionally, Kampala city lacks accessible platforms for citizen reporting, feedback and tracking of specific urban forestry issues.
4. Institutionally, KCCA urban forestry has impacted the national development agenda (NDPIV), which has seen government prioritize it as a development agenda for next 5 years. Additionally, the MoWE designating an urban forestry desk with influence from KCCA urban forestry program. However, in the absence of national urban forestry framework, there are coordination gaps among key actors including cities, municipalities, KCCA departments, relevant government MDAs, and non-state actors.
5. The absence of a gazetted Kampala Green Infrastructure ordinance (2021) further hampers regulatory enforcement, leading to continued illegal tree felling and weak compliance with planting requirements in infrastructure projects.
6. Presently, urban forestry remains underfunded, with most greening activities dependent on donor support or a few ad hoc initiatives, which makes long-term planning and maintenance difficult.
7. The plan had inadequate comprehensive baseline data, as it was based on data from only four precincts of Kololo, Mulago, Nakasero and Makerere. As a result,

most early decisions were based on data from only these precincts, leaving out critical insights from the other city areas.

8. Tree planting activities in certain occasions conflicting intervention between technical guidance and political decisions. For example, the mass Royal palm (*Roystonea regia*) planting during the NAM summit preparation along a several roads without proper spacing and species-site matching, which reduced the survival and effectiveness of planted trees.
9. Despite targets to increase tree cover per hectare, implementation faced setbacks from infrastructure development projects including the, Kampala Institutional Infrastructure Development Project (KIIDP II), Africa development Bank Road development projects and GKMA project, as well as physical damage from free ranging grazing animals, public trampling, illegal tree cutting and vandalism by private real estate developers
10. Outdoor advertisement companies and utility agencies like UEDCL and telecom were involved in cutting down trees to pave way for their installations, undermining urban greening efforts.
11. The city experienced a surge in dodder weed (*Cuscuta* spp.) infestations on tree species especially *Ficus benjamina*, forcing KCCA to cut down several infected trees.
12. Logistical challenges, including limited resources and equipment, affected timely management of overgrown and dangerous trees, sometimes leading to unexpected falls.
13. Increased urban development led to illegal tree cutting and frequent replacement with smaller, exotic species hindering progress toward the biodiversity target of an 80%–20% balance between indigenous and exotic species.
14. No new tree nurseries were established during the plan period, although KCCA focused on enhancing the productivity of existing plant materials.

In consideration of the identified issues, the urban forest system must be adequately integrated into development frameworks of all key entities, both within KCCA and its partners. It should also be reoriented to address emerging needs such as climate change adaptation, urban heat island mitigation, flood control, air quality improvement and habitat connectivity. These ecosystem service functions are not yet fully mainstreamed into Kampala's urban development and investment frameworks. To respond effectively, the updated plan prioritizes nature-based solutions, integrate forestry into planning and infrastructure sectors and support localized innovations that are informed by reliable data and inclusive governance.

5.5 Goal and Objectives

Goal:

To enhance Kampala's urban forest resource for environmental quality, resilience to climate change, and community well-being.

Objectives:

The updated KUFMP 2024/25-2029/30 is built upon five strategic objectives that collectively address the critical challenges, priorities and opportunities identified through technical evaluation of the 2019-2023/24 KUFMP, stakeholder engagement and benchmarking against forestry plans in other cities. Each objective reflects a key pillar of the strategy and is supported by targeted actions and institutional mechanisms to ensure effective implementation.

Objective 1: Expand and protect urban forest cover across all city divisions

This objective focuses on increasing tree canopy cover through restoration of degraded spaces, guided urban tree planting and effective protection of existing trees and green spaces. It prioritizes native species diversity, context-specific planting and establishment of biodiversity corridors that enhance ecological connectivity and climate resilience.

Objective 2: Strengthen institutional frameworks, coordination, and policy enforcement

Recognizing institutional fragmentation and weak legal enforcement as barriers, this objective aims to implement the Kampala city green infrastructure ordinance (2021), streamline mandates across relevant agencies and build capacity within KCCA and partner institutions for effective oversight and governance of urban forestry activities.

Objective 3: Promote community engagement, awareness and ownership in urban greening

This objective target behavioral change and civic participation by promoting inclusive community-led greening, school-based tree planting, partnerships with faith and cultural institutions, and platforms for citizen feedback and reporting. It leverages digital tools, outreach campaigns, and public education to foster a tree stewardship culture.

Objective 4: Integrate urban forestry into planning, infrastructure, and urban design systems

Urban forestry must be mainstreamed into city planning processes, infrastructure development, and land use design. This objective encourages the embedding of forestry elements into roads, drainage systems, building permits and public open spaces to ensure multifunctional and climate-smart infrastructure.

Objective 5: Establish a robust monitoring, learning and adaptive management system

This objective ensures that progress is measurable, transparent, and evidence-based. It calls for regular data collection, digital inventory updates, performance indicators, mid-term and final evaluations, and integration of lessons into annual work planning. It also supports participatory monitoring and feedback from citizens and civil society.

Together, these five objectives define the roadmap for KUFMP implementation over the next five years and form the basis for its work plans, partnerships and investment strategies.

CHAPTER 6: IMPLEMENTATION FRAMEWORK FOR THE STRATEGIC OBJECTIVES

6.1 Description of the Specific Objectives

Objective 1: Expand and Protect Urban Forest Cover across all city divisions

Kampala's rapid urban expansion has significantly reduced tree cover across all five city divisions, threatening biodiversity, microclimate regulation, and urban ecosystem services. This objective aims to reverse these trends by restoring degraded landscapes, planting new trees in strategic locations and instituting mechanisms to safeguard existing mature and young trees. The focus is not only on increasing the quantity of trees but also on improving the quality and diversity of the urban forest resource.

A key emphasis of this objective is the prioritization of native and ecologically suitable species that are adapted to the city's varied microclimates and land use contexts. Through spatial tree mapping and zonation, tree planting will be guided by division-specific needs, including roadside avenues, schools, wetlands, public institutions, and underserved urban neighborhoods. Special attention will be given to canopy-deficient areas identified in recent tree audits and to previously green spaces lost to settlements and commercial development. Tree corridors will be established or reconnected to promote ecological continuity and wildlife movement.

Additionally, the protection of existing trees is as important as planting new ones. This includes strengthening enforcement against illegal tree cutting, establishing a tree permitting system for regulated removal and creating a registry of heritage and protected trees within the city. Long, medium- and short-term maintenance of the trees through pruning, watering, removal and pest control will be carried out as and when deemed necessary. This will be institutionalized within KCCA's tree care mandate, supported by institutions such as schools and other categories of communities. The overall goal is to achieve measurable gains in tree canopy cover (an increase of 30% by 2039), ecosystem resilience, and equitable access to urban green spaces citywide.

Objective 2: Strengthen Institutional Frameworks, Coordination, and Policy

Enforcement

Effective urban forestry management depends heavily on clear institutional mandates, cross-sectoral coordination and enforceable policy instruments. Kampala currently faces fragmented responsibilities across multiple actors including KCCA directorates, ministries, local councils, CSOs and private actors consequently resulting into overlaps, enforcement gaps and inefficiencies. This objective seeks to address the institutional issues by building a well-defined governance structure and enabling policies that support the success of the updated KUFMP.

A core priority under this objective is the finalization, approval and operationalization of the Kampala Urban Tree Ordinance. This legal instrument will clarify urban tree ownership, delineate agency responsibilities, provide permitting frameworks for tree felling and replacement and institute penalties for non-compliance. Coupled with this will be the development of standardized operating procedures and inter-agency coordination protocols for tree planting, maintenance, data sharing and community engagement. The urban forestry function within KCCA will be further formalized and empowered, with the Urban Forestry Technical Committee playing a central coordinating role.

Furthermore, capacity building will be pursued for both technical and enforcement staff, including training on silvicultural practices, use of digital tools, species selection, and legal enforcement. Strengthening partnerships with agencies such as NEMA, NFA, UNRA, the Ministry of Lands, Housing and Urban Development and MW&E will be prioritized to align mandates and share resources. Local government structures such as Division Urban Councils

and ward-level environmental committees will be equipped to monitor, supervise, and mobilize support for urban greening activities.

Objective 3: Promote Community Engagement, Awareness, and Ownership in Urban Greening

The success of urban forestry depends not only on institutional actions but also on the active involvement of the communities who live in and interact with the urban landscape. Presently, local community participation in tree planting and care remains low due to limited awareness, fragmented outreach and unclear community roles. This objective seeks to transform citizens from passive beneficiaries into active stewards of the city's urban forest, through structured engagement, education, and shared responsibility.

A key strategy under this objective is to design and implement inclusive community greening programs, focusing on diverse categories of communities including youth, women, religious institutions, schools, landlords, market vendors and organized groups. Platforms such as neighborhood tree adoption initiatives, faith-based climate action campaigns, and school-based greening clubs will be initiated and/or scaled up across all divisions. Tree tagging should be expanded citywide and develop a Kampala urban forestry portal. Annual greening days, tree festivals and competitions will be institutionalized to create citywide awareness and celebrate community contributions. In partnership with civil society organizations, KCCA will provide technical support, seedlings and materials to communities and institutions willing to participate in tree planting and care.

Furthermore, the objective emphasizes the need for intense public awareness education and communication using culturally appropriate, accessible and technology-enabled tools. The Kampala Tree Watch App, social media platforms, radio programs and other community out-reach community programs will be used to sensitize residents on tree rights, benefits, regulations and reporting mechanisms. Adequate attention to Feedbacks from public will ensure that their voices are reflected in urban forestry decision-making processes.

Objective 4: Integrate Urban Forestry into Planning, Infrastructure and Urban Design Systems

Urban forestry can only thrive and progress if it is adequately and fully integrated into the physical, regulatory, and investment frameworks that shape Kampala city's-built environment. A key action under this objective involves mainstreaming urban tree planning into Kampala's physical development plans and infrastructure design standards. All new and rehabilitated roads, public buildings, drainage corridors and transport terminals will include designated planting areas and tree protection zones. Specific urban forestry guidelines will be developed for integration into the KCCA building approval process, ensuring that developers allocate space for tree planting and preserve existing mature trees wherever feasible. Urban planning and engineering professionals within KCCA will be trained to incorporate tree-related considerations in their design and implementation work. There is need for planning and implementing infrastructure development considering biodiversity, lakefront and wetlands.

Objective 5: Establish a Robust Monitoring, Learning, and Adaptive Management System

To ensure that the Kampala Urban Forestry Management Plan (KUFMP) 2024-2028/29 is implemented effectively, it is essential to track progress continuously, evaluate outcomes, and adapt strategies based on the outcomes. Urban forestry operates in a dynamic context affected and influenced by changing land use, climatic events, institutional capacities and public behavior. This objective aims to create a comprehensive system for Monitoring, Evaluation, Learning, and Reporting (MELR) that promotes accountability, data-driven decision-making and institutional learning.

The core of this objective is the development and operationalization of a citywide urban forestry MELR framework by the KCCA's relevant units. This system will include SMART (Specific, Measurable, Achievable, Realistic, and Time-bound) indicators aligned to each strategic objective and action area. These indicators will cover various aspects including number of trees planted and surviving, changes in canopy cover, extent of public participation, enforcement actions and institutional performance. A combination of tools including remote sensing, GIS-based dashboards, citizen reporting platforms and field surveys will be employed to track and visualize progress.

Equally important is the establishment of regular reporting structures and feedback mechanisms. These will include annual progress updates, and, mid- and end-of-plan evaluations, and learning forums involving stakeholders. KCCA will also publish an open-access urban forestry data portal to promote transparency, encourage collaboration and facilitate research. The adaptive management element will ensure that lessons learned, both from successes and setbacks will inform revisions to annual work plans and strategic priorities. This objective will help institutionalize a culture of reflection, learning, and continuous improvement in Kampala's urban forestry journey.

6.2 Actions for implementation of the Objectives

6.2.1 Objective 1 - Expand and Protect Urban Forest Cover across All City Divisions

To effectively expand and protect urban forest cover in Kampala, implementation actions must target three integrated aspects: (1) **planting of new trees in priority areas**, (2) **protection of existing trees** and (3) **long-term maintenance and care**.

Guided Tree Planting in Priority Areas

Planting efforts will follow a zoned approach, targeting roadside corridors and avenues, compounds of Schools and other education institutions, health centers, markets, and religious grounds, Wetland edges, riparian buffers, and flood-prone areas and former green spaces degraded by informal settlements or construction.

Species selection will prioritize native, drought-resistant, and ecologically beneficial species, while also accommodating multipurpose trees (fruit, shade, medicinal) where appropriate. To ensure planting success, actions will be synchronized with rainy seasons and backed by local nursery supply.

Planting will be implemented collaboratively by KCCA divisions, CSOs, schools, faith-based organizations, landlords, and market vendor associations. Youth and women's groups will be engaged through work-for-green programs, fostering employment and ownership.

Establishment and Enforcement of Tree Protection Mechanisms

Expanding tree cover requires that existing and newly planted trees. Currently, tree loss due to illegal felling, unregulated construction, and vandalism remains high. A tree protection framework consisting of the following provisions will be developed and effectively implemented:

- A Tree Permitting and Removal Control System, which will authorize felling only in cases of safety hazards or approved developments, with mandatory replacement ratios.
- A Tree Registry for Heritage and Protected Trees, capturing trees of cultural, historical, ecological, or aesthetic value and Eco-tourism.
- Field-based inspection teams tasked with enforcing tree protection bylaws, conducting compliance audits on developers, and issuing citations for violations.

Tree protection guidelines will also be integrated into the building permit review process, ensuring that mature trees are considered in site development plans. During major public

infrastructure works (road expansion, drainage upgrades), environmental impact assessments will include tree conservation plans.

Maintenance, aftercare and community Stewardship

Sustaining newly planted and existing trees requires long-term tree care programming and an adapted standardized Urban Tree Maintenance Protocol will include Pruning schedules based on species and season, composting to improve soil conditions, Pest and disease control, especially for susceptible species and Dry-season watering, especially in concrete-dense areas and new planting zones.

Maintenance responsibilities will be shared across actors:

- KCCA Forestry Unit will lead efforts in public spaces
- Schools and other institutions or entities will manage trees within their premises
- Communities and neighborhood associations will be trained and incentivized to care for trees near homes and public facilities

To encourage accountability, a “Tree Adoption Program” will be rolled out, where institutions or individuals can sign up to monitor and care for specific trees, with recognition through awards or public signage.

Species Diversification and Nursery Strengthening

The Kampala urban area is currently dominated by exotic tree species, many of which offer comparatively less ecological value. Accordingly, an increasing number of native species will be planted in public spaces and the private land owners will also be encouraged to include indigenous trees areas under their jurisdiction.

Restoration of Degraded and Encroached Green Spaces

Across Kampala, formerly green areas such as wetland buffers, institutional lawns, and roadside reserves have been degraded or lost due to encroachment. To restore the affected areas, green belts and road reserves will be reclaimed, cleared of solid waste, and restored with native vegetation and Institutional lands (schools, police barracks, churches) will be supported to reforest open grounds through structured agreements. In addition, encroached wetlands and steep slopes will be prioritized for restoration planting using species that stabilize soil and filter runoff and some vacant or underutilized KCCA land will be converted into urban forests, mini-parks, or demonstration sites. These actions will be guided by restoration maps informed by satellite imagery, ground truthing and historical land use analysis. Restoration will be undertaken in collaboration with NGOs, CBOs and residents.

Table 17: Implementation matrix for Objective 1

Action Area	Key Activities	Responsible Institutions	Timeline	Indicators of Success
1.1 Guided Tree Planting in Priority Areas	<ul style="list-style-type: none"> - Identify and map canopy-deficient zones in all divisions - Design division-specific tree planting plans - Conduct annual planting drives (rainy seasons) - Establish ecological tree corridors and roadside avenues 	KCCA (Landscape and Environmental Management Dept.), Division Urban Councils, NGOs, Schools, Religious Institutions and Private sector	Short to Medium Term (Years 1-5)	<ul style="list-style-type: none"> - # trees planted annually - % increase in canopy cover per division - # corridors and public institutions planted
1.2 Tree Protection and Enforcement	<ul style="list-style-type: none"> - Finalize and operationalize tree permitting framework - Develop registry of protected/heritage trees - Enforce regulations and penalties for illegal felling - Integrate tree protection into building approval processes 	KCCA Directorate of Legal Affairs, Directorate of Engineering and Technical Services and Directorate of Physical Planning	Immediate and ongoing	<ul style="list-style-type: none"> - # trees protected or permitted for removal - # enforcement actions taken - No. of heritage trees registered
1.3 Maintenance and Community Stewardship	<ul style="list-style-type: none"> - Develop and disseminate citywide tree maintenance guidelines - Engage schools, contractors, communities in aftercare - Launch "Adopt a Tree" programs - Establish emergency care units for tree stress 	KCCA Department of Landscape and Environmental Management, Schools, CBOs and Private sector	Ongoing	<ul style="list-style-type: none"> - % survival rate of planted trees - # community/tree caretaker groups formed - # maintenance activities (watering, pruning) completed
1.4 Species Diversification and Nursery Development	<ul style="list-style-type: none"> - Publish Kampala Urban Tree Species Guide - Train nursery operators and establish division-level nurseries - Promote indigenous and climate-resilient species - Integrate fruit and medicinal trees in select locations 	KCCA, Botanical Institutions, CBOs, Private Nursery Owners Groups	Short Term (Years 1-2), then continuous	<ul style="list-style-type: none"> - # suitable species planted - % of seedlings sourced from approved local nurseries - # trained nursery operators
1.5 Restoration of Degraded and Encroached Green Spaces	<ul style="list-style-type: none"> - Map and prioritize degraded sites (wetlands, road reserves, institutions) - Clear and rehabilitate with native vegetation - Formalize community co-management agreements - Install signage and protective fencing 	KCCA, Local Leaders, NGOs, Religious and Cultural Institutions	Medium Term (Years 2-5)	<ul style="list-style-type: none"> - # hectares restored - # green sites reclaimed and protected - # restoration partnerships established

represents the number of items considered

Source: Compiled by Doshnut Uganda Ltd

6.2.2 Objective 2. Strengthen Institutional Frameworks, Coordination and Policy Enforcement

Gazette and Operationalization of the Kampala City Green infrastructure ordinance (2021)

It is urgent need to finalize, approve and implement the Kampala Urban Tree Ordinance. The ordinance is expected to address the following:

- Clearly define urban tree ownership, especially on public land and road reserves
- Provide clear permitting procedures for tree felling, pruning, or transplanting
- Set replacement requirements for removed trees
- Establish penalties for illegal felling, encroachment, or vandalism
- Recognize heritage and protected trees as special conservation categories

Once approved, KCCA will disseminate the ordinance through civic education, stakeholder training, and digital platforms. It will also develop Standard Operating Procedures (SOPs) to guide implementation, enforcement, appeals, and community participation.

Clarification and Alignment of Institutional Mandates

Urban forestry in Kampala is expected to be managed by several institutions with KCCA as a main player and coordinator. The institutions include Ministry of Lands, NEMA, UEDCL, NFA, CSOs, and private developers, which can often experience overlapping mandates leading to some operational inefficiencies. In order to address the issue, KCCA will initiate the Urban Forestry Coordination Framework (UFCF), defining the mandates of each actor in relation to tree planting, protection, enforcement, and data management. It will also develop and sign Memoranda of Understanding (MoUs) with key partners such as NFA, UEDCL and Ministry of Works so as to harmonize the necessary operations. In addition, the Urban Forestry Technical Committee (UFTC) within KCCA will be empowered as the central oversight body, responsible for inter-agency coordination, technical guidance, and periodic reviews.

Capacity Building of Technical, Enforcement, and Planning Staff

Some KCCA and partner institutions often lack adequate human and technical capacity to manage complex urban forestry challenges. As such, a structured capacity development program will be rolled out, focusing on silviculture and arboriculture, tree species selection and ecological landscaping, digital tools for tree mapping and inventory management, legal literacy and enforcement training for KCCA's environmental police and Urban forestry integration for urban planners, engineers, and architects. This training will target KCCA staff, relevant national agencies, civil society and private landscapers.

Strengthening Compliance and Enforcement Systems

Without enforcement, policy reforms will remain on paper. In order to enhance compliance, KCCA will establish a Dedicated Urban Forestry Compliance Unit, which will coordinate with KCCA's Directorate of Legal Affairs and Law Enforcement so as to Conduct routine inspections and respond to public complaints, investigate violations such as illegal tree cutting by developers, and prosecute offenders under the Tree Ordinance and related laws. In addition, Environmental compliance audits will be made mandatory before and after major infrastructure works.

Mainstreaming Urban Forestry into Citywide Policy and Planning Frameworks

Although the mainstreaming strategy is already in operation, this updated plan requires a stronger alignment of the urban forestry plans with higher-level policy processes. Accordingly, the KUFMP objectives will be strongly embedded into the Kampala's Physical Development Plan, KCCA's Strategic Plan, KCCA's Annual work plans and the city's budgets.

Table 18: Implementation matrix for Objective 2

Action Area	Key Activities	Responsible Institutions	Timeline	Indicators of Success
2.1 Urban Tree Ordinance finalization and operationalization	<ul style="list-style-type: none"> - Finalize and pass the Kampala Urban Tree Ordinance - Disseminate through civic education and training - Develop SOPs for permitting, protection, and enforcement 	KCCA Directorate of Legal Affairs, Directorate of Physical Planning and Department of Public and Corporate Affairs, Division Urban Councils	Immediate–Year 2	<ul style="list-style-type: none"> - Ordinance approved and gazetted - # of trainings held - # SOPs developed and adopted
2.2 Institutional Role Clarification and Coordination	<ul style="list-style-type: none"> - Establish Urban Forestry Coordination Framework - Sign MoUs with key agencies (NFA, UNRA, etc.) - Empower the Urban Forestry Technical Committee (UFTC) to lead oversight 	KCCA (Environment Dept.), NEMA, UEDCL, Ministry of Lands, UFTC	Short Term (Years 1–2), then continuous	<ul style="list-style-type: none"> - Coordination framework adopted - # MoUs signed - # UFTC meetings and resolutions
2.3 Capacity Building of Staff and Stakeholders	<ul style="list-style-type: none"> - Conduct technical and enforcement training for KCCA, Division, and ward staff - Train about silviculture, GIS tools, species selection - Include private contractors, NGOs, and community leaders in capacity programs 	KCCA HR Dept., Urban Forestry Unit, Partner CSOs, Academic Institutions	Continuous (Annual Training Cycles)	<ul style="list-style-type: none"> - # staff trained by category - # trainings delivered - % of divisions with trained staff

2.4 Enforcement and Compliance Enhancement	<ul style="list-style-type: none"> - Establish a Dedicated Urban Forestry Compliance Unit - Conduct regular inspections and compliance audits - Use digital tools and apps for enforcement and reporting 	KCCA Law Enforcement, Urban Forestry Unit, ICT Dept.	Short to Medium Term (Years 1–4)	<ul style="list-style-type: none"> - # enforcement actions taken - # violations resolved - % reduction in illegal felling cases
2.5 Policy Integration and Strategic Alignment	<ul style="list-style-type: none"> - Mainstream KUFMP in city planning and budgeting - Align with the Physical Development Plan (PDP), Strategic Plan, and MTEF - Include forestry indicators in citywide performance frameworks 	KCCA Planning Dept., Finance Dept., City Executive Committee	Short Term and ongoing	<ul style="list-style-type: none"> - # plans and budgets integrating urban forestry - # forestry indicators tracked - Annual budget allocations to forestry

represents the number of items considered.

Source: Compiled by Doshnut Uganda Ltd

6.2.3 Objective 3. Promote Community Engagement, Awareness and Ownership in Urban Greening

This objective aims to transform residents from passive beneficiaries into active contributors through inclusive programs, effective communication, and sustained public involvement. Activities to implement the objectives are described hereafter in sections (a) to (c).

a. Design and Rollout of Inclusive Community Greening Programs

To promote widespread ownership, KCCA will develop inclusive, locally adapted community greening programs targeting the Youth (mainly through school greening clubs and student eco-champions), Women's groups, Religious and cultural institutions, and Tenants and landlords especially in relatively highly populated areas.

Among others, these programs will include *Neighborhood tree planting campaigns* co-designed with local leaders, *greening public spaces*, *Tree adoption initiatives* (where community members care for designated trees), *Faith-based green initiatives* and *Cultural campaigns* linked to tree stewardship. On its part, KCCA will provide seedlings, technical guidance, and materials, while the communities will offer land, labor, and monitoring.

b. Institutionalization of Annual Public Events and Greening Celebrations

To ensure sustainable commitment and drive for urban forestry promotion, KCCA will initiate/activate the institutionalization of citywide greening events including Kampala Urban Tree Festival (An annual event celebrating community greening champions, schools, and innovators in urban forestry), Division-Level Greening Days (Quarterly planting and clean-up events that double as learning platforms), Tree Planting Competitions (Targeting schools and local groups with recognition and small awards) and Environmental Drama and Art Campaigns (Engaging youth to spread conservation messages creatively). These events will be embedded in KCCA's civic calendar.

c. Public Education, Environmental Literacy, and Digital Engagement

A major barrier to urban forestry is lack of consistent and accessible environmental education. KCCA will implement various strategies to raise awareness and change attitudes through the development of tree-focused learning materials for schools, translated into local languages, produce radio talk shows, promote the Kampala Tree Watch App (A mobile platform for reporting illegal tree felling, uploading greening photos, and tracking planted trees, use visual signage in public places to explain the functions of trees and disseminate a monthly tree bulletin with updates, success stories, and community voices.

Table 19: Implementation Matrix for Objective 3

Action Area	Key Activities	Responsible Institutions	Timeline	Indicators of Success
3.1 Inclusive Community Greening Programs	<ul style="list-style-type: none"> - Identify and mobilize target groups (youth, women, religious institutions, vendors) - Support neighborhood tree planting and adoption schemes - Provide seedlings, tools, and technical training - Link greening to social and livelihood goals - Organize Kampala Urban Tree Festival and Greening Days 	KCCA (Community Services Dept.), Division Urban Councils, CSOs, Schools, Religious and Cultural Leaders	Short to Medium Term (Years 1–4)	<ul style="list-style-type: none"> - # of community groups participating - # of trees planted and adopted - % increase in community-led greening
3.2 Public Greening Events and Celebrations	<ul style="list-style-type: none"> - Hold school competitions and community art campaigns - Recognize outstanding local greening champions 	KCCA, Media Houses, Private Sector Sponsors, NGOs	Annual and Ongoing	<ul style="list-style-type: none"> - # of participants per event - # public events held - # champions and schools awarded
3.3 Environmental Education and Digital Engagement	<ul style="list-style-type: none"> - Develop school and community education materials - Run radio shows, social media campaigns, and community drama - Promote Kampala Tree Watch App and feedback systems - Use signage to raise public awareness 	KCCA Communications Dept., Education Dept., Media Houses, App Developers	Short to Medium Term (Years 1–3), then ongoing	<ul style="list-style-type: none"> - # outreach campaigns conducted - # app users and reports submitted - # schools with active greening curricula

represents the number of items considered

Source: Compiled by Doshnut Uganda Ltd

6.2.4 Objective 4. Integrate Urban Forestry into Planning, Infrastructure, and Urban Design Systems

In order for Kampala to become a greener, healthier, and more climate-resilient city, trees must be adequately integrated into the key aspects of physical planning and infrastructure development. To integrate trees into the city's spatial structure, KCCA will ensure that urban forestry principles are reflected in the Kampala Physical Development Plan (PDP) and all its sectoral plans. Specifically Green infrastructure elements such as tree corridors, riparian buffers, and public parks will be zoned and mapped.

All road designs (new and rehabilitated) will be lined with shade trees. Drainage corridors and flood zones will also integrate riparian vegetation, bioswales, and erosion-controlling species. In addition, urban forestry guidelines will be developed and made mandatory in engineering and landscaping specifications.

Although real estate development is accelerating in Kampala, it is often at the cost of urban trees. In order to ensure that private developers contribute to urban greening, the building permit process will be updated to require tree preservation plans for sites with existing trees, minimum greening ratios, and provision of planting areas, especially for large building complexes. Site inspection teams will monitor compliance with tree-related conditions post-approval.

Table 20: Implementation Matrix for Objective 4

Action Area	Key Activities	Responsible Institutions	Timeline	Indicators of Success
4.1 Mainstream Urban Forestry into Physical Planning Frameworks	<ul style="list-style-type: none"> - Incorporate urban forestry elements into Kampala Physical Development Plan and Local Area Plans - Map and zone green infrastructure corridors and tree buffers - Promote urban trees as critical infrastructure 	KCCA Physical Planning Dept., Urban Forestry Unit, Division Planners	Short Term (Years 1-2)	<ul style="list-style-type: none"> - Urban forestry provisions included in PDP - # LAPs with greening components - # green zones officially gazette
4.2 Tree Integration into Infrastructure Designs	<ul style="list-style-type: none"> - integrate the tree component in the design of roads, drainage systems and public facilities - Develop design standards for tree-lined streets, bioswales, and medians - Retrofit existing infrastructure where feasible 	KCCA Engineering and Roads Depts., Directorate of Physical Planning, Landscape Architects	Short to Medium Term (Years 2-5)	<ul style="list-style-type: none"> - # infrastructure projects with integrated trees - km of tree-lined roads - # drainage systems using green solutions
4.3 Greening in Building and Development Control	<ul style="list-style-type: none"> - Revise building permit process to include tree preservation and planting standards - Update and enforce Urban Greening and Landscaping Guidelines - Monitor private development for compliance 	KCCA Physical Planning and Building Control Depts., Law Enforcement, Developers	Short to Medium Term (Years 1-4)	<ul style="list-style-type: none"> - % of permits with tree preservation plans - # enforcement actions taken - # compliant private developments

represents the number of items considered

Source: Compiled by Doshnut Uganda Ltd

6.2.5 Objective 5. Establish a Robust Monitoring, Learning, and Adaptive Management System

This objective ensures that essential systems are in place to track progress, evaluate outcomes, learn from experiences and adjust strategies accordingly. KCCA will design and implement a comprehensive Urban Forestry Monitoring, Evaluation, Learning and Reporting (MELR) Framework, which will define indicators aligned with each strategic objective and action area. The indicators will include the number and survival rate of trees planted, canopy cover changes per division, frequency of illegal tree removals, level of community participation and enforcement and compliance actions. The MELR framework will be institutionalized within the relevant KCCA unit(s) and synchronized with the city's overall performance monitoring systems.

KCCA will invest in modern data collection tools and technologies to support real-time, efficient, and scalable monitoring. These will include GIS-based dashboards for tree location, status, and species, periodic satellite-based canopy assessments, digital tree inventory platforms linked with the Kampala Tree Watch App and field data collection tools for tree health, age, and maintenance needs. These systems will provide decision-makers with accurate, visual and up-to-date information on the state of the urban forest.

In order to ensure regular reporting, reviews and evaluations, KCCA will establish routine systems of publishing quarterly and annual implementation reports in which summaries of progress, challenges and upcoming priorities will be indicated. In addition, Urban Forestry

Scorecards will be issued per division, showing canopy trends, community participation, and enforcement records. Mid-term review (by Year 3) and end-of-plan evaluation (Year 5) will also be conducted by external reviewers in collaboration with KCCA staff. Annual stakeholder learning forums will be held share insights and recommend adjustments where necessary.

KCCA will promote public participation in the monitoring process through training of community volunteers (Tree Stewards) to monitor tree health, report damage, and recommend interventions, expanding the use of the Kampala Tree Watch App to enable crowd-sourced data on illegal felling, tree status, and suggested planting areas, and involving schools and CSOs in small scale local tree audit and mapping exercises. The public's involvement will deepen ownership, reduce monitoring costs and promote transparency.

Based on the evaluation and monitoring findings, KCCA will where necessary, adjust annual work plans and strategies. Consequently, the MELR findings will be used to influence updates to policies, planning tools and allocation of resources for forestry activities.

Table 21: Implementation Matrix for Objective 5

Action Area	Key Activities	Responsible Institutions	Timeline	Indicators of Success
5.1 Urban Forestry MELR Framework Development	<ul style="list-style-type: none"> - Define urban forestry-specific SMART indicators - Assign data sources, frequency, and responsible parties - Align MELR with KCCA's wider reporting systems - Develop MELR manual and training package 	KCCA Environment Dept., Planning Unit, Urban Forestry Unit, MELR Experts	Short Term (Years 1-2)	<ul style="list-style-type: none"> - MELR framework finalized and in use - # staff trained on MELR - # indicators regularly reported
5.2 Digital Tools and Remote Monitoring	<ul style="list-style-type: none"> - Create GIS-based urban forestry dashboard - Conduct canopy assessments via satellite imagery - Integrate Tree Watch App with central inventory system - Equip field teams with digital data collection tools 	KCCA ICT Dept., GIS Unit, Urban Forestry Unit, Satellite Partners	Medium Term (Years 2-4), then continuous	<ul style="list-style-type: none"> - Digital tree inventory established - # canopy assessment reports - # plots monitored digitally
5.3 Regular Reporting and Evaluation	<ul style="list-style-type: none"> - Produce quarterly and annual implementation reports - Publish Urban Forestry Scorecards for each division - Conduct mid-term and end-of-plan evaluations - Host annual stakeholder learning forums 	KCCA Planning and Communications Units, M&E Focal Persons, Independent Evaluators	Ongoing (Annually / Every 6 Months)	<ul style="list-style-type: none"> - # reports produced and shared - # scorecards published - % recommendations integrated
5.4 Participatory Monitoring and Citizen Science	<ul style="list-style-type: none"> - Train Tree Stewards and community monitors - Promote Tree Watch App usage across all divisions - Involve schools/CSOs in tree audits and mapping - Establish reward/incentive systems for accurate reporting 	KCCA Community Services, Schools, NGOs, Local Councils	Short to Medium Term (Years 1-4)	<ul style="list-style-type: none"> - # active Tree Stewards - # reports submitted by citizens - % community feedback acted upon

5.5 Learning Integration and Adaptive Management	<ul style="list-style-type: none"> - Maintain a learning/adaptation log - Revise annual plans and budgets based on MELR insights - Scale up successful models and revise weak approaches - Update urban forestry policy based on findings 	KCCA Urban Forestry Unit, Planning Dept., UFTC, Policy Unit	Medium to Long Term (Years 2-5)	<ul style="list-style-type: none"> - # planning revisions made from MELR - # successful practices scaled - % of adaptive actions implemented
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represents the number of items considered

Source: Compiled by Doshnut Uganda Ltd

CHAPTER 7: BUDGETING AND FINANCIAL PLAN

7.1 Introduction

The successful implementation of the Updated Kampala Urban Forestry Management Plan (KUFMP) for the remaining four financial years (FY2025/26 to FY2029/30) requires a realistic, structured, and results-oriented financial plan. This section presents a budgeting framework that aligns with the Plan's five strategic objectives and corresponding activities across all city divisions.

The financial plan provides an itemized estimate of the costs required to implement the required activities. It takes into account both fixed and recurring costs associated with staffing, operations, equipment, logistics and contingencies.

The total budget allocation for the implementation period (FY2025/26 to FY2029/30) is **UGX 3,453,092,000**. The funds are distributed as follows:

- **FY 2025/26 – UGX 772,023,000**
- **FY 2026/27 – UGX 837,023,000**
- **FY 2027/28 – UGX 922,023,000**
- **FY 2028/29 – UGX 922,023,000**
- **FY 2029/30 – UGX 922,023,000**

This financial plan is designed to enable effective prioritization of expenditures, resource mobilization and accountability. It provides both a summarized itemized budget and a detailed breakdown per budget line.

7.2 Itemized Budget Summary

The table below provides a summary of the total estimated costs for the key budget categories, distributed across the four financial years of implementing the updated KUFMP (Table 22). Altogether, they add up to **UGX 4,375,115,000/=**.

Table 22: Itemized Budget Summary FY2025/26 – FY2029/30 (UGX, '000)

Budget Category	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	Total (UGX,'000)
7.3.1 KCCA staff and other personnel	452,023	437,023	442,023	442,023	442,023	1,773,092
7.3.2 Equipment and tools	50,000	40,000	30,000	20,000	20,000	160,000
7.3.3 Tree nursery operations	40,000	50,000	60,000	60,000	60,000	270,000
7.3.4 Tree Planting and maintenance	100,000	130,000	160,000	170,000	170,000	730,000
7.3.5 Community engagement and sensitization	40,000	60,000	70,000	60,000	60,000	290,000
7.3.6 Monitoring, Evaluation, Learning and Reporting (MELR)	30,000	50,000	60,000	60,000	60,000	260,000
7.3.7 Logistics and operational overheads	40,000	50,000	70,000	70,000	70,000	300,000
7.3.8 Contingency (approx. 5%)	20,000	20,000	30,000	40,000	40,000	150,000
TOTAL (UGX)	772,023	837,023	922,023	922,023	922,023	4,375,115,000

7.3 Detailed Budget Breakdown

7.3.1 KCCA Staff and other personnel (UGX 1,773,092,000)

This budget line supports the recruitment, retention and capacity development of technical and support personnel required to implement the Kampala Urban Forestry Management Plan across all five city divisions. Human resources are essential for executing field activities, monitoring, community engagement, policy enforcement and coordination (Table 23).

Table 23: Key cost budget elements for Personnel and their corresponding justifications

Cost Item	Description	Estimated Annual Allocation (UGX '000)
Urban Forestry Technical Officers (x 5 divisions)	Recruitment and facilitation (monthly salaries/wages, transport, coordination)	247,023 (Yr1) → 247,023 (Yr2) → 247,023 (Yr3), → Yr-4) 247,023
Field Assistants	Temporary assistants to support planting, audits, maintenance	15,000 (Yr 1) → 20,000 (Yr2) → 25,000 (Yr 3-4)
Enforcement and Legal Support	Collaboration with enforcement units for protection and ordinance implementation	100,000 annually
Training and Capacity Building Workshops	Skill-building sessions on silviculture, GIS, MELR, and urban greening	40,000 (Yr1), 20,000 (Yr2), 20,000 (Yr3-4)
Internship Engagement Programme	Hosting environmental and forestry students to support implementation	50,000 annually
Sub-total per Year (UGX)		452,023 (Yr1) → 437,023 (Yr2) → 442,023 (Yr3) → 442,023 (Yr4)

Total for the KCCA and other personnel (4 years): UGX 1,773,092,000

7.3.2 Equipment and tools (UGX 140 million)

This budget supports the procurement, replacement and maintenance of equipment and tools necessary for urban tree management, data collection, nursery operations, enforcement and public outreach (Table 24).

Table 24: Key cost budget elements for Equipment and tools and their corresponding justifications

Cost Item	Description	Estimated Annual Allocation (UGX '000)
Tree Planting Tools (spades, hoes, slashers, etc.)	Bulk purchase and periodic replacement for divisions	10,000 (Yr1), 7,000 (Yr2), 5,000 (Yr3), 3,000 (Yr4)
Tree Maintenance Tools (pruners, ladders, watering cans, Crane truck, diseases detection equipment, Water bowser)	Tools for long-term care of the trees and other green spaces	45,000 annually
GPS Devices and survey Equipment	To support tree inventory and spatial mapping	10,000 (Yr1)
Digital tablets for field data Collection	For MELR team and KCCA technical officers	10,000 (Yr1), 5,000 (Yr2)
GIS Software Licenses and data Storage tools	Software for managing and analyzing tree inventory data	5,000 (Yr1), 5,000 (Yr2)

Protective gear (helmets, gloves, reflective vests)	For staff safety during field operations	15,000 annually
Branded Tents, banners and PA Systems	Used during greening campaigns, public education events	5,000 (Yr1), 3,000 (Yr2), 2,000 (Yr3-4)
Repairs and maintenance	Routine servicing of tools and equipment	10,000 annually
Sub-total per Year (UGX)		50,000 → 40,000 → 30,000 → 20,000

Total for Equipment and Tools (4 years): UGX 140 million

7.3.3 Tree Nursery operations (UGX 210 million)

The budget line supports the establishment, maintenance and scaling of decentralized nursery sites in all city divisions, ensuring year-round availability of diverse, healthy, and ecologically suitable seedlings for planting (Table 25).

Table 25: Key cost budget elements for Tree Nursery operations and their corresponding justifications

Cost Item	Description	Estimated Annual Allocation (UGX '000)
Establishment of division-level Nurseries	Site preparation, fencing, water access, and basic structures	20,000 (Yr1)
Seedling production (native, ornamental, agroforestry species)	Sourcing seeds, propagation, potting, weeding, pest control	10,000 → 20,000 → 25,000 → 25,000
Salaries for nursery attendants (contract-based)	Staff to oversee nursery care, coordination, and training	5,000 annually per nursery (approx. 5 nurseries)
Nursery infrastructure (pots, shade nets, watering tanks)	Procurement and replacement of nursery infrastructure	5,000 (Yr1), 10,000 (Yr2), 5,000 (Yr3-4)
Technical training for nursery staff and partners	Capacity building in propagation techniques and disease control	3,000 (Yr1), 2,000 (Yr2)
Support to community/School micro-Nurseries	Inputs and technical backstopping for partner nurseries	2,000 → 3,000 → 5,000 → 5,000
Sub-total per Year (UGX)		40,000 → 50,000 → 60,000 → 60,000

Total for Tree Nursery Operations (4 years): UGX 210 million

7.3.4 Tree Planting and Maintenance (UGX 560 million)

Tree planting and long-term maintenance are central to achieving the KUFMP's canopy expansion and ecosystem restoration targets. This budget line covers procurement and transportation of seedlings, site preparation, planting events, and critical aftercare (watering, pruning, mulching (where necessary), staking, pest control) (Table 17) to ensure high survival rates.

Table 26: Key cost budget elements for Tree Planting and Maintenance and their corresponding justifications

Cost Item	Description	Estimated Annual Allocation (UGX '000)
Seedling procurement (complementary to nursery supply)	Specialized or high-volume orders not met by the KCCA-owned nurseries	10,000 → 15,000 → 20,000 → 20,000
Planting site preparation	Clearing, pegging, digging, enrichment planting, fencing as needed	20,000 → 30,000 → 35,000 → 35,000
Tree transportation to planting sites	Hired trucks or KCCA vehicles for bulk seedling movement	5,000 annually
Public and Institutional Planting Events	Logistics, event branding, refreshments, coordination	15,000 → 20,000 → 25,000 → 25,000
Tree maintenance (watering, mulching, staking, pruning)	Critical for survival during dry months and early growth years	40,000 → 50,000 → 60,000 → 60,000
Pest and disease management	Bio-pesticides, monitoring kits, contractor services if needed	5,000 annually
Tree Tagging and geo-referencing (linked to MELR)	Labelling and linking planted trees to inventory systems	5,000 (Yr2–4)
Sub-total per Year (UGX)		100,000 → 130,000 → 160,000 → 170,000

Total for Tree Planting and Maintenance (4 years): UGX 560 million

7.3.5 Community Engagement & Sensitization (UGX 230 million)

This budget component covers grassroots mobilization, public awareness campaigns, school and faith-based greening activities and community participatory engagements such as tree adoption and reporting.

Table 27: Key cost budget elements for community engagement and sensitization and their corresponding justifications

Cost Item	Description	Estimated Allocation ('000)	Annual (UGX '000)
Community mobilization campaigns	Awareness drives, division-level sensitization, door-to-door outreach	10,000 → 15,000 → 20,000 → 15,000	
Urban tree festival and greening Days	Annual flagship events to raise public visibility and appreciation	10,000 → 15,000 → 15,000 → 10,000	
Production of Information, Education and communication (IEC) materials (including banners, flyers, booklets)	Messaging in local languages, climate education tools	5,000 annually	
Media engagement (radio, social media, community drama)	Amplifying key messages and reporting channels	5,000 → 10,000 → 10,000 → 10,000	
School and Youth Greening Clubs	Support for school tree clubs, training, tools, and recognition programs	5,000 → 10,000 → 15,000 → 10,000	
Engagement with Faith, Market and Cultural Institutions	Outreach, meetings, and greening drives with influential community bodies	5,000 annually	
Feedback systems and reporting tools (linked to Tree Watch App)	Community-level reporting, tree care alerts, suggestion tracking	5,000 (Yr2–4)	
Sub-total per Year (UGX)		40,000 → 60,000 → 70,000 → 60,000	

Total for Community Engagement & Sensitization (4 years): UGX 230 million

7.3.6 Monitoring and Evaluation (UGX 200 million)

As earlier mentioned, the M&E will employ the Monitoring, Evaluation, Learning and Adaptive Management (MELAM) Framework/approach. The key cost elements and Justifications are given in table 28.

Table 28: Key cost budget elements for Monitoring and Evaluation and their corresponding justifications

Cost Item	Description	Estimated Annual Allocation (UGX '000)
Development of MELAM Framework and Indicators	Framework design, setting SMART indicators for each objective	10,000 (Yr1)
GIS-Based Tree Inventory and Mapping System	Remote sensing, geo-referencing, dashboard development, baseline audits	10,000 → 15,000 → 15,000 → 10,000
Tree Watch App Operationalization and Maintenance	App upgrades, community training, technical support	5,000 annually
Periodic Data Collection and Field Surveys	Planted tree survival, community engagement, enforcement tracking	5,000 → 10,000 → 15,000 → 15,000
Quarterly and Annual Reporting	Scorecards, infographics, KCCA progress reports	5,000 annually
Mid-Term and End-of-Plan Evaluations	Independent reviews, reflection workshops, stakeholder validation	10,000 (Yr3), 15,000 (Yr4)
Learning Forums and Policy Feedback Workshops	Sharing lessons, influencing policy, re-aligning strategies	5,000 → 5,000 → 5,000 → 5,000
Open Data Portal and Digital Access Tools	Hosting forestry datasets online, increasing transparency	5,000 → 5,000 (Yr2-3)
Sub-total per Year (UGX)		30,000 → 50,000 → 60,000 → 60,000

Total for Monitoring, Evaluation, Learning & Adaptive Management (4 years): UGX 200 million

7.3.7 Logistics and Operational Overheads (UGX 230 million)

The logistics and operational overheads budget components are essential day-to-day operational and logistical costs that enable smooth implementation of all activities, coordination of the KUFMP. The given costs are necessary for transportation, communications, venue hiring, utilities and other essential requirements that will ensure that the KUFMP runs efficiently across all the city five divisions. Table 29 highlights the key cost budget elements and their justifications

Table 29: Key cost budget elements for Logistics and Operational Overheads and their corresponding justifications

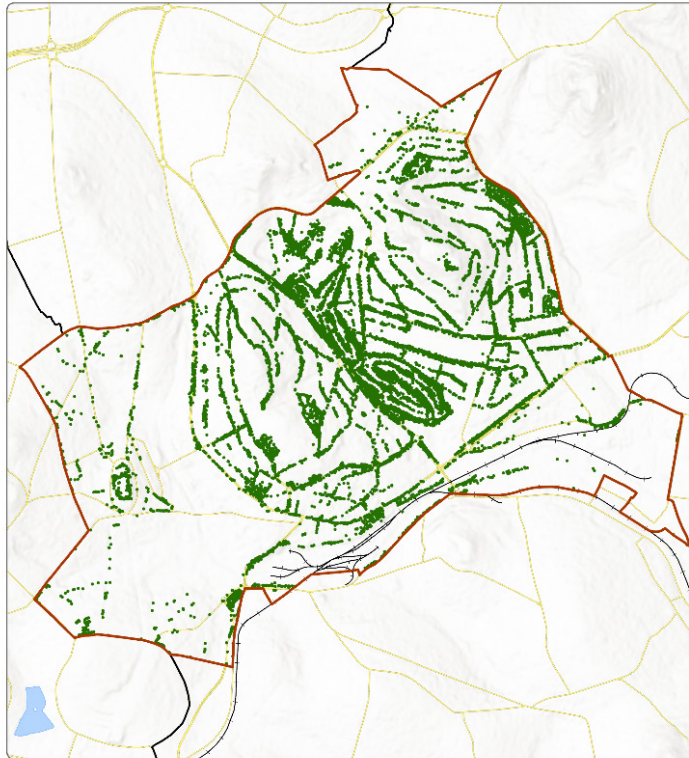
Cost Item	Description	Estimated Annual Allocation (UGX '000)
Transport and fuel	Fuel and maintenance for vehicles transporting staff, seedlings, and tools	10,000 → 15,000 → 20,000 → 20,000
Hired Vehicles and Logistics Contractors	For peak-season activities, especially tree planting & nursery deliveries	5,000 → 10,000 → 15,000 → 15,000
Venue and Equipment Hire (trainings, workshops)	Community halls, tents, chairs, PA systems for meetings and events	5,000 → 7,000 → 10,000 → 10,000
Office Supplies and Communications	Internet, airtime, stationery, printing, signage	5,000 → 5,000 → 10,000 → 10,000
Administrative Support (stipends, temp hires)	Part-time administrative assistants or data entry personnel	5,000 → 5,000 → 5,000 → 5,000
Utilities (electricity, water for nurseries/offices)	Ongoing operational needs for KCCA offices & nursery sites	5,000 annually
Insurance and Compliance Costs	Insurance for equipment, vehicle permits, audit fees	5,000 (Yr2-4)
Emergency Mobilization Support	Unforeseen needs during heavy planting cycles or extreme weather events	5,000 annually
Sub-total per Year (UGX)		40,000 → 50,000 → 70,000 → 70,000

Total for Logistics and Operational Overheads (4 years): UGX 230 million

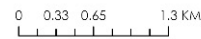
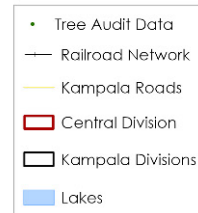
APPENDICES.

Appendix 1 (i-v): Distribution of audited trees in five divisions of Kampala Urban area.

i. Central Division -KCCA

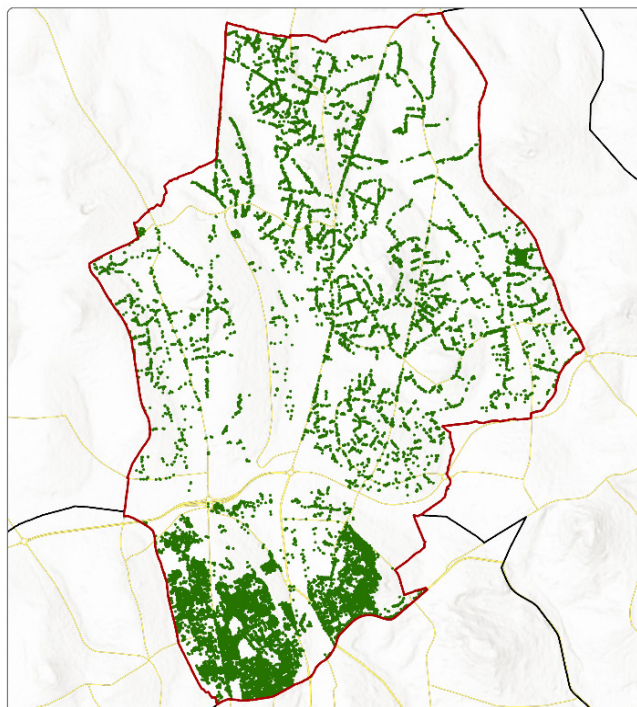


DISTRIBUTION OF TREES IN CENTRAL DIVISION

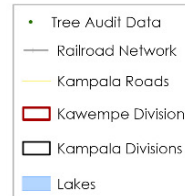


Source: Esri, NASA, NGA, USGS
Tree Audit: KCCA 2016 - 2025
Admin Boundary: UBOS 2014
Kampala Roads: KCCA 2022

ii. Kawempe Division -KCCA

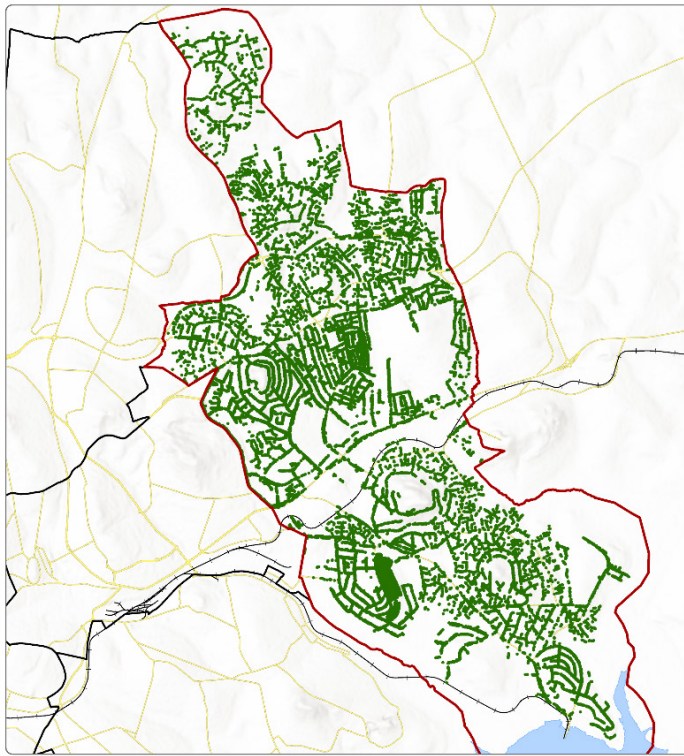


DISTRIBUTION OF TREES IN KAWEMPE DIVISION



Source: Esri, NASA, NGA, USGS
Tree Audit: KCCA 2016 - 2025
Admin Boundary: UBOS 2014
Kampala Roads: KCCA 2022

iii. Nakawa Division -KCCA



DISTRIBUTION OF TREES IN NAKAWA DIVISION

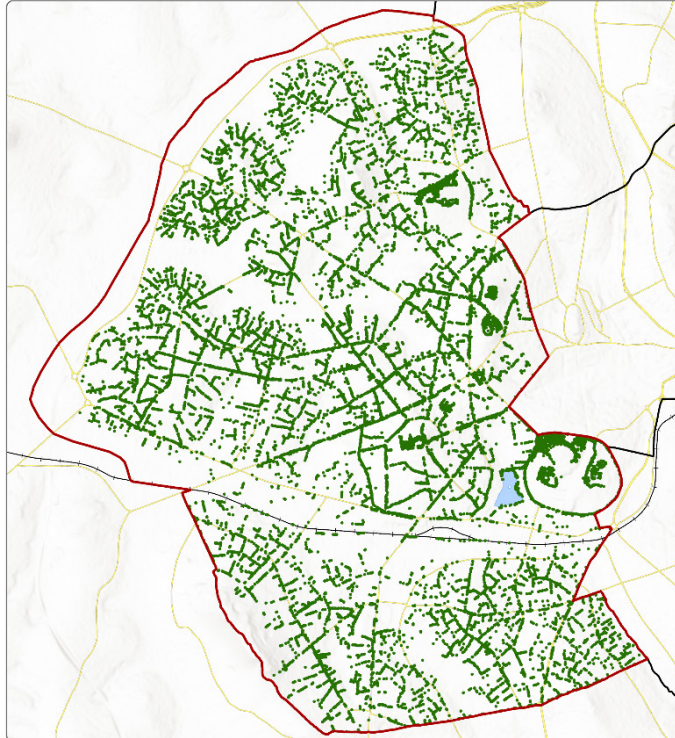
N

- Tree Audit Data
- Railroad Network
- Kampala Roads
- ▭ Nakawa Division
- ▭ Kampala Divisions
- ▭ Lakes



Date: Esti: NASA, NGA, USGS
 Tree Audit: KCCA 2016 - 2025
 Admin Boundary: UBOS 2014
 Kampala Roads: KCCA 2022

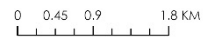
iv. Rubaga Division -KCCA



DISTRIBUTION OF TREES IN RUBAGA DIVISION

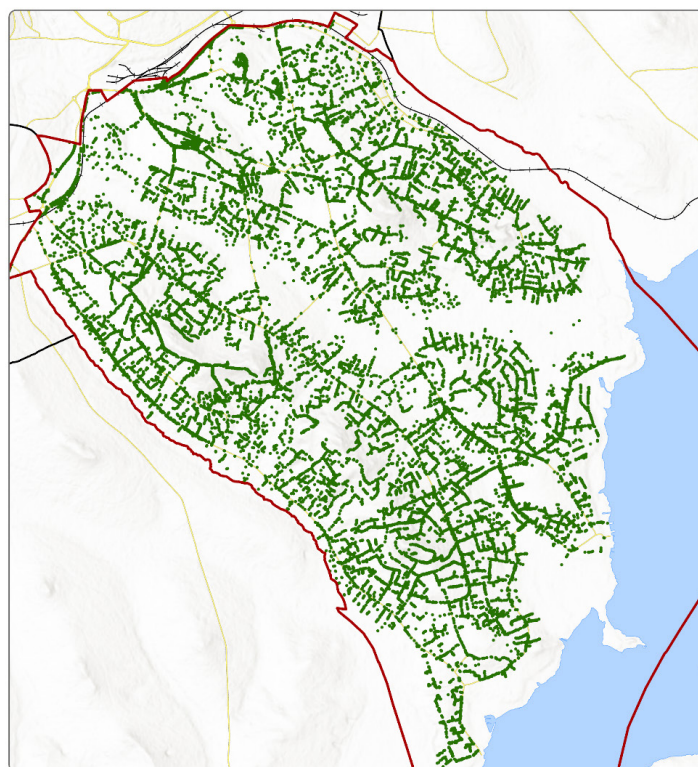
N

- Tree Audit Data
- Railroad Network
- Kampala Roads
- ▭ Rubaga Division
- ▭ Kampala Divisions
- ▭ Lakes



Date: Esti: NASA, NGA, USGS
 Tree Audit: KCCA 2016 - 2025
 Admin Boundary: UBOS 2014
 Kampala Roads: KCCA 2022

v. Makindye Division.



DISTRIBUTION OF TREES IN MAKINDYE DIVISION

N

- Tree Audit Data
- Railroad Network
- Kampala Roads
- ▭ Makindye Division
- ▭ Kampala Divisions
- ▭ Lakes

0 0.5 1 2 KM

Source: ERI, NASA, NGA, USGS
Date: Tree Audit: KCCA 2016 - 2025
 Admin Boundary: UBOS 2014
 Kampala Roads: KCCA 2022

Appendix 2 (i-v). Tree Abundance in different Parishes of Kampala City Divisions.

i. Central Division

Sn	Parish	Area (Ha)	No of Trees
1	Bukesa	59.86	148
2	Civic Center	122.71	987
3	Industrial Area	169.2	321
4	Kagugube	49.79	118
5	Kamwokya I	39.56	240
6	Kamwokya II	50.93	62
7	Kisenyi III	23.51	229
8	Kisenyi I	23.58	1
9	Kisenyi II	50.52	33
10	Kololo I	106.74	2931
11	Kololo II	111.33	1536
12	Kololo III	102.6	4319
13	Kololo IV	154.92	5971
14	Mengo	70.64	81
15	Nakasero I	63.22	1018
16	Nakasero II	158.87	2310
17	Nakasero III	38.1	182
18	Nakivubo-Shauriyako	20.61	2
19	Old Kampala	58.09	132
20	Nakasero IV	34.45	27

ii. Kawempe Division

Sn	Parish	Area (Ha)	No of Trees
1	Bwaise I	93.47	90
2	Bwaise II	78.06	110
3	Bwaise III	53.05	44
4	Kanyanya	266.73	2129
5	Kawempe I	320.26	582
6	Kawempe II	306.5	2543
7	Kazo	123.67	532
8	Kikaaya	396.96	2331
9	Komamboga	374.72	1385
10	Kyebando	308.97	1487
11	Makerere I	78.46	2300
12	Makerere II	56.88	3109
13	Makerere III	62.63	200
14	Makerere University	173.06	11144
15	Mpererwe	122.05	662
16	Mulago I	94.72	3935
17	Mulago II	49.77	664
18	Mulago III	86.62	166
19	Wandegeya	35.71	267

iii. Nakawa Division				iv. Lubaga Division			
Sn	Parish	Area (Ha)	No of Trees	Sn	Parish	Area (Ha)	No of Trees
1	Banda	149.05	857	1	Lubya	687.65	4,947
2	Bugolobi	387.46	6018	2	Lungujja	309.74	3,763
3	Bukoto I	207.79	1,544	3	Busega	486.37	3,483
4	Bukoto II	361.92	2,410	4	Mutundwe	511.8	3,122
5	Butabika	400.53	1617	5	Rubaga	333.88	3,078
6	Kiwatule	287.92	3,026	6	Namirembe	186.24	2,324
7	Kyambogo	62.59	785	7	Ndeeba	197.06	2,212
8	Kyanja	715.1	3,902	8	Kasubi	295.99	1,878
9	Luzira	421.48	3,521	9	Kabowa	256.12	1,545
10	Luzira Prisons	178.31	254	10	Nakulabye	103.28	1,175
11	Mbuya I	229.35	1,159	11	Nateete	188.09	1,152
12	Mbuya II	176.35	1,886	12	Najjanankumbi I	88.99	734
13	Mutungo	496.4	4,385	13	Najjanankumbi II	102.74	601
14	Nabisunsa	31.46	37				
15	Naguru I	77.23	1,805				
16	Naguru II	297.4	9,054				
17	Nakawa	49	47				
18	Nakawa Institution	33.22	16				
19	Ntinda	266.79	6,202				
20	Ntinda Police Barracks	63.71	378				
21	UPK	75.51	402				
22	Upper Estate	139.34	1,038				

V. Makindye Division			
Sn	Parish	Area (Ha)	No of Trees
1	Bukasa	635.82	4038
2	Buziga	708.65	5104
3	Ggaba	1305.25	5248
4	Kabalagala	50.2	326
5	Kansanga-Muyenga	362.21	2698
6	Katwe I	30.08	177
7	Katwe II	52.29	196
8	Kibuye I	77.63	490
9	Kibuye II	42.49	177
10	Kisugu	125.97	936
11	Lukuli	416.58	3460
12	Luwafu	201	2703
13	Makindye I	138.05	1844
14	Makindye II	103.51	725
15	Nsambya Central	285.34	2537
16	Nsambya Estate	7.41	135
17	Nsambya Railway	32.96	214
18	Wabigalo	63.25	501
19	Kibuli	108.77	862
20	Salaama	755.32	3521
21	Industrial Area	169.2	13

Appendix 3: Kampala's tree species by origins and distribution across five city divisions.

No	Tree species	Origin	Distribution of Tree Species in Divisions of Kampala				
			Central	Kawempe	Nakawa	Rubaga	Makindye
1	<i>Arundinaria gigantean</i>	Exotic	✓				
2	<i>Acacia albida</i>	Native				✓	
3	<i>Acacia auriculiformis</i>	Native			✓		✓
4	<i>Acacia gerrardii</i>	Native	✓	✓		✓	
5	<i>Acacia hockii</i>	Native		✓	✓	✓	
6	<i>Acacia nilotica</i>	Native			✓		
7	<i>Acacia senegal</i>	Native		✓	✓		✓
8	<i>Acacia seyal</i>	Native					✓
9	<i>Acacia xanthophloea</i>	Native				✓	✓
10	<i>Acer davidii</i>	Exotic	✓				
11	<i>Acer palmatum</i>	Exotic					✓
12	<i>Acrocarpus fraxinifolius</i>	Exotic	✓	✓		✓	✓
13	<i>Aegle marmelos</i>	Exotic					
14	<i>Aesculus californica</i>	Exotic					✓
15	<i>Azelia africana</i>	Native				✓	
16	<i>Agathis atropurpurea</i>	Exotic		✓	✓		
17	<i>Agathis australis</i>	Exotic					✓
18	<i>Agathis robusta</i>	Exotic			✓	✓	✓
19	<i>Agave sisalana</i>	Exotic			✓		
20	<i>Ailanthus altissima</i>	Exotic			✓		✓
21	<i>Albizia coriaria</i>	Native	✓	✓	✓	✓	✓
22	<i>Albizia glaberrima</i>	Native	✓			✓	
23	<i>Albizia gummifera</i>	Native	✓	✓		✓	✓
24	<i>Albizia lebbeck</i>	Native	✓				
25	<i>Albizia zygia</i>	Native	✓	✓	✓	✓	✓
26	<i>Aleurites moluccana</i>	Exotic	✓	✓	✓	✓	✓
27	<i>Allophylus rubifolius</i>	Native					✓
28	<i>Alstonia boonei</i>	Native	✓	✓	✓		
29	<i>Anacardium occidentale</i>	Exotic	✓	✓			
30	<i>Annona muricata</i>	Exotic	✓	✓	✓	✓	✓
31	<i>Anthocleista grandiflora</i>	Native					✓
32	<i>Antiaris toxicaria</i>	Native	✓	✓	✓	✓	✓
33	<i>Antidesma bunius</i>	Exotic	✓	✓			
34	<i>Araucaria angustifolia</i>	Exotic		✓	✓	✓	
35	<i>Araucaria araucana</i>	Exotic	✓	✓	✓	✓	✓

36	<i>Araucaria cunninghamii</i>	Exotic	✓	✓	✓	✓	✓
37	<i>Araucaria heterophylla</i>	Exotic	✓	✓	✓	✓	✓
38	<i>Archontophoenix alexandrae</i>	Exotic		✓	✓	✓	✓
39	<i>Archontophoenix cunninghamiana</i>	Exotic	✓	✓	✓	✓	✓
40	<i>Areca catechu</i>	Exotic	✓	✓	✓	✓	✓
41	<i>Artocarpus altilis</i>	Exotic	✓	✓	✓	✓	✓
42	<i>Artocarpus heterophyllus</i>	Exotic	✓	✓	✓	✓	✓
43	<i>Arundinaria alpina</i>	Native	✓	✓			
44	<i>Asimina tribola</i>	Exotic					✓
45	<i>Averrhoa carambola</i>	Exotic		✓	✓	✓	✓
46	<i>Azadirachta indica</i>	Exotic	✓	✓	✓	✓	✓
47	<i>Baikiaea insignis</i>	Native	✓	✓			✓
48	<i>Bambusa vulgaris</i>	Exotic	✓	✓		✓	✓
49	<i>Bauhinia blakaena</i>	Exotic	✓	✓			
50	<i>Bauhinia purpurea</i>	Exotic		✓	✓	✓	
51	<i>Bauhinia variegata</i>	Exotic	✓	✓	✓	✓	✓
52	<i>Beaucarnea recurvate</i>	Exotic					✓
53	<i>Bismarckia nobilis</i>	Exotic			✓	✓	✓
54	<i>Bombax buonopozense</i>	Native	✓	✓	✓	✓	✓
55	<i>Borassus aethiopum</i>	Native	✓	✓	✓	✓	✓
56	<i>Borassus flabellifer</i>	Exotic	✓	✓	✓	✓	✓
57	<i>Boswellia papyrifera</i>	Exotic	✓				✓
58	<i>Bougainvillea glabra</i>	Exotic	✓			✓	✓
59	<i>Brachychiton acerifolius</i>	Exotic	✓				
60	<i>Brahea edulis</i>	Exotic		✓			✓
61	<i>Bridelia micrantha</i>	Native	✓	✓	✓	✓	✓
62	<i>Broussonetia papyrifera</i>	Exotic	✓	✓	✓	✓	✓
63	<i>Brugmansia suaveolens</i>	Exotic			✓	✓	
64	<i>Bursera simaruba</i>	Exotic				✓	
65	<i>Burttodavia nyasica</i>	Exotic			✓	✓	✓
66	<i>Cadiaeum variegatum</i>	Exotic			✓		
67	<i>Caesalpinia decapetala</i>	Exotic		✓	✓	✓	
68	<i>Caesalpinia pulcherrima</i>	Exotic	✓	✓	✓	✓	✓
69	<i>Calliandra calothyrsus</i>	Exotic	✓	✓	✓	✓	✓
70	<i>Calliandra haematocephala</i>	Exotic			✓	✓	✓
71	<i>Calliandra surinamensis</i>	Exotic	✓	✓	✓	✓	✓
72	<i>Callistemon citrinus</i>	Exotic	✓	✓	✓	✓	✓
73	<i>Callistemon shiresii</i>	Exotic	✓	✓	✓	✓	✓

74	<i>Callistemon viminalis</i>	Exotic	✓	✓	✓	✓	✓
75	<i>Calodendrum capense</i>	Exotic	✓	✓			
76	<i>Cananga odorata</i>	Exotic	✓	✓	✓	✓	✓
77	<i>Canarium schweinfurthii</i>	Native	✓	✓	✓	✓	✓
78	<i>Capparis fascicularis</i>	Native	✓				
79	<i>Carissa macrocarpa</i>	Exotic	✓				
80	<i>Carya laciniosa</i>	Exotic					✓
81	<i>Caryota mitis</i>	Exotic	✓	✓	✓	✓	✓
82	<i>Caryota urens</i>	Exotic	✓	✓	✓	✓	✓
83	<i>Casimiroa edulis</i>	Exotic		✓	✓		
84	<i>Cassia fistula</i>	Exotic			✓		✓
85	<i>Cassia longiracemosa</i>	Native					✓
86	<i>Cassia obtusifolia</i>	Exotic	✓	✓			
87	<i>Cassia roxburghii</i>	Exotic			✓	✓	✓
88	<i>Cassia singueana</i>	Native					✓
89	<i>Casuarina cunninghamiana</i>	Exotic	✓	✓	✓	✓	✓
90	<i>Casuarina equisetifolia</i>	Exotic	✓	✓	✓	✓	✓
91	<i>Casuarina glauca</i>	Exotic	✓		✓	✓	
92	<i>Cedrela odorata</i>	Exotic	✓	✓	✓	✓	✓
93	<i>Ceiba speciose</i>	Exotic	✓				
94	<i>Celtis africana</i>	Native	✓	✓			✓
95	<i>Celtis mildbraedii</i>	Native				✓	
96	<i>Celtis wightii</i>	Exotic	✓	✓			
97	<i>Cercidium floridum</i>	Exotic					✓
98	<i>Cereus peruvianus</i>	Exotic	✓				
99	<i>Cestrum nocturnum</i>	Exotic				✓	
100	<i>Chrysophyllum albidum</i>	Native	✓	✓			
101	<i>Chrysophyllum perpulchrum</i>	Native			✓		
102	<i>Cinnamomum zeylanicum</i>	Exotic		✓		✓	✓
103	<i>Citharexylum spinosum</i>	Exotic	✓	✓	✓	✓	✓
104	<i>Citrus limonia</i>	Exotic	✓	✓	✓	✓	✓
105	<i>Citrus paradisi</i>	Exotic	✓	✓		✓	
106	<i>Citrus reticulata</i>	Exotic	✓	✓	✓	✓	✓
107	<i>Citrus sinensis</i>	Exotic	✓	✓	✓	✓	✓
108	<i>Cocos nucifera</i>	Exotic	✓	✓	✓	✓	✓
109	<i>Codiaeum variegatum</i>	Exotic	✓	✓	✓	✓	✓
110	<i>Coffea liberica</i>	Native	✓	✓	✓	✓	✓
111	<i>Coffea robusta</i>	Native	✓	✓			

112	<i>Cola gigantea</i>	Native	✓				
113	<i>Combretum molle</i>	Native	✓				
114	<i>Conocarpus lancifolius</i>	Exotic	✓	✓			
115	<i>Cordia africana</i>	Native		✓		✓	
116	<i>Cordia millenii</i>	Native	✓	✓		✓	✓
117	<i>Cordia sebestena</i>	Exotic	✓		✓		✓
118	<i>Cordia uncinulata</i>	Native	✓				
119	<i>Cornus alba bailhalo</i>	Exotic	✓				
120	<i>Couroupita guianensis</i>	Exotic					
121	<i>Craibia brownii</i>	Native			✓	✓	✓
122	<i>Craterispermum laurinum</i>	Native					✓
123	<i>Crescentia alata</i>	Exotic				✓	✓
124	<i>Croton megalocarpus</i>	Native	✓	✓	✓	✓	✓
125	<i>Cupressus lusitanica</i>	Exotic	✓	✓	✓	✓	✓
126	<i>Cupressus nootkaensis</i>	Exotic				✓	✓
127	<i>Cupressus sempervirens</i>	Exotic	✓	✓			
128	<i>Cyathea cooperi</i>	Exotic	✓				
129	<i>Cycas revoluta</i>	Exotic	✓		✓	✓	✓
130	<i>Cynometra alexandri</i>	Native		✓	✓	✓	
131	<i>Datura suaveolens</i>	Exotic		✓			
132	<i>Delonix regia</i>	Exotic	✓	✓	✓	✓	✓
133	<i>Dichaetanthera corymbosa</i>	Exotic					✓
134	<i>Dillenia indica</i>	Exotic				✓	✓
135	<i>Diphasia angolensis</i>	Native				✓	✓
136	<i>Dovyalis caffra</i>	Native	✓	✓	✓	✓	
137	<i>Dracaena alectrifolmis</i>	Native	✓				
138	<i>Dracaena fragrans</i>	Native		✓	✓	✓	✓
139	<i>Dracaena steudneri</i>	Native		✓	✓	✓	
140	<i>Duranta erecta</i>	Exotic	✓	✓	✓	✓	✓
141	<i>Dyopsis decaryi</i>	Exotic	✓	✓			
142	<i>Dyopsis lutescens</i>	Exotic	✓	✓	✓	✓	✓
143	<i>Ectadiopsis oblongifolia</i>	Native					✓
144	<i>Elaeis guineensis</i>	Native	✓	✓	✓	✓	✓
145	<i>Elaeocarpus ganitrus</i>		✓	✓	✓	✓	✓
146	<i>Encephalartos manikensis</i>	Native			✓		✓
147	<i>Entada abyssinica</i>	Native	✓	✓			
148	<i>Entandrophragma angolense</i>	Native	✓				
149	<i>Entandrophragma cylindricum</i>	Native	✓				

150	<i>Eriobotrya japonica</i>	Exotic	✓	✓			
151	<i>Erythrina abyssinica</i>	Native	✓	✓	✓	✓	
152	<i>Erythrina excelsa</i>	Native	✓	✓		✓	✓
153	<i>Erythrina indica</i>	Exotic	✓	✓	✓	✓	✓
154	<i>Erythrophleum sauveolens</i>	Native	✓				
155	<i>Eucalyptus cloeziana</i>	Exotic	✓				
156	<i>Eucalyptus deglupta</i>	Exotic					✓
157	<i>Eucalyptus foelscheana</i>	Exotic	✓				✓
158	<i>Eucalyptus globulus</i>	Exotic	✓	✓		✓	✓
159	<i>Eucalyptus grandis</i>	Exotic	✓	✓	✓	✓	✓
160	<i>Eucalyptus robusta</i>	Exotic	✓	✓	✓	✓	✓
161	<i>Eucalyptus saligna</i>	Exotic	✓	✓	✓	✓	
162	<i>Eugenia oleina</i>	Exotic		✓	✓	✓	✓
163	<i>Eugenia uniflora</i>	Exotic	✓	✓	✓	✓	✓
164	<i>Euphorbia calamiformis</i>	Exotic	✓				
165	<i>Euphorbia candelabrum</i>	Native	✓	✓	✓	✓	✓
166	<i>Euphorbia obovalifolia</i>	Native					✓
167	<i>Euphorbia pulcherrima</i>	Native					✓
168	<i>Euphorbia tirucalli</i>	Native		✓	✓	✓	✓
169	<i>Euphorbia venenifera</i>	Native					✓
170	<i>Ficus abutilifolia</i>	Exotic	✓	✓	✓	✓	✓
171	<i>Ficus asperifolia</i>	Native		✓			
172	<i>Ficus benjamina</i>	Exotic	✓	✓	✓	✓	✓
173	<i>Ficus carica</i>	Exotic		✓			
174	<i>Ficus elastica</i>	Exotic	✓	✓	✓	✓	✓
175	<i>Ficus exasperata</i>	Native	✓	✓	✓	✓	✓
176	<i>Ficus glumosa</i>	Native	✓	✓	✓		✓
177	<i>Ficus maclellandii</i>	Exotic	✓	✓	✓	✓	
178	<i>Ficus macrophyllus</i>	Exotic	✓				
179	<i>Ficus natalensis</i>	Native	✓	✓	✓	✓	✓
180	<i>Ficus ovata</i>	Exotic	✓	✓	✓	✓	✓
181	<i>Ficus platyphylla</i>	Native	✓				
182	<i>Ficus pumila</i>	Exotic			✓	✓	✓
183	<i>Ficus racemosa</i>	Exotic			✓	✓	✓
184	<i>Ficus saussureana</i>	Exotic		✓			
185	<i>Ficus sur</i>	Exotic	✓	✓	✓		✓
186	<i>Ficus sycomorus</i>	Exotic	✓	✓	✓	✓	✓
187	<i>Ficus thonningii</i>	Native				✓	

188	<i>Ficus trichopoda</i>	Native					✓
189	<i>Ficus vallis-choudae</i>	Native	✓	✓	✓		✓
190	<i>Ficus verruculosa</i>	Native		✓			
191	<i>Filicium decipiens</i>	Native	✓	✓	✓	✓	✓
192	<i>Flacourtia indica</i>	Native					✓
193	<i>Flueggea virosa</i>	Native					✓
194	<i>Fraxinus angustifolia</i>	Exotic					✓
195	<i>Funtumia africana</i>	Native	✓	✓			
196	<i>Garcinia mangostana</i>	Native					
197	<i>Garcinia millensis</i>	Native					✓
198	<i>Gliricidia sepium</i>	Exotic	✓	✓		✓	✓
199	<i>Gmelina arborea</i>	Exotic			✓		✓
200	<i>Grevillea robusta</i>	Exotic	✓	✓	✓	✓	✓
201	<i>Grewia mildbraedii</i>	Native		✓			
202	<i>Grewia mollis</i>	Native		✓			
203	<i>Guarea cedrata</i>	Native	✓				
204	<i>Hamelia patens</i>	Exotic	✓	✓	✓	✓	✓
205	<i>Harpephyllum caffrum</i>	Exotic		✓			
206	<i>Hevea brasiliensis</i>	Exotic	✓				
207	<i>Hyophorbe lagenicaulis</i>	Exotic			✓	✓	✓
208	<i>Inga edulis</i>	Exotic			✓	✓	✓
209	<i>Ixora casei</i>	Exotic				✓	
210	<i>Jacaranda mimosifolia</i>	Exotic	✓	✓	✓	✓	✓
211	<i>Jatropha curcas</i>	Exotic		✓	✓	✓	✓
212	<i>Jatropha multifida</i>	Exotic				✓	
213	<i>Justicia adhatoda</i>	Exotic					
214	<i>Khaya anthotheca</i>	Native	✓	✓	✓	✓	✓
215	<i>Khaya grandifoliola</i>	Native	✓	✓			✓
216	<i>Khaya senegalensis</i>	Native	✓	✓	✓	✓	✓
217	<i>Kigelia africana</i>	Native	✓	✓	✓	✓	✓
218	<i>Lannea microcarpa</i>	Native				✓	
219	<i>Lawsonia inermis</i>	Exotic		✓			
220	<i>Leptoderris fasciculata</i>	Exotic					✓
221	<i>Leucaena diversifolia</i>	Exotic		✓		✓	✓
222	<i>Leucaena leucocephala</i>	Exotic	✓	✓	✓	✓	✓
223	<i>Livistona chinensis</i>	Exotic	✓	✓			
224	<i>Macadamia tetraphylla</i>	Exotic		✓	✓		✓
225	<i>Maesopsis eminii</i>	Native	✓	✓	✓	✓	✓

226	<i>Magnolia champaca</i>	Exotic	✓	✓	✓	✓	✓
227	<i>Malus pumila</i>	Exotic	✓		✓	✓	
228	<i>Mangifera indica</i>	Exotic	✓	✓	✓	✓	✓
229	<i>Mangifera odorata</i>	Exotic	✓	✓	✓	✓	✓
230	<i>Manihot carthagenensis</i>	Exotic	✓	✓	✓	✓	✓
231	<i>Manihot grahami</i>	Exotic			✓		
232	<i>Manilkara dawei</i>	Native					✓
233	<i>Markhamia lutea</i>	Native	✓	✓	✓	✓	✓
234	<i>Melaleuca armillaris</i>	Exotic				✓	✓
235	<i>Melaleuca huegelii</i>	Exotic	✓	✓			
236	<i>Melaleuca quinquenervia</i>	Exotic	✓	✓			
237	<i>Melia azedarach</i>	Exotic	✓	✓	✓	✓	✓
238	<i>Melia volkensii</i>	Exotic		✓			
239	<i>Milicia excelsa</i>	Native	✓	✓	✓	✓	✓
240	<i>Millettia dura</i>	Native	✓	✓		✓	
241	<i>Millettia pinnata</i>	Exotic	✓				
242	<i>Monodora myristica</i>	Native	✓	✓		✓	
243	<i>Morinda lucida</i>	Native	✓	✓		✓	
244	<i>Morinda titanophylla</i>	Native				✓	
245	<i>Moringa oleifera</i>	Exotic	✓	✓	✓	✓	✓
246	<i>Morus alba</i>	Exotic	✓	✓	✓	✓	✓
247	<i>Morus mesozygia</i>	Native	✓	✓		✓	
248	<i>Murraya exotica</i>	Exotic		✓			
249	<i>Murraya koenigii</i>	Exotic	✓	✓	✓		✓
250	<i>Musanga cecropioides</i>	Native		✓			
251	<i>Myroxylon balsamum</i>	Native	✓	✓			
252	<i>Nauclea diderrichii</i>	Native	✓	✓	✓	✓	
253	<i>Nerium oleander</i>	Exotic					✓
254	<i>Newtonia buchananii</i>	Native	✓	✓			
255	<i>Olea capensis</i>	Native			✓		
256	<i>Pachira glabra</i>	Exotic	✓	✓	✓	✓	✓
257	<i>Pandanus ugandaensis</i>	Native				✓	
258	<i>Pandanus utilis</i>	Exotic			✓		
259	<i>Passiflora edulis</i>	Exotic					✓
260	<i>Pauridiantha callicarpoides</i>	Native					✓
261	<i>Peddiea fisheri</i>	Native		✓			
262	<i>Peltophorum pterocarpum</i>	Exotic			✓	✓	✓
263	<i>Persea americana</i>	Exotic	✓	✓	✓	✓	✓

264	<i>Phoenix canariensis</i>	Exotic	✓	✓	✓	✓	✓
265	<i>Phoenix dactylifera</i>	Exotic			✓		✓
266	<i>Phoenix reclinata</i>	Native	✓	✓		✓	
267	<i>Phoenix roebelenii</i>	Native	✓	✓			
268	<i>Phyllanthus acidus</i>	Exotic	✓	✓	✓		
269	<i>Phyllanthus emblica</i>	Exotic		✓			
270	<i>Pigifeta filaris</i>	Exotic	✓				
271	<i>Piliostigma thorningii</i>	Native			✓		✓
272	<i>Pinus caribaea</i>	Exotic	✓	✓	✓	✓	✓
273	<i>Pinus patula</i>	Exotic	✓	✓	✓	✓	✓
274	<i>Pithecellobium dulce</i>	Exotic	✓	✓	✓	✓	✓
275	<i>Plumeria alba</i>	Exotic		✓	✓	✓	
276	<i>Plumeria rubra</i>	Exotic	✓	✓	✓	✓	✓
277	<i>Podocarpus gracilior</i>	Native				✓	✓
278	<i>Podocarpus henkelii</i>	Native	✓	✓			
279	<i>Podocarpus latifolius</i>	Native		✓		✓	✓
280	<i>Podocarpus macrophyllus</i>	Exotic	✓	✓	✓	✓	✓
281	<i>Podocarpus usambarensis</i>	Native			✓	✓	
282	<i>Polyalthia longifolia</i>	Exotic	✓	✓	✓	✓	✓
283	<i>Polyscia fulva</i>	Native		✓		✓	
284	<i>Premna serratifolia</i>	Native	✓	✓			
285	<i>Prichardia pacifica</i>	Exotic					✓
286	<i>Prunus africana</i>	Native	✓	✓		✓	✓
287	<i>Pseudomussaenda flava</i>	Exotic					✓
288	<i>Psidium cattleianum</i>	Exotic	✓	✓	✓	✓	✓
289	<i>Psidium guajava</i>	Exotic	✓	✓	✓	✓	✓
290	<i>Punica granatum</i>	Exotic	✓	✓	✓	✓	✓
291	<i>Rauvolfia vomitoria</i>	Native		✓			
292	<i>Ravenala madagascariensis</i>	Exotic	✓	✓	✓	✓	✓
293	<i>Rinorea oblongifolia</i>	Native					✓
294	<i>Robinia x slavini</i>	Exotic	✓				
295	<i>Rothmannia urcelliformis</i>	Exotic					
296	<i>Roystonea regia</i>	Exotic	✓	✓	✓	✓	✓
297	<i>Sapindus saponaria</i>	Exotic	✓	✓	✓	✓	✓
298	<i>Sapium ellipticum</i>	Native	✓	✓	✓	✓	✓
299	<i>Schefflera abyssinica</i>	Native	✓	✓	✓	✓	✓
300	<i>Schefflera actinophylla</i>	Exotic			✓	✓	✓
301	<i>Schefflera arboricola</i>	Exotic	✓	✓	✓	✓	✓

302	<i>Schinus terebinthifolius</i>	Exotic	✓	✓	✓	✓	
303	<i>Schizolobium parahyba</i>	Exotic	✓	✓	✓	✓	✓
304	<i>Senna siamea</i>	Exotic	✓	✓	✓	✓	✓
305	<i>Senna spectabilis</i>	Exotic	✓	✓	✓	✓	✓
306	<i>Senna surattensis</i>	Exotic			✓	✓	✓
307	<i>Sesbania sesban</i>	Native	✓	✓	✓	✓	
308	<i>Solanum mauritianum</i>	Exotic	✓	✓	✓	✓	
309	<i>Solanum wrightii</i>	Exotic	✓	✓	✓	✓	✓
310	<i>Spathodea campanulata</i>	Native	✓	✓	✓	✓	✓
311	<i>Steganotaenia araliacea</i>	Native		✓			
312	<i>Sterculia dawei</i>	Native		✓			
313	<i>Strychnos mitis</i>	Native	✓				
314	<i>Swietenia macrophylla</i>	Exotic	✓		✓		
315	<i>Syagrus romanzoffiana</i>	Exotic			✓	✓	✓
316	<i>Symphonia globulifera</i>	Native	✓	✓			
317	<i>Synadenium grantii</i>	Native					✓
318	<i>Syzygium guineense</i>	Native			✓	✓	✓
319	<i>Syzygium owariense</i>	Native	✓	✓			
320	<i>Syzygium australe</i>	Exotic	✓	✓	✓	✓	✓
321	<i>Syzygium cordatum</i>	Native		✓	✓		
322	<i>Syzygium cumini</i>	Exotic	✓	✓	✓	✓	✓
323	<i>Tabebuia rosea</i>	Exotic	✓	✓	✓	✓	✓
324	<i>Tabernaemontana divaricata</i>	Exotic		✓	✓	✓	✓
325	<i>Tabernaemontana holstii</i>	Native		✓	✓	✓	
326	<i>Tamarindus indica</i>	Native	✓	✓	✓	✓	✓
327	<i>Tarchonanthus camphoratus</i>	Native			✓		
328	<i>Teclea nobilis</i>	Native	✓	✓	✓	✓	✓
329	<i>Tecoma stans</i>	Exotic	✓	✓	✓		✓
330	<i>Tectona grandis</i>	Exotic	✓	✓	✓	✓	✓
331	<i>Terminalia catappa</i>	Exotic	✓	✓	✓	✓	✓
332	<i>Terminalia glaucescens</i>	Exotic	✓	✓			
333	<i>Terminalia ivorensis</i>	Exotic	✓	✓	✓	✓	✓
334	<i>Terminalia mantaly</i>	Exotic	✓	✓	✓	✓	✓
335	<i>Terminalia schimperiana</i>	Native			✓		✓
336	<i>Terminalia superba</i>	Exotic	✓	✓	✓	✓	✓
337	<i>Tetradenia riparia</i>	Native		✓			✓
338	<i>Theobroma cacao</i>	Exotic	✓	✓	✓	✓	✓
339	<i>Thevetia peruviana</i>	Exotic	✓	✓	✓	✓	✓

340	<i>Thuja occidentalis</i>	Exotic	✓	✓	✓	✓	✓
341	<i>Tipuana tipu</i>	Exotic			✓	✓	
342	<i>Toona ciliata</i>	Exotic	✓	✓	✓	✓	✓
343	<i>Treculia africana</i>	Native		✓			
344	<i>Trema orientalis</i>	Native	✓	✓	✓	✓	✓
345	<i>Trichilia dregeana</i>	Native	✓				
346	<i>Vangueria apiculata</i>	Native	✓	✓	✓	✓	✓
347	<i>Vangueria madagascariensis</i>	Exotic	✓	✓	✓	✓	✓
348	<i>Veitchia merrillii</i>	Exotic		✓		✓	
349	<i>Vernonia amygdalina</i>	Native	✓	✓	✓	✓	✓
350	<i>Vernonia auriculifera</i>	Native		✓			
351	<i>Viburnum emerald</i>	Exotic					✓
352	<i>Warbugia ugandensis</i>	Native	✓	✓	✓	✓	
353	<i>Washingtonia filifera</i>	Exotic	✓	✓	✓	✓	✓
354	<i>Washingtonia robusta</i>	Exotic	✓	✓	✓	✓	✓
355	<i>Wodyetia bifurcate</i>	Native	✓	✓			
356	<i>Zanthoxylum gillettii</i>	Native			✓		
357	<i>Altonia scholaris</i>	Exotic					✓
358	<i>Apodytes dimidiata</i>	Exotic					✓
359	<i>Barleria brownii</i>	Native					✓
360	<i>Casimiroa edulis</i>	Exotic					✓
361	<i>Cordyline australis</i>	Exotic					✓
362	<i>Cyathea cooperi</i>	Native					✓
363	<i>Dichrostachys cinerea</i>	Native					✓
364	<i>Euphorbia pulcherrima</i>	Native					✓
365	<i>Faidherbia albida</i>	Exotic					✓
366	<i>Ficus cordata</i>	Exotic					✓
367	<i>Flueggea virosa</i>	Native					✓
368	<i>Leptoderris fasciculata</i>	Native					✓
369	<i>Lophostemon confertus</i>	Native					✓
370	<i>Manilkara obovata</i>	Native					✓
371	<i>Piliostigma thorningii</i>	Exotic					✓
372	<i>Robinia x slavinii</i>	Exotic					✓
373	<i>Terminalia brownii</i>	Exotic					✓

Appendix 4 a-e: Variations in causes of poor health conditions of the audited trees in five divisions of Kampala.

a. Tree Health Status Versus their Causative Agents for Kampala Central

Sn	Health Status	Causative Agent									Total
		Age	Animals	Climate	Disease/fungi	Fire	Humans	insects	Others	Stranglers	
1	Dead Trees	17	0	17	19	0	8	16	26	1	104
2	Declining in Health Trees	38	2	27	194	3	70	281	81	30	726
3	Dying Trees	14	0	5	26	1	13	27	28	4	118
4	Healthy Trees	6	4	3	5	4	2	10	1	1	36
5	Unhealthy/Diseased Trees	269	5	131	213	5	144	525	287	32	1611
Total		344	11	183	457	13	237	859	423	68	2595

b. Tree Health Status Versus their Causative Agents for Kampala Kawempe

Sn	Health Status	Causative Agent									Total
		Age	Animals	climate	Disease/fungi	Fire	Humans	insects	Others	Stranglers	
1	Dead Trees	0	0	2	2	0	9	0	2	1	16
2	Declining in Health Trees	195	11	45	135	27	207	133	70	25	848
3	Dying Trees	8	1	3	6	3	7	8	3	1	40
4	Healthy Trees	3	0	2	0	0	0	0	0	1	6
5	Unhealthy/Diseased Trees	18	5	4	48	5	60	21	43	10	214
Total		224	17	56	191	35	283	162	118	38	1124

c. Tree Health Status Versus their Causative Agents for Kampala Nakawa

Sn	Health Status	Causative Agent									Total
		Age	Animals	climate	Disease/fungi	Fire	Humans	insects	Others	Stranglers	
1	Dead Trees	36	1	5	8	1	34	12	35	0	132
2	Declining in Health Trees	383	45	24	142	6	201	292	104	87	1284
3	Dying Trees	29	7	7	14	2	17	10	21	9	116
4	Healthy Trees	31	6	2	5	5	132	204	6	27	418
5	Unhealthy/Diseased Trees	3	3	3	24	0	6	11	19	4	73
Total		482	62	41	193	14	390	529	185	127	2023

d . Tree Health Status Versus their Causative Agents for Kampala Rubaga

Sn	Health Status	Causative Agent									Total
		Age	Animals	climate	Diease/ fungi	Fire	Humans	insects	Others	Stranglers	
1	Dead Trees	20	6	8	9	0	26	15	17	2	103
2	Declining in Health Trees	561	163	77	109	30	526	407	240	160	2273
3	Dying Trees	44	2	5	20	6	22	13	30	12	154
4	Healthy Trees	10	6	3	3	2	25	68	10	10	137
5	Unheathy/Diseased Trees	53	44	14	137	13	134	60	122	87	664
Total		688	221	107	278	51	733	563	419	271	3331

e Tree Health Status Versus their Causative Agents for Kampala Makindye

Sn	Health Status	Causative Agent									Total
		Age	Animals	climate	Diease/ fungi	Fire	Humans	insects	Others	Stranglers	
1	Dead Trees	8	1	13	0	2	19	3	4	0	50
2	Declining in Health Trees	250	13	109	0	6	342	182	31	99	1032
3	Dying Trees	12	0	10	0	0	20	5	3	0	50
4	Healthy Trees	8	3	5	0	1	33	22	4	6	82
5	Unheathy/Diseased Trees	4	1	2	0	0	22	8	1	2	40
Total		282	18	139	0	9	436	220	43	107	1254

APPENDIX 5: STAKEHOLDER ENGAGEMENT THEMATIC QUESTIONS.

Theme A: Urban tree planting and management, enhancing biodiversity and combating climate change

Questions

1. Suggest key objectives that can adequately address the following current urban forestry aspects;
 - i. Tree planting and management
 - ii. Enhancement of Biodiversity
 - iii. Combating climate change effects.
2. What criteria should guide the selection of trees to be planted in Kampala city (including ecological suitability, cultural relevance, resilience...etc)?
3. Which areas in Kampala are currently most in need of tree planting and why?
4. What practical measures can increase survival and growth of newly planted and existing trees in Kampala city within the next five-year period?
5. What indicators and tools should be used to track the survival and growth of planted trees across the city within a five-year period?
6. Suggest cost estimates for activities including establishing tree nursery beds (where needed), sourcing for seedlings (if necessary), tree planting and maintenance within a five-year period.
7. What are the optimal seasons and timelines for key urban forest activities including tree nursery establishment tree planting, maintenance and follow-up assessments in different divisions of Kampala city in a 5-year period?

Theme B: Policy and institutional framework applicable to urban forestry.

Questions

1. (a) What legal and regulatory challenges facing Urban forestry in Kampala City?
(b) Suggest ways of addressing the challenges.
2. What strategies and practices can ensure compliance with urban forestry laws and policies?
3. How can inter-agency coordination (e.g., KCCA, NEMA, NFA, UWA) be enhanced in implementing Kampala urban forestry plans?
4. How can compliance with urban forestry policies and ordinances be monitored and reported consistently across all city divisions?
5. What resources are required for effective policy enforcement, training and institutional strengthening in urban forestry?
6. Which timeframes within a 5-year period are adequate for reviewing and updating key laws and policies associated with urban forestry?

Theme C: Integration of urban forestry in urban planning and infrastructure

Questions

1. How can urban forestry plans be integrated into Kampala City's existing development plans, zoning and environmental impact assessments?
2. Suggest ways/strategies that Kampala city developers and contractors should employ in order to integrate/accommodate tree and green spaces into new construction projects.
3. Suggest Urban-based innovative infrastructural designs that can improve and increase trees and green spaces in Kampala city.
4. What mechanisms should be used to assess whether new developments are complying with urban greening guidelines?
5. Suggest a budget that should be earmarked for activities to be undertaken in urban forestry activities involving City planning and infrastructural developments

Theme D: Public awareness about and community participation in urban forestry.

Questions

1. Considering the key socio-economic groups in Kampala city, what are the current levels of public awareness about the environmental/ecological, health and socio-economic benefits of urban forests?
2. What strategies can be employed to effectively sensitize public about the significance of urban forests?
3. How can various kinds of communities including schools, security organizations, cultural institutions, women and youth groups and individuals be inspired and motivated to actively participate in planting and managing trees in the city.
4. How can the impact of community awareness campaigns and partnership programs be progressively evaluated over time (in a 5-year period)?
5. Suggest costs of activities associated with community mobilization and public awareness creation for promoting Urban forests in Kampala city in the next five years.
6. What are the appropriate timelines for particular mobilization and awareness campaigns in communities during the next five years?

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