

The Urban Growth and Applied Urban Planning Framework: *Case Study Kakamega Municipality, Kenya*

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Abstract

Urbanization in Kenyan urban areas; has been rapid and unregulated since 1960s. The main challenge is how to envision urban growth under such unprecedented trends. This paper discusses the urban growth and urban planning framework applied in Kakamega Municipality, Kenya. Specifically, the study examined historical growth trends, urban planning regulations and policies as well as the urban planning practices in Kakamega Municipality. Content analysis study was conducted and key informant interviews with urban managers and stakeholders recorded. The qualitative and quantitative approaches were applied. Geo-statistical analysis functions were applied for non-spatial and spatial data. High urbanization rate was revealed in Kakamega Municipality. The paper concludes by stating that there is incongruity between applied urban planning framework and the actual practice. The paper recommends review of urban planning regulations and zoning policies to accommodate the contemporary urban dynamics in Kakamega Municipality.

Keywords: Urban growth, urban planning framework

INTRODUCTION

The former Secretary-General for United Nations, Ban Ki-moon in his opening remarks stated that "Cities are powerhouses of economic growth and catalysts for inclusion and innovation" (UN, 2016). Cities are engines of growth (Fainstein, 2021) which are resembled to living organisms as they are adaptive to the contemporary transformative urban dynamics within the clusters of socioeconomic, ecological, cultural and spatial development anchored under urban planning framework (United Nations, 2017). As one would say urbanization and urban growth go hand in hand (UN Habitat, 2016), so is urbanization essential and linked to industrialization, modernization as well as the sociological process of rationalization. Remarkably, in 2009, the world became more urbanized than rural. It is then predicted that 64.1% and 85.9% of developing and developed world will be urbanized by 2050 (Wiskerke, 2015). The rates of urbanization vary depending on the scale of city status (Castán Broto, 2019). Urbanization is still happening in developed nations with mega cities of over 10 million residents' population (Sorensen

& Okata, 2010). It is however pronounced in Africa and South East Asian countries in the smaller cities and towns of less than 1-5 million residents' population (Wiskerke, 2015). The unprecedented urbanization trends keep intensifying leading to greater cities that were once incomprehensible a century ago (Cohen, 2006). An explicit and unique phenomenon being experienced in African cities reveals that urbanization models are different depending on the level of urban competitiveness. Historically, cities were termed as magnets for growth and economic development (Wiskerke, 2015), which is not the case as "Cities in Africa are not serving as engines of growth and structural transformation" (World Bank, 2000) rather as focal points for rural people seeking better life. It is then pertinent to note that the emerging future of cities largely rely upon the state of urban planning framework, how it is practiced and integrated within the urban transformative processes to realize the New Urban Agenda (United Nations, 2017). However, the uncontrolled urban growth coupled with poor

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urban management, privatization of public good, urban inequality, informality and urban sprawl presents urban planning framework as unstable and unsustainable. As cities emerge and continue to grow there is need to change the pattern of urbanization (UN-Habitat, 2018). This calls for an evidence based urban planning framework that provides new forms of collaborations, governance, financing, cooperations and planning for a sustainable positive transformation in the world.

Kakamega Municipality is the headquarter of Kakamega County and a fast-growing urban area in the Western Kenya. The Municipal urbanization patterns have been changing tremendously since the town was established in 1903 (Pletcher, 2012). The effect of this has been urban sprawl into the agricultural land, increased pressure on the existing infrastructure, high demands for housing units, escalated poverty rates and growth of informal settlements.

The main objective of the study was to examine the urban growth and urban planning framework applied in Kakamega Municipality, Kenya.

While the specific objectives of the study were to; explore the historical growth trends, assess the urban planning regulations and policies and delve into the urban planning practices in Kakamega Municipality.

To achieve sustainable urban growth, the urban management need a proper urban planning framework that guides the urban growth commensurately. This article therefore reviews the historical trends of urban growth as well as discusses the applied urban planning framework in Kakamega Municipality.

THEORY

Urban planning regulations

The basis of urban planning in Kenya is on the British blue prints. In the colonial era planning legislation was applied as an approach for development as well as a tool to control functions and settlement of people based on colour and race. A similar case for Kakamega Municipality whereby residential zones were divided into Europeans, Asian and African neighbourhoods. Fortunately, the laws were repealed in 1963 after independence. These opened ways for people to own and occupy prime residential zones without any restrictions.

Initially, the Kenyan Government applied the Growth Centre Policy in the post – independency era up to 1980's. However, it was realized that the program had gaps as it resulted to informality and unsustainable development. The centralized planning model was therefore adopted in 1990's. Whereby the urban planning for towns was done by the Central Government through the Ministry of Lands by the Physical Planning Department in Nairobi. Master and structure planning approaches were applied and the planning officers would be seconded to Municipalities to prepare plans. The plans would present proposals for land uses, infrastructure, social amenities, deferred land, public spaces and utilities. This was guided by the repealed Physical Planning Act CAP 286, 1996 and the Physical Planning hand book. After the plan was completed and approved, it was implemented by the Municipal officers through applying it in approving planning developments. In 2010, The Kenyan Constitution was promulgated; which allows two levels of governance; at national and county, where Kenyan people can exercise their sovereign power. Article 6 (1) classifies Kenyan territory into 47 counties, article 10 grants devolution of power and articles 185 and 186 allows the County Governments to perform functions (Kenya Government, 2010). The County Government Act, 2012 section 5 then outlines the County Government functions as follows:

County legislation in accordance with article 185 of constitution which confers the County Assembly authority for; oversight on the county executive committee and other executive organs; receive and approve plans and policies that guide development and management of County spatial growth. These plans and policies influence the exploitation, development and management of the County's resources, infrastructure and institutions.

Article 186 of the Kenyan constitution through the Fourth Schedule assigns fourteen (14) functions to the County Governments to perform. The eighth of the fourteen is the county planning and development.

The urban planning framework in Kakamega Municipality is then guided by both the national



and county legislations. The key guiding regulations are the Physical and Land Use Planning Act, 2019, Urban Areas and Cities Act, 2011 and County Government Act, 2012 (Kenya Government, 2011). The urban planning framework is locally implemented guided by the Integrated Strategic Urban Development Plan 2017 - 2030 (Kakamega County Government, 2017).

The signing of the United Nations Millenium declaration in September, 2000 for Millenium Development Goals (MDGs), breathed new life in urban growth for most of the urban centres in developing countries. Goal 8; Targets A & F allowed ease of trading and penetration of technology and information to the lower cadre areas (UN, 2015). By 2002, Kenya ushered in a new government under the leadership of President Mwai Kibaki, who drew The Kenya Vision 2030 framework (Kenya Government, 2022). According to the state department for economic planning (2022, p. 1), the vision framework focused at transforming Kenya into "a newly-industrializing, middle income country providing a high quality of life to all its citizens in a clean and secure environment." This gave people confidence to return to their home towns to invest. Further the promulgation of The Constitution of Kenya in 2010, renewed growth in Kakamega Municipality (Kenya Government, 2010). To align with the implementation of The Vision 2030 framework, The Kenya National Spatial Plan (2015 - 2045) was formulated. This is an integrated spatial plan for achieving balanced and sustainable national development in Kenya. The plan provides a coordinated framework for sectoral planning to address the disconnect between physical and economic planning in Kenya (Kenya Government, 2015). The passing of the Physical and Land Use Planning Act (PLUPA) in 2019, further shaped how urban planning ought to be practiced in the new dispensation of devolution of functions at the County Government level (Kenya Government, 2019). The legislation introduced revised urban planning regulations to promote contemporary effective urban growth. This triggered progressive urban transformation in Kakamega Municipality.

RESEARCH METHODS

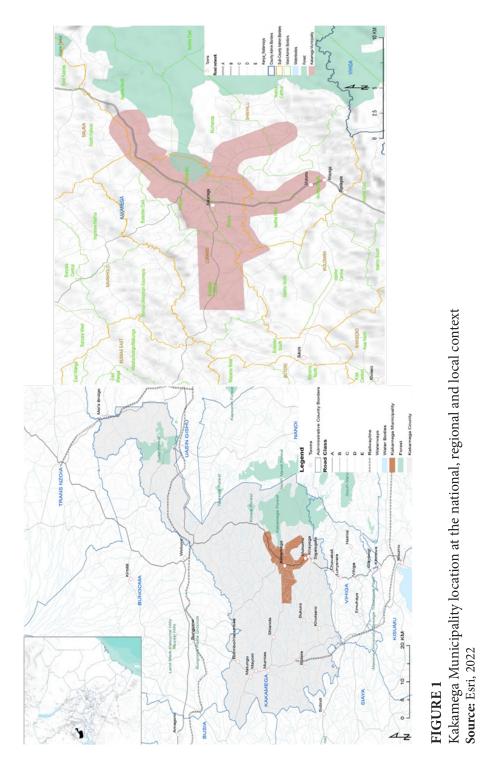
The study was within Kakamega Municipality as presented in **Figure 1**. It is located within coordinates; 0.283333°N 34.75°E, at an altitude of

1520 – 1680 meters above sea level, 30 km North of the equator; on the South-Western part of Kenya (Kakamega Municipality, 2017). The Municipality comprises of eight wards namely; Butsotso Central, Butsotso East, Butsotso South, Mahiakalo, Isukha Central and Isukha West, Sheywe and Shirere. As the headquarter of Kakamega County, it covers a spatial area of 123 KM2 and sustains a population of 285,882 which is projected to be 353,989 by the year 2029 at a population growth rate of 4% (Kenya National Bureau of Statistics, 2019). It is noted that 32% of the residents live below the poverty level (Kakamega County Government, 2018).

The content analysis research design was applied (Krippendorff, 2004). Primarily, key informants and semi-structured interviews were conducted to understand matters on urban planning practices, planning policies, trends of urban growth and urban challenges. Purposive sampling approach was applied to identify officers in key respective departments, dealing with urban planning functions, policy formulations, land matters, infrastructure as well as economic development. These included; The physical planning officer at the Ministry of Lands (Urban planning department); Director _ Urban planning, Director _ Lands, Director _ Finance and Economic Planning, Director _ Housing, Director _ Public works, Kakamega County and urban planning officer at the Municipality. To capture more insights on policy matters and practices on urban planning at the local level, eight ward managers were also interviewed.

The secondary data was captured, condensed, coded and categorized as guided by Drisko & Maschi (2016) from different source levels as follows; national data - 15%, county data - 20%, municipal data - 46%, open-source data - 14% and third party - 5%. The relevancy of the data sources was validated by the departmental officers as guided by Kothari (2004). These included spatial development plans, county integrated development plans, financial reports, economic development reports, annual performance reports, development approval reports and planning regulations and policies. The relevant historical documents and contemporary reports providing content on Kakamega Municipality were reviewed to develop themes and framework for the study.





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Qualitative and quantitative data was collected. By using the content analysis procedures, the data was condensed, coded, categorized and analysed. Both the spatial and non-spatial data were analysed. Application of geo-statistical analysis functions to analyse data and provide maps was significant. The functional tools of geographical distribution measurements, geographical pattern analysis and regression statistical analysis were used. The maps displayed the spatial distribution of features, patterns and clusters of parameters.

RESULTS AND DISCUSSION

History of Kakamega Municipality

Kakamega Municipality has evolved from a single cell urban centre to one of the fast-growing towns in Kenya. It was initially established by the British



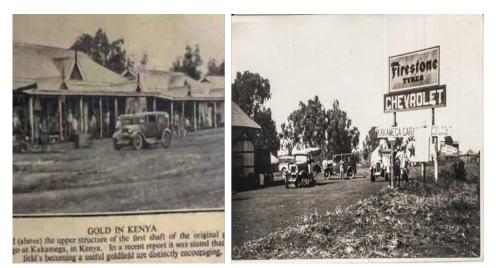
colonial government in 1903 for defensive purposes (Nicholls, 2015) through the first Town Ordinance that was enacted in 1903 (Machooka, 1997). In addition, the British colonists were attracted by the fertile soil for agriculture, residents' cultural heritage and its proximity to other local economic zones (Kakamega County Government, 2016). The town became a district headquarter by 1920 (Pletcher, 2012).

In early 1930s until 1952, Kakamega was the scene for Kakamega gold rush as per the geological reports by Sir Albert Ernest Kitson (Kakamega County Government, 2017). As stated by Nicholls (2015) in her article The Kakamega Gold fields, "In 1930 Kakamega township was an open space with a few Indian dukas (shops), but in the middle of the decade it became a prosperous and crowded township". A story is provided that in 1930, an American named Louis Andrew Johnson, with his wife, two Europeans and five Africans were on a return trip from Northern Tanganyika back to Turbo - a town in Uasin Gishu County. Johnson having been informed of the possibility of gold reefs in Kakamega through the geological survey report in 1930 by A.D Combe (Nicholls, 2015); they were prompted to stop in Kakamega town near the Yala River where they found gold flecks and surprisingly discovered it was a gold mine (Paukwa, 2022). Louis and the team were then prompted to seek funds from lenders to effectively extract the gold (Nicholls, 2020). This begun the Kakamega Gold rush. At this time the world was facing The Great Depression that had started in

1929 and progressed up to 1940 (Pletcher, 2012). Many prospectors were attracted to the town and months within Louis breaking the ground, over 1,000 settlers had occupied Kakamega town.

The Spectator newspaper dated 12 December, 1932, as quoted by Nicholls (2015) even reported the influx of people in the area; "Lorries are arriving laden with household goods as evidence of an intention to take up more permanent residence. Three types of prospectors have arrived. The first is the man who is willing to work hard with his hands in the hope of making a reasonable living; the second is the business man anxious to acquire plots in the township for the purpose of trading; and the third is the type anxious to obtain options on properties". The colonial government recognized the transformation in Kakamega and decided to build permanent structures in the area as shown in Figures 2 (a & b). Rules and regulations were set up to control the mining activities and the growth of the town as noted in Figure 3. An annual mining license renewal fee of twenty shillings was impost for a claim of 300 feet by 100 feet. By 1932, over 1,700 claims had been registered.

The Standard Bank of South Africa were the first to be prompted to build two branches in the area in 1934. Barclays bank and National Bank of India (KCB) were also attracted to the town. The town already had three hotels, European shops, Indian shops, a Corkscrew Bar, a car garage and a filling station. The Rosterman Gold Mines and



FIGURES 2a & b Kakamega township in 1930s Source: Nicholls, 2015



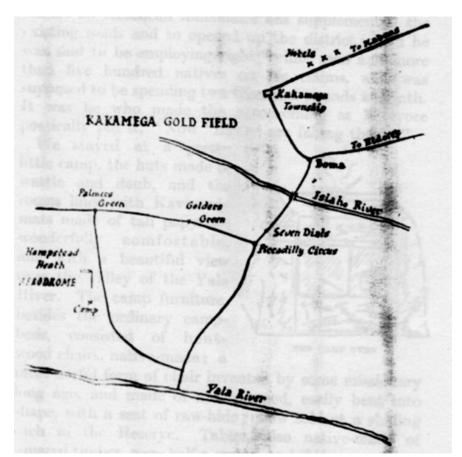


FIGURE 3

Kakamega Township and Gold field in 1930s **Source:** Nicholls, 2015

Risk Mine companies were the main prospectors mining companies since by then they already had advanced technology for deep - level mining (600 feet by 1937 and 1,940 feet by 1946) (Paukwa, (2022); Nicholls, (2015)). Unfortunately, the numbers of individual miners begun to reduce as a result of malaria incidences in the region. The number leveled off to 384 in February, from 439 in January, 1934. In 1938, the numbers reduced further as a result of the Italian-Abyssinian war which prevented capital investments in gold mines. Then with the breaking of World War II, it became difficult to export gold. This reduced the margin of investments further to lower levels. The companies closed down in 1952 when the gold reef was exhausted. This marked the initial phase of urban growth of Kakamega town.

In 1974, Kakamega town was declared a Municipality, within Kakamega District as presented in **Figure 4**. Within the period of 1970's – 1980's, there were minimal mining activities still being done by the locals in the area. The manual

methods of extraction were applied as in **Figure 5**. By this era most of commercial activities had closed down and the Municipality had become a ghost area.

In 1988, Kakamega District was declared the headquarter for Western Province. Kakamega Municipality was privileged since most of the provincial offices were premised in the Municipality. This rejuvenated the growth of the town. In 1996, the Physical and Planning Act (PPA), CAP 286 was enacted (Kenya Government, 1996). This legislation shaped the urban planning of towns in Kenya. First, it recognized urban and regional planning as a profession and town planners were granted authority to approve development applications. Secondly, it provided for the preparation of the Regional and Local physical development plans. The Central Government funded the planning and implementation of these development plans. Most urban areas in Kenya including Kakamega Municipality benefited from this centralized urban planning model. By the





FIGURE 4 Kakamega Municipality in 1974 Source: Pletcher, 2012

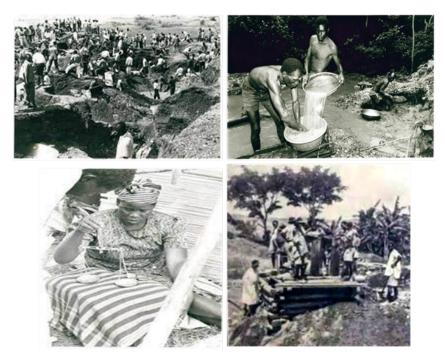


FIGURE 5 Gold mining in 1970s-1980s Source: Paukwa, 2022



new millennium, the urban growth in Kakamega Municipality was plan led.

Spatial Growth

Over the years, the municipality boundary has been administratively extended 4 times in order to accommodate the increasing demand for urban space. During the precolonial, Kakamega was an urban centre being used for defensive purposes by the British colonials (Pick boundary) as revealed in Figure 6a. The boundary (yellow) was extended in the postcolonial to absorb the demands and effects of the urban sprawls. Upon being commissioned a Municipality (1970s -1980s) the rate of urbanization increased and the boundary (red) was adjusted (Kakamega County Government, 2017). As urban dynamics kept changing and pressure for urban space and demand for housing units increased, the boundary (blue) was further extended to accommodate the satellite urban centres of Shinyalu, Lubao, Khayega and Eshisiru as presented in Figure 6b.

The spatial trend has been of linear growth along the major roads linking Kakamega Municipality to other Municipalities – Mumias, Butere, Lumakanda and other areas within the larger Kakamega County (Kakamega County Government, 2017). The district notes of Shinyalu, Lubao, Khayega and Eshisiru as per **Figure 6b**, serve as decentralization points for the core Kakamega town. These urban nodes are providing residential units for people working in Kakamega town as well as goods and services that would have been sold at Kakamega Central Business District.

Urbanization trends

There has been accelerated rates of urbanization in Kakamega Municipality since it was established. This is because of the postcolonial fortunate effects (Kenya Government, 2009). The lifting of restrictive colonial rules to allow free movement for Kenyans contributed immensely. Moreover, the government passed policies to allow free acquisition and occupancy of property in prime areas that were only restricted for colonial colour. By this many people were attracted to migrate to Kakamega town (Muchanga, 2023). The desire for better quality life attracted by the advanced infrastructure facilities and services also enhanced the trends of urbanization in Kakamega Municipality. It is evident that the rate of urbanization is high. By 1975, (Figure 7) we had

which begun to increase by 1980's. In 1990's, the Municipality had started experiencing urban sprawl as people settled in the satellite urban centres. As at the new millennium by 2005, the municipality was already experiencing urban challenges as a result of the increased population density. The extended growth of population density along the major road corridors explains the linear growth as land uses would compete for urban spaces (Kakamega County Government, 2017). By 2020 the intensity of population growth in the Kakamega urban core and the highly competitive rate for urban spaces had pushed majority of persons to the satellite urban centres. These urban centres currently serve as decongestion nodes for the Kakamega urban core as noted in Figure 6b.

partial population density in the Municipality,

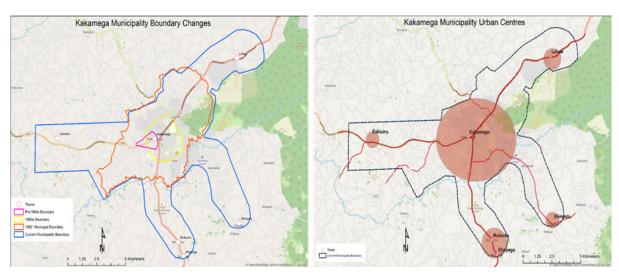
Development trends

To determine the development trends, land cover classification analysis was done. The change on land cover for the built-up area identified the rate of urban growth. The analysis showed a gradual change between 1984 to 2003 as exhibited in Figure 8. During this period, the level of urban growth and investment margins in the Municipality was low. In fact, after the end of gold rush period, Kakamega Municipality became a "sleeping town". However, this changed by the call of the new millennium as the new physical planning legislations were applied. The effects of enacting the Physical Planning Act, Cap 286 in 1996 were visible in Kakamega urban growth. The urban planners led and guided urban development through the central government urban planning model. By 2003, the Municipality had begun to change as rapid transformation was registered by 2010. The rate increased again between 2010 to 2023, with intense dispersed pattern of urban growth in the Municipality. This was as a result of devolving urban planning and other sectoral functions at the County Government levels (Kenya Government, 2010).

Urban planning practices and regulations

The urban planning practice and regulation in Kakamega Municipality was initially guided by the centralized planning model. By this model, the National Government ensured that the formulated development plans were implemented. Adequate funds were allocated respectively and monitoring and evaluation was adhered to accordingly. Currently, the urban planning practice and





FIGURES 6 a & b Kakamega Municipality boundary adjustment and urban centres **Source:** Esri, 2022

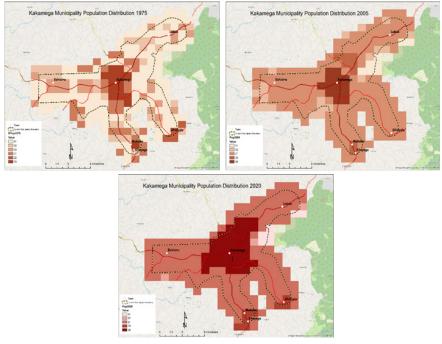


FIGURE 7 Kakamega Municipality Population density in 1975, 2005 & 2020 Source: Esri, 2022

regulation for Kakamega Municipality is anchored on the devolution model. Structure and action planning approaches are applied. The blue print guiding action planning in the Municipality is the Kakamega Municipality Integrated Development plan. This kind of approach is more of investor driven rather than the authority guided. Since the formulation and implementation of spatial development plans deserves huge capital investments which is a challenge to the Municipality governance.

The actual planning practice allows the developer or investor to submit development proposals to the municipal urban planning offices. The submitted developments goes through the planning process of vetting, which are invoiced, evaluated and approved. The building designs and the land uses proposals are identified by investors themselves based on how much returns they are likely to



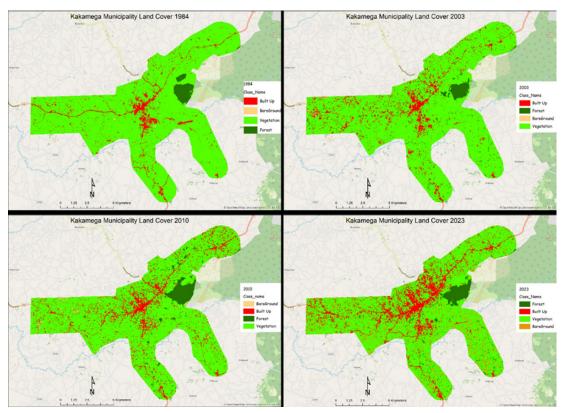


FIGURE 8 Kakamega Municipality land cover in 1984, 2003, 2010 & 2023 Source: Esri, 2022

obtain when the development is completed. This introduces a gap as urban planners are influenced to respond to the desires of developers and market forces rather than being guided by the urban planning policies and regulations. This is the case for Kakamega Municipality as it lacks a development control framework for regulating urban growth. This is in addition to the limited technical staff who are often overwhelmed by the manual workload of evaluating and approving developments. Furthermore, the funds allocated for urban planning is so marginal that cannot support adequate implementation of spatial plans. In this regard, the urban growth does not correlate to the articulated urban planning development plans and policies. It is rather market driven.

CONCLUSION AND RECOMMENDATIONS

The study examined the urban growth and urban planning framework applied in Kakamega Municipality, Kenya. It specifically focused on exploring the historical growth trends, assessment of the urban planning regulations and policies as well as evaluating the urban planning practices in Kakamega Municipality. The study applied the content analysis research design while the study themes and framework were guided by the precursor data contents.

Emerging from the discussion, Kakamega Municipality is growing at a high rate. Currently the Municipality is experiencing urban challenges arising from the effects of urbanization. The urban planning practices being applied are inadequate to solve the uprising planning problems. Besides, these gaps reveal that the urban planning framework is unstable and unsustainable. To ensure sustainable urban growth in Kakamega Municipality, it is hereby recommended that; a) proper development control guidelines be formulated, b) effective urban planning technical staff be employed c) adequate funds be allocated for urban planning practices d) monitoring and review of urban planning regulations in order to keep pace with the urban growth trends. This paper has explored urban growth and urban planning framework in Kakamega Municipality.



CITED REFERENCES

Castán, B. V., Trencher, G., & Iwaszuk, E. (2019). Transformative capacity and local action for urban sustainability. *Urban Transformative Capacity*, 48(5), 449–462.

Cohen, B. (2006). Urbanization in developing countries: Current trends, future pro-jections, and key challenges for sustainability. *Technology in Society, Elsevier, 28(1),* 63-80.

Drisko, J. W., & Maschi, T. (2016). *Content analysis*. Oxford: Oxford University Press.

Fainstein, S. S. (2021). *Urban planning*. Retrieved June 12, 2023 from https://www.britannica.com/topic/urban-planning

Hall, J. (2008). "Cross-Sectional Survey Design., ed. In P. J. Lavrakas," *In Encyclopedia of Survey Research Methods*. (pp. 173-174). Thousand Oaks :Sage.

Kakamega County Government. (2016). Kakamega municipal integrated development plan (KMIDP). Kakamega: Kakamega County Government.

Kakamega County Government. (2017). *Integrated strategic urban development plan for Kakamega municipality: 2017 - 2037.* Kakamega: Kaamega County Government.

Kakamega County Government. (2018). *County integrated development plan, 2018-2022.* Kakamega: Kakamega County Government.

Kakamega Municipality. (2017). *Integrated strategic urban development plans.* Kakamega: Kakamega County Government.

Kenya Government. (1996). *The physical planning act, CAP 286 (1996)*. Nairobi: Government Printers.

Kenya Government. (2009). *Kakamega central district development plan* 2008 - 2012. Nairobi: Government Printers.

Kenya Government. (2010). *The constitution of Kenya.* Nairobi: National Council for Law.

Kenya Government. (2010). *The constitution of Kenya, 2010*. Nairobi: National Council for Law Reporting.

Kenya Government. (2011). Urban areas and cities act, 2011. Nairobi: National Council for Law.

Kenya Government. (2015). *Kenya national spatial plan 2015-2045.* Nairobi: Kenya Government Printers.

Kenya Government. (2019). *The physical and land use planning act No 13 of 2019.* Nairobi: National Council for Law.

Kenya Government. (2022). *Kenya vision 2030*. Retrieved August 4, 2023 from https://www. planning.go.ke/kenya-vision-2030/

Kenya National Bureau of Statistics. (2019). Kenya Population and Housing Census: Volume II. Nairobi: Government Printer.

Kothari. (2004). *Research methodology, methods and techniques.* New Delhi: New Age International Publishers.

Krippendorff, K. (2004). Content Analysis; An introduction to its methodology. Pennsylvania, California: Sage Publications.

Machooka, S. (1997). Accelerated development and management of urbanization in Kenya's lake basin development authority area (lbda): some experiences and suggestions. In U. HABITAT, *Regional Development Planning and Management* of Urbanization; Experiences from Developing Countries (pp. 187-201). Nairobi: UN - HABITAT.

Muchanga, K. L. (2023). The ecology and economic practices of the Isukha and Idakho communities in colonial period 1895-1963. *Athens Journal of History,* 9(1), 95-124.

Nicholls, C. (2015). *The Kakamega goldfields*. Retrieved August 10, 2022 Old Africa: https://oldafricamagazine.com/the-kakamega-goldfields/

Nicholls, C. (2020). Who started kenya's gold rush in Kakamega in the 1930s? Retrieved from Old Africa. Retrieved August 8, 2023 https:// oldafricamagazine.com/who-started-kenyasgold-rush-in-kakamega-in-the-1930s/



Paukwa. (2022). *Kakamega gold rush.* Retrieved July 12, 2023 from https://paukwa.or.ke/ kakamega-gold-rush/

Pletcher, K. (2012). Kakamega. Retrieved May 20, 2022 from https://www.britannica.com/print/article/309888

Sorensen, A., & Okata, J. (2010). Introduction: Megacities, urban form and sustainability. In A. Sorensen, & J. Okata, *Megacities: Urban form, governance and sustainability* (pp. 1-11). New York: Springer.

UN. (2015). *Millenium development goals and beyond.* New York: UN. Retrieved April 26, 2022 from https://www.un.org/millenniumgoals/global.shtml

UN. (2016). Urbanization and development: Emerging futures; World cities report 2016. Nairobi: UN-Habitat.

UN Habitat. (2016). *Urbanization and development: Emerging features.* Nairobi: World Cities Report.

UN-Habitat. (2018). Urban planning for city leaders: A handbook for Kenya. New York: UN-Habitat.

United Nations. (2017). *New urban agenda.* Quito: Government of the Republic of Ecuador.

Wiskerke, H. (2015). Urban food system. In H. D. Drechsel, *Cities and Agirculture: Developing Resilient Urban Food Systems* (pp.1-25). Wageningen: Routledge.

World Bank. (2000). World development report 1999/2000: Entering the 21st century. New York: Oxford University Press.