



The Ugandan Journal of Management and Public Policy Studies
(UJMPPS)

June 2024, Vol. 24, No. 2, pp. 92-113

ISSN: 2078-7049 (Print), 2959-4316 (Online)

Copyright © The Author(s). All Rights Reserved.

Published by Uganda Management Institute

The Relationship between Residential Land Use, Land Tenure and Values in Kampala City, Uganda

David Kitulazzi & Luke M. Obala

University of Nairobi

P.O. BOX 30197 – 00100, NAIROBI

Corresponding E-mail: lobala@uonbi.ac.ke

Article History

Received: October 18, 2023

Revised: February 29, 2024

Accepted: March 03, 2024

Abstract

Rapid population, land scarcity, derived demand, and overlapping land rights have increased conflicts over land in Kampala. These, coupled with high need and demand for accommodation, have contributed to the need for a better understanding of the interactions between existing land tenure systems and values. This is particularly critical given that land values influence access to land, use, and ownership. A good understanding of the interactions will help develop appropriate solutions to ensure a well-functioning property market. This paper, therefore, highlights the links between residential land use, land tenure systems, and land values in Kampala City. The study used a descriptive research design. Primary data was obtained through field studies undertaken between 2017 and 2018 but data collected on land values were for varied periods between and 10 years depending on data availability. A field survey was undertaken within Kampala's Makindye Division and involved interviews with selected households, key informant interviews, informal discussions, and observation. Secondary data was obtained by reviewing relevant literature. The findings were that Kampala has a multiplicity of land tenure systems; land values are influenced by a multiplicity of factors; land tenure systems have a moderate positive significant relationship with urban land values and, therefore, insignificant in predicting urban residential land values. The



© 2018 the Author(s). Creative Commons CC-BY: This open-access article is distributed under the terms of the Creative Commons Attribution 4.0 License. This permits anyone to share, use, reproduce, and redistribute the work without further permission, provided the person gives due credit to the work.

study recommended the need to develop a land tenure map for the city due to the complexity of the existing tenure system, develop a land registry for all land parcels, and the need for more studies on land value dynamics and/or trends.

Key words: *Tenure, Value, African City, Kampala*

Introduction

The relationship between land tenure systems and residential land values has received very little attention in recent studies despite their influence on urban development, access to land and transactions in the land market. Like in many other African cities the prevailing land tenure system in Kampala is a product of complex interactions between colonial legacy, religion and customs of the various ethnic groups. As a consequence, the existing tenure system is largely viewed by scholars and practitioners as being complicated, bureaucratic, technical and translucent (Syagga, 2011 and Habitat for Humanity, 2013). It is seen as facilitating land acquisition through the informal system which considered simple, well-understood, less costly and appropriate for trading relatively small plots of land (Syagga, 2011). Others have however seen this as contributing to inequitable access to land and increased informality (Kitulazzi, 2018).

In addition, past studies on Kampala have concluded that there is a link between land prices and/or values and existing tenure systems (Muinde, 2004; Nkurunziza, 2005, Giddings, 2009; Nakatudde, 2010 and Kitulazzi, 2018). The assertion by Ottensmann (1997) that land values influence allocation of land and shape urban the model of development further reinforces the argument on the linkages between land tenure and land values. Harvey and Jowsey (2004) assertion that land values should be viewed as the price paid for the highest and best use of land should also be seen in the same light. These arguments coupled with the view that land tenure plays a critical in the determination of land use, ownership and development (Parsons, 1951; Thorncroft, 1974; Olima and Obala, 1998) further elevates the role of land tenure in influencing land market and consequently transactions on land.

The paper set out to highlight the links between land tenure systems and urban residential land values in Kampala city. This is driven by the desire address persistent problems attributed to land tenure systems in Kampala that include a complex formal land acquisition processes, persistent conflicts over ownership, rights and increasing uncertainty. A situation that has thus been variously described as: complex and conflictual (Habitat for Humanity, 2013; and Giddings, 2009). The observations are further reinforced by reports by daily press point out a worrying trend of conflicting land tenure rights as a single parcel is reported to have two or more rights subsisting (see New Vision, December 11th 2005). For instance, it is not uncommon to find a landlord with a title over a property and others who occupy the same parcel of land and are legally protected. The title holder cannot transfer his interest without consulting the occupants. This state of affairs negatively impacts on the land market (New Vision, December, 11th 2005 and Land Sector Strategic Plan II, 2013 – 2023). Furthermore, the fact that about 52% of land in the city is held under mailo tenure further complicates land management and

transactions in land.

Interestingly, as Al-Otaibi and Alzamil (2019); Kok et al (2014) and Thuyen et al (2017) assert that there is limited empirical evidence on factors influencing urban land values. Indeed, Kok et al; (2014) adds that this situation is largely due to lack of data needed for analysis given that real estate transactions are largely secretive. Thus data on transactions are not openly shared and declared figures are often understated especially in countries like Uganda.

Literature Review

Land tenure system lends itself to diverse definitions. As Olima and Obala (1998) assert, land tenure systems varies between countries and within countries. It is largely seen as a set of social relations that define the relationships between man and land with respect to land ownership, use and rights. These rights and related responsibilities are rooted in sets of rules and customs which are endorsed by official or unofficial entities where a number of people may hold diverse tenure rights in the same piece of land - which can be formal or informal (Durand-Lasserve and Selod, 2007 and UN-Habitat, 2008). Similarly, earlier definitions by Thorncroft (1974); Parsons (1951) and Wehrwein (1983) land tenure is viewed as connoting social relations between men determining their rights and obligations over land. Olima and Obala (1998:114) summarized that it refers to a systematic land holding that embodies legal, contractual and communal arrangements under which people gain access and utilize land. It constitutes the various laws, rules, procedures and obligations that govern the interests in land, duties and liabilities of the people in their use and control of land resources encapsulates the key elements of the concept.

Further review of literature, highlights the fact that most developing countries have a multiplicity of land tenure systems ranging from informal, neo customary, customary to formal tenure systems (Durand-Lasserve and Selod, 2007). This has largely been observed to be as a result of the colonial legacy. For instance, in the case of Uganda, as Kihangire (2011) observes that the emergence of a strong customary system of land holding was influenced by the beginning of new land holding systems promoted by colonial rulers who were keen to appease the local chiefs so as to obtain their collaboration for successful administration of the colony. Cornhiel (2003) reinforces the argument that Uganda's existing land tenure system was first acknowledged when the British through the country's colonial administration signed the 1900 Buganda Agreement with the Buganda Kingdom. This agreement divided the land in Kampala between three distinct groups traditional leadership (Kabaka), colonial government and the church.

Urban Land Values

The concept of value plays a critical role in land use allocation in a functioning land market, thus it is viewed as the price paid for the highest and best use of land and is determined by market forces (Harvey and Jowsey, 2004 and Nakatudde, 2010). However, Gaddy and Hart, (1993) as well as Martin, (1995) contend that value is created, changed and destroyed by the

interactions of physical, political, economic and social forces. Martin (1995) adds that land tenure further influences value. This is further reinforced by Dowall (1993) that sees land value as being a product of interactions in the land market. Topcu (2009) adds that land values are also depended on the built environment surrounding the buildings, their function, land location and accessibility. Obala (1990) came to a similar conclusion in the case of Kisumu City.

Roberts (2008) further argues that land values are also influenced by quality of land and that quality of land is influenced by planning and development control conditions (Krajewska et al; 2021 and Thinaka and Wickramaarachi, 2022). Thus land within a planned neighbourhood with development control conditions would attract a higher price and value. On the other hand, Ondiek et al; (2020) sees the quality as being more related to environmental factors and influence of man. The influence is that land use is changed from wet land to other uses that are more attractive and beneficial to occupants. A consensus is emerging from existing literature that location is critical in influencing urban land values (Chinh et al, 2020; Kok, et al 2014; Thiwanka and Wickramaarachchi, 2022).

On the other hand, FAO (2002) argues that land value is largely related to the natural attributes of the land without structural improvements and elaborates this view using two situations namely; countries where there are no functional land markets, secondly, places where land is treated as a common good. This is an assessment that find place in the before and immediate post independent discourse on land (see Nyerere, 1967 and Kenyatta, 1958). This notion found itself in policies of several countries – where for long land has been considered a common property and so scant attention was paid to the land market (Kironde, 2000).

Hai & Huong (2017) see land value as a product of derived demand and need for housing. They further contend that it is also influenced by its characteristics such as being fixed in location, unique in composition, and finite in supply. They add that these attributes make land one of the most precious assets and in turn giving it value. This is reinforced by Hyford (2007) finding that land value is a function of physical, social, legal, economic and environmental factors. This calls upon valuers to analyse the numerous factors that influence the changes in urban land values (Kok et al, 2014; Nguyen et al 2020; Pochwatka, P. 2020 and Al-Otaibi, 2019).

It is thus clear from existing literature that land value is a product of physical, environmental and location factors; legal, governmental and political factors, economic and social factors. As Gwartney & Delaware, (1999) argues, these factors work both independently and in association with one another to help the assessor in determining value. A better understanding of these factors and their various dimensions is important in determination of realistic values of residential land. The elements of physical, environmental and location factors contributing to land value variations highlighted by Gwartney & Delaware, (1999); Hyford, (2007); Albouy and Ehrlich, (2013); Damascene et al, 2014; Swamidurai, 2014) include among others; size of the parcel, location of the parcel in terms of access, topography, utilities, services like schools hospital, parks among others. Oloke et al (2013); Uju and Iyanda (2012) further assert that a parcel of land in a good location that is easily accessible would command a higher price and value. On the other hand, Obala (1990) as well as Hai & Huong, (2017) established that

distance from the Central Business District and infrastructural facilities significantly impacts on land pricing and values.

On the question of legal, governmental and political factors, the key attributes have been highlighted by Hyford (2007); Gwartney & Delaware (1999) and Thiwanka and Wickramaarachchi, (2022) to include among others; security of tenure, land use regulations, stable political climate, taxes, and building laws. Hyford (2007) further asserts that security of tenure along with a stable political climate are central to provision of guarantees to investors for their investment in a country. Consequently, property prices and values tend to be higher as land purchasers are well assured of their tenure security.

Gwartney & Delaware (1999); Swamidurai, (2014) and Hyford, (2007) argue that when analyzing the economic factors that influence land values, it is critical to assess productivity of land, consumers ability to purchase and land use. This is because they influence employment levels, income levels, inflation rates, interest rates, wage rates among others. These factors and their attributes influence the standards of living among people leading to their demand more for real estate either for consumption or investment purposes thus positively influencing land values. This position is further supported by Krajewska et al (2021).

Land Market

A central feature in the analysis of land use allocation and values is the land market. As Dowall (1993) and Mahoney, R. et al; (2007) contend, markets exist to provide for exchange of goods and services. In addition, for a good or a service to be exchanged it must have use and consequently value. Syagga (1994:13) has elaborated on the concept of value distinguishing between user value and market value. In the end he highlighted that market value is the value in exchange that is determined through forces of demand and supply. However, land is a unique resource that is fixed in terms of location and exchange related to it can only be over the various bundles of rights on a particular parcel.

Operations of the land market are however often constricted by existing institutions (formal and informal), laws, regulations as well as the economic orientation of the country. In the end, land markets are viewed as mechanisms that facilitate efficient allocation of land and its associated assets (Dale, P. et al (2010). Suffice to add, that land market functions are greatly influenced by land tenure systems. It has also been observed that the failure of a formal land market to discharge its functions leads to development of an informal land market (Obala, 2011) and Giddings, 2009). Syagga (2011) and Giddings (2009) assert that informal land market is considered more efficient and transparent in the case of Kampala.

In analyzing property market it is important to distinguish between the different submarkets namely: residential, retail, office, and industrial properties market. Residential market which is the focus of this paper is unique in many respects. For instance, as Sivitanidou (1999) posits it often places overwhelming emphasis on effective demand and affordability but also does not suffer wide supply fluctuations.

3. The Study Methodology

Data presented here is based on field studies undertaken between 2017 and 2018 as well as secondary information on land values for a varied period of between 5 and 10 years (between the year 2004 and 2016). Field survey was undertaken within Kampala's Makindye Division. The primary data was obtained through interviews, formal and informal discussions and observation. On the other hand, secondary data was obtained through a review literature, planning and valuation records. The interviews and discussions were undertaken largely with professional valuers, land administrators, planners as well as administrators within the Buganda Land Board and Kampala Archdiocese Land Board. The interviewees were selected due to their perceived in depth knowledge and experience in land management and administration issues in Kampala.

Discussions with the various professionals such as Valuers and Planners focused on their opinions and experiences related to land tenure and land values. Similarly, interviews and discussions with officials from Buganda Land Board and Kampala Archdiocese Land Board were aimed at obtaining information on their knowledge, expertise and experiences on transactions, access to land, and values. The data obtained through the interviews helped in corroboration of information gathered through the questionnaires that were administered to the household respondents. The household questionnaire focused on the respondents understanding the tenure systems, land use regulations and trends on land prices (values) in the city.

Information on land on land values was obtained from the records of professional valuation firms in Kampala covered a period of 10 years between 2006 and 2016. This approach was adopted because of the challenges of obtaining accurate information from official land registry. The data obtained was considered reliable given that professional valuers were considered objective. The data has been useful in further providing corroboration on factors influencing land values and land use changes in the study area.

Data collected through primary and secondary sources were useful in providing information through which the interactions between land and land values were examined. This facilitated the drawing of conclusions at the end of the study. In addition, analysis of the relationships between land tenure systems and land values were undertaken using correlations and multiple regression analysis that helped in drawing conclusions on the contribution of land tenure system on land values.

4. Study Results and Discussions

4.1 Existing land tenure systems

Four systems of land tenure were identified in Kampala City. They included: a) customary tenure, mailo tenure, freehold and leasehold tenure systems.

i) *Customary Tenure/communal*: This is land held mostly under the customary tenure

under different forms say communal, belonging to a specific clan while in others, it is in custody of individuals; with people having the rights to own and use the land but without land titles (Pedersen et al, 2012). However, to obtain title to such land requires a mutual agreement between individuals and the community that holds the land through its leaders and chiefs (Ssemutooke, 2015). He adds that it only after this that government land boards would be able to process a title. Uganda's existing laws provide for conversion of communal tenure into freehold and leasehold. However, Cornhiel (2003) and Kitulazzi, (2018) have both observed that the process is fraught with fraud and corruption making it inequitable, least understood and frustrating.

- ii) *Mailo Tenure*: This refers to land tenure system that emerged from the 1900 Buganda Agreement. This was an agreement between the Kabaka (traditional head of Buganda People) and the colonial government. The agreement led to allocation of about 350 square miles of land to the Buganda Kingdom that is to the Kabaka and his chiefs, it is this this large swathes of land that became known as mailo land from the word "mile" (see Ssemutooke, 2015; Muinde, 2013; Pedersen et al, 2012; Kihangire, 2011; Wamani, 2010; Giddings, 2009). Allocation of this land entails obtaining permission from the traditional authority, and as Ssemutooke (2015) asserts by the time of independence in 1962, there were thousands of registered mailo land owners with small parcels of land obtained through inheritance and sale who got certificates of land titles from the colonial administration. While customary rights of plots (Bibanja) had peasants (Bibanja holders) settled on the land at the permission of the mailo owner who paid an annual rent premium (Obusulu) to the landlord/owner (Cornhiel, 2003). Recent changes in laws in Uganda have tended to restrain mailo land owners, customary tenants and bona fide lawful owners from evicting Bibanja occupants. Mailo land has further been categorized into Kabaka's' land and Private Mailo each with varying rights (see Mabikke, 2016, Musinguzi, et al 2023 and Walter, S. et al 2023).
- iii) *Freehold Tenure*: This tenure is viewed as having the highest form of security of tenure as it is registered for the holders in perpetuity. The holder has full rights of ownership, use, transactions and disposal which significantly make it valuable. Just like Mailo land, freehold tenure origins is traced to the 1900 Buganda Agreement. It is the agreement that freehold land was awarded as a grant to the citizens, existing religious institutions, educational institutions and other corporate institutions by the British colonial administration before Uganda's independence in 1962. However, Land Reform Decree of 1975 abolished this type of tenure and converted them 99 year leases (see Wamani (2010); Cornhiel (2003); Pedersen et al, (2012) and Ssemutooke (2015).
- iv) *Leasehold Tenure*: This refers to a land holding formed either by contract or by operation of law with obligations which might be regulated by law among the parties under which the landlord or owner (lessor) awards the tenant or occupant (lessee) restricted rights of ownership of land usually for a defined period for a consideration of a capital sum (premium) or for both rent and a premium (Land Act 1998, and Pedersen et al; 2012). In addition, as observed by Muinde (2013), leasehold land tenure in Kampala is the former public land that was owned by the colonial government which fell under the

jurisdiction of Uganda Land Commission (ULC). ULC then vested this land in urban areas to local land boards (LLB) to maintain, sell or lease it (Wamani, 2010; Giddings, 2009). To date, there is leasehold land owned and managed by ULC but majority of the leased land in Kampala is under Kampala Capital City Authority (KCCA) and managed by Kampala District Land Board (KDLB). However, the administration of leasehold land by ULC and KDLB is passive because KCCA has overshadowed these institutions.

Overall, land in Kampala city held and managed under the various tenure systems thus more than fifty two percent (52%) of the land is held under mailo tenure, about thirty percent (30%) is public land administered by Kampala Capital City Authority (KCCA) and leased to private individuals, about eight percent (8%) of the land is owned by the Government for its usage, about seven percent (7%) is freehold and the rest owned by institutions (see Giddings, 2009). This implies that the land tenure systems existing in Kampala comprise of Mailo, Freehold and Leasehold. Given that a significant amount of land is informally held explains why there assertions that transactions processes in the same is perceived to better understood, quick and transparent.

4.2 The influence of land tenure systems on land values

Table 1 below presents land values in Kampala and factors that affect them that include: size of land, access to land, land use regulations, changes in population, and changes in income, political climate, availability of social amenities, land topology and Land tenure security influenced land values to some extent.

Table 1: Factors affecting Urban Land Values

No	Statement	SA	A	N	D	SD	Mean	S.D
		Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)		
1	Size of land parcel affects Urban land values	20 (64.5%)	10 (32.2%)	0 (0.0%)	1 (3.2%)	0 (0.0%)	1.42	.672
2	Land accessibility affects Urban land values	23 (74.2%)	7 (22.6%)	0 (0.0%)	1 (3.2%)	0 (0.0%)	1.32	.653
3	Land use regulations affect Urban land values	12 (38.7%)	12 (38.7%)	6 (19.4%)	0 (0.0%)	1 (3.2%)	1.90	.944
4	Population changes affect Urban land values	12 (38.7%)	15 (48.4%)	4 (12.9%)	0 (0.0%)	0 (0.0%)	1.74	.682
5	Changes in income levels affect Urban land values	7 (22.6%)	12 (38.7%)	8 (25.8%)	3 (9.7%)	1 (3.2%)	2.32	1.045
6	Political climate affects Urban land values	11 (35.5%)	12 (38.7%)	5 (16.15%)	2 (6.5%)	1 (3.2%)	2.03	1.048

No	Statement	SA	A	N	D	SD	Mean	S.D
6	Social amenities affect Urban land values	12 (38.7%)	16 (51.6%)	3 (9.7%)	0 (0.0%)	0 (0.0%)	1.71	.643
7	Land topology affects Urban land values	9 (29.0%)	19 (61.3)	2 (6.55)	0 (0.0%)	1 (3.2%)	1.87	.806
8	Land tenure security affects Urban land values	14 (45.2%)	15 (48.4%)	2 (6.5%)	0 (0.0%)	0 (0.0%)	1.61	.615
	Average Mean						1.769	

Source: Survey Data (2018)

The results indicate that a majority of respondents agreed that above factors affect land values in the case study area. Indeed an average mean of 1.769 as illustrated in table 1 confirms this. Thus about 96.7% of the respondents strongly agreed that the size of land parcel affects urban land values. In the case of land accessibility about 96.8 per cent of the respondents strongly agreed it affects land values. Similarly, about 77.4% of the respondents agreed that land use regulations affected land values. The implication of these results is that values are influenced by different factors, however, their degrees of influence may vary.

For instance, socio-economic factors such as land tenure, changes in population, income levels, physical factors such as climatic conditions, topographic condition, access to social amenities such as schools and health facilities among others influence land values. The results confirm earlier findings on land values in Kampala (Thiwanka and Wickramaarachchi, 2022; Chun, 2018; Nakatudde, 2010; Damascene et al, 2014; Oloke et al, 2013; Emo et al; 2013 and Uju, & Iyanda, 2012).

The influence of land tenure type on urban land values

Table 2 below presents the results depicting the influence of land tenure type on land values in Kampala city.

Table 2: influence of land tenure type on urban land value

	Trends in Urban Land Values	SA	A	N	D	SD	Mean	SD
1	Private mailo has the highest trend of land values over the 10 years of 2006 - 2016	11 (35.5%)	11 (35.5%)	8 (25.8%)	1 (3.2%)	0 (0.0%)	1.97	.875
2	Official mailo (Kabaka's Land) has the highest trend of land values over the 10 years of 2006 - 2016	1 (3.2%)	1 (3.2%)	14 (45.2%)	11 (35.5%)	4 (12.9%)	3.52	.890
3	Freehold land has the highest trend of land values over the 10 years of 2006 - 2016	7 (22.6%)	5 (16.1%)	9 (29.0%)	10 (32.3%)	0 (0.0%)	2.71	1.160

	Trends in Urban Land Values	SA	A	N	D	SD	Mean	SD
4	Leasehold land has the highest trend of land values over the 10 years of 2006 – 2016	2 (6.5%)	9 (29.0%)	11 (35.5%)	9 (29.0%)	0 (0.0%)	2.87	.922
5	Property rental values always give a reflection of changes in the trend of land values	6 (19.4%)	13 (41.9%)	4 (12.9%)	7 (22.6%)	1 (3.2%)	2.48	1.151
6	The demand and supply of land always gives a reflection of changes in the trend of land values	13 (41.9%)	15 (48.4%)	2 (6.5%)	1 (3.2%)	0 (0.0%)	1.71	.739
7	Favorable factors affecting land values show a rate of increase in the trend of land values	7 (22.6%)	20 (64.5%)	2 (6.5%)	1 (3.2%)	1 (3.2%)	2.00	.856
8	Unfavorable factors affecting land values show a rate of increase in the trend of land values	0 (0.0%)	5 (16.1%)	8 (25.8%)	15 (48.4%)	3 (9.7%)	3.52	.890
	Average Mean						2.598	

Source: Survey Data (2018)

The study results as depicted in table 2 below confirmed that the type of tenure influenced land values. A mean average of 2.598 indicate that a majority of the respondents were of the opinion that land tenure plays a significant role influencing land values. For instance, 71 per cent of the respondents agreed that land that is under private mailo tenure had the highest trend. This implies that private mailo land is most preferred since the holder has perpetual ownership. Private Mailo was followed by freehold land where 38.7% of the respondents agreed. In the case of land held under leasehold tenure 35.5% of the respondents agreed that this influenced land values. This implies that leasehold is less preferred in comparison to land held under freehold tenure. Interesting, land held under official mailo (Kabaka's and) had the least preference by a paltry 6.4% of the respondents. This implies that official mailo is not preferred since this land belongs to the King of Buganda while the rest on the land are tenants owning just plots of land. The results imply that land market is sensitive to level of tenure security provided by each tenure system.

Discussions with key informants revealed that land values generally increase with time; thus the increase in land values in the study area is not unique. They attributed the increase to the increase in demand which is driven population increase, thus confirming findings by Damascene et al, (2014).

It further emerged that the study area is characterized by rental housing, and as Wamani (2010) established in his study rents are vital in establishing trends in land values. Key informant discussions, revealed that locations characterised by high rents have higher land values as compared to those with lower rents. This is in line with established studies and more recent works by Kok et al (2014) and Thiwanka & Wickramaachchi, (2022).

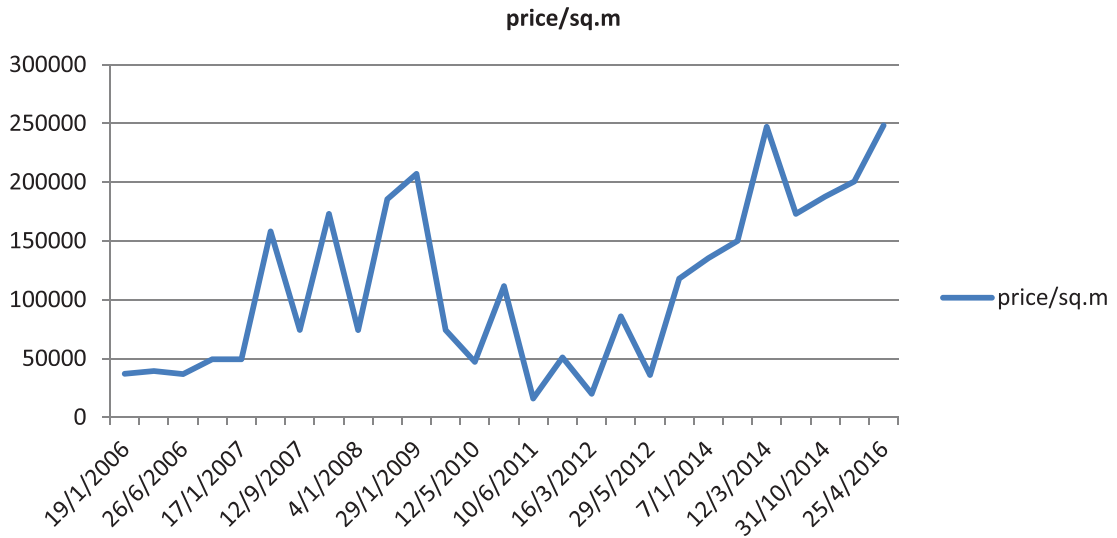
Land Values Trends

Table 3 and Graph 1 below present trends on land values based on land tenure type within the study area. The data covering of ten years from the year 2006 to 2016. For analysis the data was reduced a square metre unit to enable easier determination of trends on land values in the study area. The trends as illustrated in graph are based on values per square metre of a specific tenure and year.

Table 3: Trends of Urban Land Values on Private Mailo

Area	Block no	Plot size (HA)	Plot size (acres)	Plot size (sq.m)	Value estimate (Ugx)	Date of valuation	price/sq.m
Kisugu	244	0.45	1.12	4532.64	168,000,000	19/1/2006	37064.492
Kisugu	244	0.32	0.79	3197.13	126,000,000	26/6/2006	39410.346
Kisugu	244	0.149	0.37	1497.39	55,000,000	26/6/2006	36730.578
Kisugu	244	0.084	0.208	841.776	41,600,000	17/7/2006	49419.323
Kisugu	244	0.08	0.197	797.259	39,400,000	17/1/2007	49419.323
Nabutiti-Kansanga	254	0.101	0.25	1011.75	160,000,000	8/2/2007	158141.83
Kisugu	244	0.137	0.338	1367.886	101,558,100	12/9/2007	74244.564
Kisugu	244	0.2	0.494	1999.218	345,800,000	15/10/2007	172967.63
Kisugu	244	0.028	0.069	279.243	20,700,000	4/1/2008	74128.984
Kisugu	244	0.036	0.0889	359.7783	66,750,000	11/12/2008	185530.92
Nabutiti-Kansanga	254	0.142	0.35	1416.45	293,250,000	29/1/2009	207031.66
Kisugu	244	0.15	0.371	1501.437	111,300,000	23/6/2009	74128.984
Kisugu	244	0.036	0.089	360.183	17,000,000	12/5/2010	47198.23
Nabutiti-Kansanga	254	0.101	0.249	1007.703	112,500,000	3/2/2011	111640.04
Kisugu	244	0.3	0.74	2994.78	48,000,000	10/6/2011	16027.889
Kisugu	244	0.055	0.136	550.392	28,000,000	2/3/2012	50872.832
Kisugu	244	0.4	0.99	4006.53	80,301,000	16/3/2012	20042.531
Kyeitabya	246	0.33	0.82	3318.54	285,000,000	16/3/2012	85881.141
Kisugu	244	2	4.94	19992.18	720,000,000	29/5/2012	36014.082
Kisugu	244	0.17	0.419	1695.693	200,000,000	24/6/2013	117945.88
Kyeitabya	246	0.101	0.25	1011.75	137,000,000	7/1/2014	135408.94
Kisugu	244	0.2	0.494	1999.218	300,000,000	14/1/2014	150058.67
Kisugu	244	0.15	0.37	1497.39	370,000,000	12/3/2014	247096.61
Muyenga	244	0.204	0.5	2023.5	350,000,000	31/10/2014	172967.63
Kisugu	244	0.167	0.395	1598.565	300,000,000	31/10/2014	187668.32
Kisugu	244	0.111	0.27	1092.69	219,200,000	18/1/2016	200605.84
Kisugu	244	0.43	1.06	4289.82	1,065,000,000	25/4/2016	248262.16

Source: Survey Data (2018)

Graph 1: Analysis of the Trends of Urban Land Values on Private Mailo

Source: Survey Data (2018)

A review of valuation data sets was critical in establishing trends in property values per tenure within the study area. Tables 3, 4, 5 and 6 as well as graphs 1 to 4 depict the trends and land values variations based on the prevailing land tenure system. For instance in table 3 above present data and analysis on a total of twenty Seven (27) that private mailo were analyzed. The results reveal that land values were on the rise from the year 2006 to 2007. However, between 2007 and 2009, there was a rise and fall in the land values which may be attributed to world financial crisis of 2007/2008. Interestingly, land values continued to decrease from the beginning of 2009 till mid-2012. The informants argued that this may be attributed several factors; i) anxiety over general elections, ii) inflation; and iii) poor performance of the economy. Land values have been escalating from as shown in the graph due to favorable factors resulting to an increase in the demand for more land in the Division although there was a slight decline of at the end of 2014.

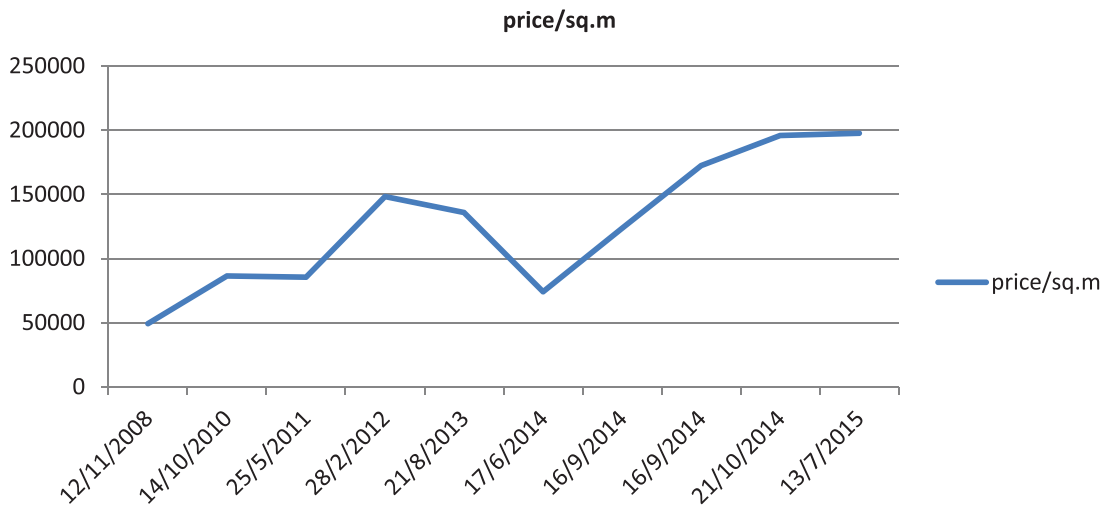
Land value trends on Kabaka's land tenure type

Table 4 and Graph 2 presents trends on values on Kabaka land tenure type over period of 10 years.

Table 4: Trends of Urban Land Values on Kabaka's land

Area	Block No	Years	Wef	Plot Size (Acres)	Plot Size (Sq.M)	Value Estimate (Ugx)	Date of Valuation	Price/Sq.M
Konge	273	49	1/1/2004	0.19	768.93	38,000,000	12/11/2008	49419.323
Buziga	273	44	1/5/2006	0.561	2270.367	196,350,000	14/10/2010	86483.815
Buziga	273	44	1/12/1996	0.462	1869.714	160,000,000	25/5/2011	85574.585
Buziga	273	49	1/7/2009	0.1	404.7	60,000,000	28/2/2012	148257.97
Lukuli	253	47	1/3/1978	0.457	1849.479	251,350,000	21/8/2013	135903.14
Konge	273	49	1/10/2007	0.314	1270.758	94,200,000	17/6/2014	74128.984
Buziga	273	44	1/5/2011	0.694	2808.618	347,000,000	16/9/2014	123548.31
Buziga	273	44	1/5/2009	0.94	3804.18	655,900,000	16/9/2014	172415.61
Buziga	273	46	1/7/1993	0.41	1659.27	325,000,000	21/10/2014	195869.27
Buziga	273	49	1/9/2014	0.25	1011.75	200,000,000	13/7/2015	197677.29

Source: Survey Data (2018)

Graph 2: Trends of Urban Land Values on Kabaka's land tenure type

Source: Survey Data (2018)

Table 4 and graph 2 present results of the analysis on a total of ten (10) properties that are Kabaka's land (official Mailo). The results show that land values were on the rise from the year 2008 till the end of 2010. However, from the beginning of 2011 till the middle of 2011 there was neither rise nor fall in the land values. Discussions with key respondents revealed that could be attributed to uncertainty and anxiety due to the general and presidential elections that year. Thereafter land values begun rising till mid 2014 when there was a fall.

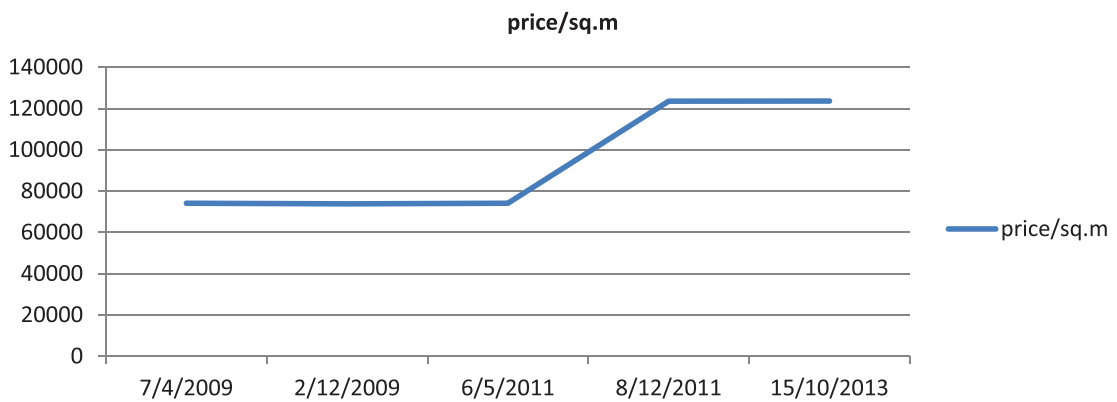
Table 5: Trends of Urban Land Values on Freehold land

Table 5 and graph 3 below present urban land value trends on freehold land within the study area over a period 5 years.

Area	Block No	Yrs	Wef	Plot Size (Acres)	Plot Size (Sq.m)	Value Estimate (Ugx)	Date Of Valuation	Price/Sq.m
Nsambya	15	49	1/1/1994	0.25	1011.75	75,000,000	7/4/2009	74128.984
Nsambya	15			0.255	1031.99	76,200,000	2/12/2009	73838.283
Nsambya	15	49	1/1/1996	0.3	1214.1	90,000,000	6/5/2011	74128.984
Nsambya	15	99	1/1/1993	0.969	3921.54	484,500,000	8/12/2011	123548.31
Nsambya	15	36	1/8/2000	0.195	789.17	97,565,000	15/10/2013	123630.67

Source: Survey Data (2018)

Graph 3: Analysis of the Trends of Urban Land Values on Freehold land



Source: Survey Data (2018)

As depicted in table 5 and graph 3 land values were fairly stable between 2009 and 2011. However, towards the end 2011 till end of the year 2012 there was a rise. This was followed by stability throughout 2013. This trend is partly attributed to uncertainty or tenure insecurity as land in the area is largely mailo tenure system that is considered fairly insecure given the overlapping rights and consequently buyers remain a bit cautious. This means there are limited transactions in the area resulting and therefore the marginal changes in the value of land under the land tenure system.

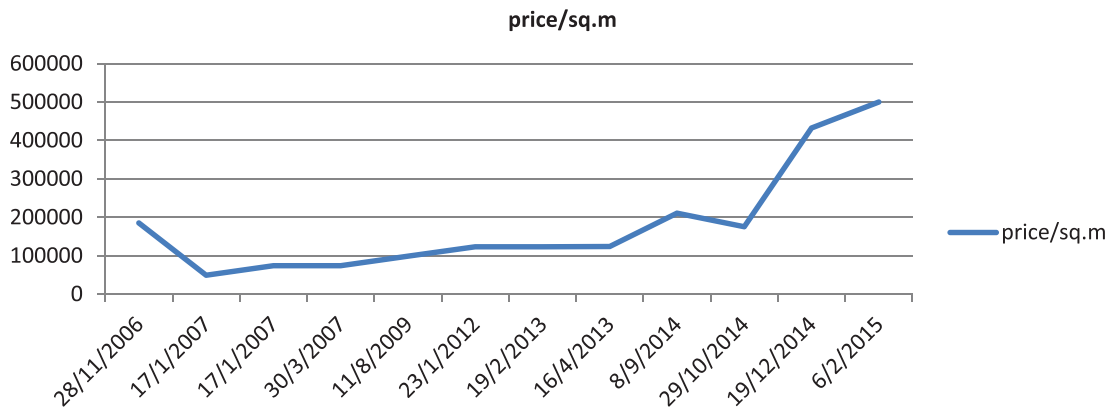
Urban land value s trends on leasehold tenure type

Table 6 and Graph 4 below illustrate the changes in land values over a 10 year period. Data on 12 properties within the study area were analysed.

Table 6: Trends of Urban Land Values on Leasehold land

Area	Block no	Yr	Wef	Plot size (acres)	Plot size (sq.m)	Value estimate (Ugx)	Date of valuation	Price/sq.m
Katwe	7	49	1/8/1984	0.59	2387.73	442,500,000	28/11/2006	185322.46
Bunga	249	49	1/8/1984	0.494	1999.22	98,800,000	17/1/2007	49419.323
Namuwongo 18 close		49	1/8/1995	0.067	271.15	20,100,000	17/1/2007	74128.984
Gaba	252	49	1/1/1994	0.25	1011.75	75,000,000	30/3/2007	74128.984
Kisugu close		99		0.111	449.22	44,400,000	11/8/2009	98838.646
Bukasa 3rd close		99	1/6/1999	0.521	2108.49	260,000,000	23/1/2012	123311.17
Kibuye	7	44	1/8/2006	0.141	570.627	70,395,000	19/2/2013	123364.3
Kibuye	7	49	1/3/2005	0.207	837.729	103,740,000	16/4/2013	123834.8
Muyenga	244	99	12/6/2013	0.17	687.99	144,924,150	8/9/2014	210648.63
Kawuku	248	99	13/10/2009	0.31	1254.57	220,000,000	29/10/2014	175358.89
Gaba	255	49	1/10/1995	0.16	647.52	280,000,000	19/12/2014	432419.08
Kibuye	7	49	1/3/1998	0.42	1699.74	850,000,000	6/2/2015	500076.48

Source: Survey Data (2018)

Graph 4: Analysis of the Trends of Urban Land Values on Leasehold land

Source: Survey Data (2018)

The results revealed that land values were on a decline from 2006 till the beginning of the year 2007. This was followed with a rise in land values till September 2014. This increase in prices may be attribute to favorable economic and stable economic situation. This was followed by a slight fall in prices till 2015. This trend is generally as a result of factors influencing urban residential land values in the whole region such as increased in migration, changes in incomes and due to

4.3 Relationship between Land Tenure Systems and Urban Land Values

The main assumption in this work was that land tenure played a significant role in determination of land values in Kampala. The results as depicted in table 7 below highlights the influence and relationship between land tenure systems and urban residential land values. The table further indicates the relationship between each land tenure system against urban land values and then the variable land tenure systems (*as a whole*) against urban land values. The results reveal that there is a moderate significant positive relationship between Kabaka's land and urban land values ($r = .499^{**}$, $p \leq .01$). Thus a unit change in the availability of Kabaka's land is associated with positive moderate changes in urban land values. In addition, the results reveal that there is a weak positive relationship between private mailo land tenure system and urban land values ($r = .289$, $p \leq .01$). In effect, this means that a change in the availability of private mailo land tenure system is associated with weak positive changes in urban land values.

The correlation analysis reveal that there is a moderate significant positive relationship between freehold land tenure system and urban land values given Pearson's correlations coefficient ($r = .492^{**}$, $p \leq .01$). This means that a change in the availability of freehold land induces positive moderate changes in urban land values. On the other hand, it emerged that the relationship between leasehold land tenure system and urban land values was found to be positive but weak and not significant ($r = .177$, $p \leq .01$). This implies that a change in leasehold land tenure system is associated with weak but positive changes in urban land values.

Lastly, the analysis revealed that there is weak significant positive relationship between land tenure systems (*as a whole*) and urban land values ($r = .457^{**}$, $p \leq .01$). This implies that a change in tenure systems as a whole is associated with a weak but positive relationship with urban land values.

Table 7: Correlation Results Using Pearson's Correlation Matrix

Tenure type	1	2	3	4	5	6
Kabaka's Land (1)	1.000					
Private Mailo (2)	.437*	1.000				
Freehold Land (3)	.531**	.505**	1.000			
Leasehold Land (4)	.394*	.365*	.430*	1.000		
Land Tenure Systems (5)	.735**	.762**	.801**	.749**	1.000	
Urban Land values (6)	.499**	.289	.492**	.177	.457**	1.000

Source: Survey Data (2018)

*. Correlation is significant at the 0.05 level (2- tailed).

**.. Correlation is significant at the 0.01 level (2-tailed).

Kabaka's land = ($r = .499^{**}$, $p \leq 0.01$)

Private Mailo = ($r = .289$)

Freehold land = ($r = .492^{**}$, $p \leq 0.01$)

Leasehold land = ($r = .117$)

Land Tenure System = ($r = .457^{**}$, $p \leq 0.01$)

Regression Analysis

In addition, a linear regression analysis was undertaken to determine the prediction and contribution of land tenure systems on urban residential land values. The results of the analysis indicated that the contribution of land tenure systems to urban residential land values changes is 22.8% (given adjusted R Square of .228). This means that 77.2% land value changes is attributed to other factors (size, location, access to CBD, social amenities, topology, among others) that affect urban land values.

The results from analysis revealed that freehold land tenure system explained about 45% of the observed changes in urban land values (beta .450). Kabaka's land explained 43.6% of the observed changes in urban land values (beta .436). Private Mailo land explained 10% (beta .436) of the observed changes in urban land values. This implies that freehold land tenure system was the best predictor of urban land values in study area. On the whole, land tenure system as whole had a negative predictor of urban land values with beta -.300 (-30%). This implies that land tenure systems are insignificant in predicting urban land values (see table 8 below for the regression analysis)

Table 8: Regression Analysis

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.575 ^a	.331	.228	.34159	

	Unstandardized coefficients		Standardized coefficient		
	B	Std. Error	Beta		
1 (Constant)	.843	.429		1.964	.060
Kabaka' land	.453	.263	.436	1.723	.097
Private mailo	.079	.216	.100	.366	.717
Freehold land	.379	.241	.450	1.574	.128
LTS	-1.306	2.101	-.300	-.622	.539

Survey Data (2018)

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1 Leasehold Land	.a	.	.	.	0.00

5. Conclusions

The study confirmed the position held by many scholars that urban areas in Africa have multiple land tenure systems (see Durand-Lasserve and Seof, 2007; and Payne & Durand-Lasserve, 2012). For instance, in Kampala four distinct land tenure systems are found existing side by side. A more interesting finding is the overlapping rights and ownership, where more than one person may have subsisting interests in one parcel of land. This constrains decision

making on land transactions for and makes it difficult to use such land parcels as collateral or security. In the end, this impacts on land market transactions and development.

In addition, the study concluded that land tenure although significant with about 22% influence on land values has a weak but significant positive relationship with urban land values and consequently a negative predictor of urban land values hence making them insignificant in predicting urban land values in the city. However, it remains a key factor and land policy reforms would need to address issues related to land tenure systems as land tenure remains a key feature on land conflicts in the city as the population grows and demand for land increases for development residential housing and other infrastructural facilities.

Overall, several factors such as land size, location and quality among others contributed to over 77 per cent of land values. However, between the different shades of land tenure systems there are differences in influence on land values with freehold tenure system contributing about 45 per cent; Kabaka's land 43.6 and private mailo contributing about 10 per cent of land values in the city. It should be appreciated the contribution of tenure system on land value is related to the level of security of tenure it provides (see Payne 2002).

However, it is important to recognize that the study was limited to establishing the influence of land tenure systems on land value changes in the city and relied on Makindye case study. The case study was limited in size and scope. Furthermore, the study did not investigate the influence of land tenure on land market transactions and therefore could not adequately provide answers to the question of land tenure contribution to urban development. Besides, the study was limited to capital values yet as Museleku (2022) asserts rental values are more popular in cities of developing countries. It is therefore apparent that a study covering a wider area and focusing on both capital and rental values will be necessary to help draw a more conclusive evidence on the influence land tenure on among others access to land, land market operations, land development and land values.

9. References

- albouy, D. and Ehrlich, G. (2013). The Distribution of Urban Land Values: Evidence from Market Transactions. Retrieved from <http://davidalbouy.net/landdescription.pdf>.
- Al-Otaibi, O.M and Alzamil, W.S. (2019). The impact of property management on the value of residential product in Saudi Arabia. *Urban studies and public administration*, vol. 2 No.2: 99 - 113
- Cornhiel, S. L. (2003). Uganda Country Brief: Property Rights and Land Markets. Retrieved from <http://citeseerx.ist.psu.edu/>
- Cornhiel S. L. & Barnes, G. (1999). Formalizing Informality: The Praedial Registration System in Peru. LTC Research Paper 131
- Damascene, J. et al (2014). Land Market Values, Urban Land Policies, and their Impacts in Urban Centers of Rwanda.

- Downing, P.B. (1974). Factors affecting commercial land values: An empirical study of Milwaukee, Wisconsin. *Land Economics*, University of Wisconsin Press, vol49, No.1 PP 44- 56
- Durand-Lasserve, A. & Selod, H. (2007). The Formalization of Urban Land Tenure in Developing Countries. Retrieved from <http://siteresources.worldbank.org/>
- Emo, I. F. et al. (2013). Prioritizing Residential Land Value Determinants in Onitsha, Nigeria. *International Journal of Academic Research in Business and Social Sciences* Vol. 3, No. 3 /SSN: 2222-6990
- FAO. (2003). FAO Land Tenure Studies 3. Land Tenure and Rural Development. Retrieved from www.fao.org/3/a-y4307e.pdf.
- FAO. (2003). Overview of Land Value Conditions. *AGL/MISC/35/2003*.
- Financial Stability Report. *Issue No.6*. (2014, June). Retrieved from <https://www.bou.or.ug/>
- Giddings, S.W. (2009). The Land Market in Kampala, Uganda and its Effect on Settlement Patterns. *Washington D. C. International Housing Coalition*.
- Habitat for Humanity & The Master Card Foundation. (2013). Uganda Housing Market Mapping and Value Chain Analysis. Retrieved from <https://www.habitat.org/sites/>
- Hai, L. & Huong, T. N. (2017). Factors Influencing Residential Land Prices in Tien Du District, BacNinh Province. *Journal of Forestry Science and Technology*. No. 5
- Hayford, S. A. K. (2004). Design of a Land Value Information System to Support Land Reform Program. *A Case Study of Namibia*.
- Holden, S.T & Otsuka, K. (2014). The Roles of Land Tenure Reforms and Land Markets in the Context of Population Growth and Land Use Intensification in Africa: *Elsevier, Volume 48, October 2014, Pages 88-97*
- Kakaire, S. (2013, July 4). Mailo Land Curse Leaves Hate, Misery in Its Wake. Retrieved from <http://observer.ug/component/content/article?id=26235:mailo-land-curse-leaves-hate-misery-in-its-wake>.
- KCCA. (2015). Strategic Plan. (2014/15-2018/19). Laying the Foundation for Kampala City Transformation. Retrieved from <https://www.kcca.go.ug>
- Kihangire, N. (2011, March1). Land Tenure in Colonial and Post-Colonial Uganda. Retrieved from <http://lawschoolguide.blogspot.co.ke/2011/03/land-tenure-in-colonial-and-post.html>.
- Kok N. et al (2014) Land use regulations and the value of land and housing: An intra – metropolitan analysis. *Journal of Urban Economics* 81(2014) 136 - 148
- Kolowe, P. (2014). The Determinants of Urban Land and Property Values: *The Case of Rwanda*. *Master's Thesis*. Paper 87. Retrieved from <https://repository.usfca.edu/thes/87>

- Krajewska, Małgorzata; zopińska, Kinga & Siemińska, Ewa. (2021). "Value of land properties in the context of planning conditions risk on the example of the suburban zone of a Polish city," *Land Use Policy*, Elsevier, vol. 109(C).
- Le Dinh, H. and Huong N.T. (2017) Factors influencing residential land prices in Tie Du District, Bac Ninh Province, Vietnam. *Journal of Forestry Science and Technology*, No. 5
- Mabikke, S.B. (2016) Historical Continuum of land rights in Uganda: A review of land tenure systems and approaches for improving tenure security. *Journal of Land and Rural Development Studies* 4(2) 153 - 171
- Muinde, D. K. (2013). Assessing the Effects of Land Tenure on Urban Developments in Kampala. Retrieved from <https://www.itc.nl/>
- Nakatudde, R. (2010). Real estate development, land tenure and land use dynamics in peri-urban areas of greater Kampala city. Unpublished MA Research project, Makerere University
- Chinh, N.T et al (2020). Factors that affect land values and the development of land value maps for strengthening policy making in Vietnam: the case study of non-agricultural land in Quang Ninh province, Vietnam. International Journal of Environmental Quality, vol.36 (2020): 23 -35
- Nkurunziza, E. (2005). Informal Land Delivery Processes in African Cities. *Summary of findings and implications. Policy Brief -5.*
- Obala L.M. (1990) Urban land Value Variations: Case study of Kisumu Municipality, Unpublished BA Land Economics project, University of Nairobi
- Obala, L.M. (2011). The relationship between land conflicts and inequity: The case of Nairobi City, unpublished PhD Thesis University of Witwatersrand
- Olima, W.H.A and Obala, L.M. (1999). The effect of existing land tenure systems on urban land development: A case study of Kenya's secondary towns, with emphasis on Kisumu, *Habitat International*, vol. 23 No. 1 pp 113 -124
- Oloke, C. O et al. (2013). An Examination of the Factors Affecting Residential Property Values in Magodo Neighborhood, Lagos State. *International Journal of Economy, Management and Social Sciences*, 2(8) August 2013, Pages: 639-643.
- Ottensmann, J. R. (1997).Urban Sprawl, Land Values and the Density of Development. *Land Economics: PP389-400.*
- Payne, G. and Durand-Lasserve (2013).Holding On: Security of Tenure - Types, Policies, Practices and Challenges. Retrieved from <http://www.ohchr.org/>
- Pedersen et al. (2012). Land Tenure and Economic Activities in Uganda: *A Literature Review.DIIS working Paper 2012:13*
- Pochwatka, P. (2020). Analysis of real estate market in the city of Lublin (Poland) from the perspective of spatial development. E3S Web conferences 191.02007

- Republic of Uganda. (2010). Statistical Abstract. Vol.1. Kampala
- Republic of Uganda. (1995). Constitution of Uganda.
- Republic of Uganda. (1998). The Land Act.
- Roberts, L. (2008). The great housing bubble, Monterey Cypress LLC
- Robinson, M. (2007). Bid Rent and Location Gradients: The Importance of Relative Location. Retrieved from www.hhsrobinson.org
- Securing a Kibanja on Kabaka's Land Has Been Made Easy, Try It Now (2017). Retrieved from <http://www.bugandalandboard.or.ug/>
- Ssemutooke, J. (2015, February 11). Explaining the Different Types of Land Tenure. *The Daily Monitor*, Retrieved from <http://www.monitor.co.ug>.
- Sivitanidou, R. and P. Sivitanides (1999). Office capitalization rates: real estate and capital market influences. *Journal of real estate finance and economics*, 18(3), 297 - 322
- Syagga, P. M. (2011). Urban Land Markets in East Africa. Retrieved from <http://www.urbanlandmark.org.za/>
- Thakur, S. & Choi, M. J. (2012). Characteristics of Land Value Variation and the Urban Land Market in Kathmandu, Nepal. *International Journal of Urban Sciences*, 16:1, 49-61, DOI: 10.1080/12265934.2012.665220.
- Thirkell, A. (1989). Urban Land World Bank Policy: Redressing the Balance between the State, the Market and the Poor. *Working Paper No. 38*.
- Topçu, M. (2009). Accessibility Effect on Urban Land Values. *Scientific Research and Essay Vol.4 (11)*, pp. 1286-1291.
- Tumusiime, A. K. (2014, March 11). Understanding 'Kabaka's' Land and Private Mailo. Retrieved from <http://www.monitor.co.ug>.
- Uju, I. V & Iyanda, S. T. (2012). Comparative Analysis of the Determinants of Residential Land Values Chinese Business Review. Vol. 11, No. 2, 187-192.
- UN- Habitat (2007). Situation Analysis of Informal Settlements in Kampala. Retrieved from <https://unhabitat.org>
- Urban Land Mark & UN Habitat. (2010). Africa's Urban Land Markets: Piecing Together an Economic Puzzle.
- USAID (2010). Uganda-Land Tenure and Property Rights Profile. Retrieved from <https://usaidlandtenure.net/>

Walker, S. et al (2023). Overlapping rights and deforestation in Uganda: 20 years of evidence. *Global Environmental Change* Vol. 82 (2023)102701

Wamani, B. (2010). The Impact of Informal Settlements on Land Markets in Nakawa Division.
Retrieved from <https://www.researchgate.net>