

Land Administration and Urban Growth: A Case of Kakumiro and Igayaza Town Councils, Kakumiro District-Uganda

Ivan Lwanyaga

Management Studies (Urban Governance and Management) of Uganda, Management Institute, Kampala, Uganda

ABSTRACT

The study investigated the effectiveness land administration on urban growth in Kakumiro and Igayaza Town Councils of Kakumiro District. Specifically, the study analyzed the effect of land dispute resolution and the effect of the land information system on urban growth. The study employed a cross-sectional research design. It adopted both quantitative and qualitative approaches to data collection. The study used a sample of 305 respondents, for the quantitative part of the study and key in format interviews. Questionnaires, and interviews, were used to collect quantitative and qualitative data respectively. Primary data was analyzed using descriptive statistics, such as frequency tables and percentages followed by correlation and regression analyses to test the study hypotheses. Results established a significant positive effect of land administration on urban growth. Both land dispute resolution and the land information had a positive significant effect on urban growth. Descriptive statistics and qualitative views of key informants revealed that despite the efforts by the district to improve land administration through measures such as land titling, implementation of the land act, and handling land conflicts, a number of challenges undermine effectiveness of the dispute resolution process. A number of challenges were reported to undermine effectiveness of the of the land information system with a negative impact on its functionality and urban growth. Among the challenges include; limited awareness and knowledge about land administration process and procedures, the bureaucratic process of land registration, delayed process of land registration, titling and other services, high costs of land registration, corruption, limited coordination, limited skills and limited funding for land administration services in the district. The study provides recommendations for addressing the challenges identified towards improved land administration and its effectiveness to urban growth.

How to cite this paper: Ivan Lwanyaga "Land Administration and Urban Growth: A Case of Kakumiro and Igayaza Town Councils, Kakumiro District-Uganda" Published in International

Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470,

Volume-6 | Issue-6, October 2022, pp.889-919,

URL: www.ijtsrd.com/papers/ijtsrd51999.pdf



Copyright © 2022 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



1. INTRODUCTION

As a basic resource, land provides space, it contains environmental resources and it represents capital and generates. Land is a commercial asset and a factor of production and a key component of the localized patrimony. Land shapes persons and collective identity via its history, cultural traits as well as idioms and it is linked. Land has remained the most critical pillar human existence and national advancement. Land is a political issue and volatile. In this regard, its control, administration and use, has remained an important factor in Uganda (MoLHUD, 2013).

1.1. Background of the study

The study examined the effect of land administration on urban growth in Igayaza and Kakumiro Town Councils of Kakumiro District.

1.1.1. Historical perspective

The Statute of Uses was one example of legal evolution and ingenuity of land administration (Ting et al, 1999). From the beginning of the 15th century, the system of uses was the means by which the Chancellor, on behalf of the King, could hear petitions for the creation of equitable interests in land. These equitable interests had the effect of depriving the Crown of feudal dues. The Crown responded in 1535 with the Statute of Uses which vested legal title

in the recipient of the equitable benefit in land, and thus enabled the king to collect more feudal dues. Thus the Statute of Uses proved unpopular in the beginning, but by the time of the Industrial Revolution, when the landed aristocracy wished to sell their land to raise capital, they realized that the pre-existing legal framework made it extremely difficult to convey land because of the lack of simple legal conveyancing methods and the inherent feudal tendency towards creating interests in land into perpetuity (Bradbrooke, Maccallum & Moore, 1996., Enemark, 1997, as cited in Ting et al, 1999). The lawyers discovered that by applying the Statute of Uses, they could transfer land and the legal obligations in a manner which traditional methods could not achieve. Later, between the late 17th and early 19th centuries, the rule against perpetuities was developed by the English courts as a compromise between the landowners' right to dispose of land at will (which arose after the decline of feudalism) and the need to prevent land being removed from the market indefinitely by way of will or grant. The Statute of Uses was eventually repealed by the 1922-1925 legislative reforms that codified and simplified property legislation – culminating in the Law of Property Act 1925 (Megarry & Wade, 1984). A notable consequence of the Industrial Revolution was the growing realization of a need for some State regulation of land use by private owners. The lessons on treatment of labour, the impact on the local community and the wider environment are still issues today. The Industrial Revolution led into the capitalism vs socialism debate which has continued to this day with varying degrees of passion (Simpson, 1976 as cited in Ting et al, 1999).

The Industrial Revolution came at a time of agricultural change as well as industrial invention. There were significant land management changes which led to improved productivity. The most well-known being the enclosure movement of the 1700s across Europe and the UK. This consolidated the tiny, inefficient parcels of feudal land into larger, more productive plots. In the UK, for example, about 7,000,000 acres of land were enclosed between 1760 and 1845; these were made more productive by mixed agriculture, which included crop rotation and alternating arable/pasture use (Toynbee, 1884).. This movement, when coupled with the move by landed aristocracy into industry and the demand for labour in the urban factories, again changed the relationship with land. The urban swell may be exemplified by statistics from Liverpool, whose population of 4000 in 1685 increased to 40,000 in 1760 and then 552,425 in 1881 (Toynbee, 1884 as cited in Ting et al, 1999). This made it all the more important for the rural food

bowl to increase productivity. Increased density in urban areas created new needs in land, land markets, land administration and property law. These changes during the Industrial Revolution set in train a host of administrative and legal reforms vis-à-vis property and land (Lieberman, 1995). The concepts of property began to expand considerably beyond land, particularly in the 20th Century, to include ideas such as intellectual property.

According to Amanor, (2012) Customary land tenure relations in Africa are often characterised as traditional and unitary. They are seen to be based on notions of communal tenure, in which land is vested in a chief or council of elders, who administer the land on behalf of the community and in the interest of the collective. (Ubink et. al. 2009).

The frequently presented framework of an essential, African, culturally defined customary land tenure is problematic, since prior to colonial rule, in the nineteenth century, there were distinctly different socio-political economic formations within the continent. Some societies were organised around centralised political states with hierarchical social formations and the emergence of distinct social classes of producers (Amanor, 2012).

Other societies did not have a centralised state apparatus: there was no distinct political elite controlling a coercive state apparatus, and political cohesion was either established by a council of elders rooted in villages or age-grade associations, or in gerontocratic rule embodied in the complementary opposition of lineages, or earth priests claiming ritual powers to intercede in the control of the fertility of the earth. Other societies were highly mobile, such as pastoralists, who moved between different seasonal grazing lands.

In non-centralised societies, the control that earth priests (chefs de terrain Francophone Africa) exercised over land was based on their claims to be the direct descendants of the original settlers of land. The original settlers were believed to have established a direct relationship with the deities of the land that enabled them to conduct sacrifices and rites of intercession to ensure its fertility and the maintenance of a moral order that contributed to that fertility. This conferred on the heirs of the original settlers control over the relationship between people and the earth, powers over the agricultural calendar through control over sowing rituals, and rights to administer and allocate land to subsequent settlers and to conduct rituals concerned with the land on their behalf. The earth priests distributed land to strangers who wished to settle, and they were consulted in settling disputes (Amanor, 2012).

Under colonial rule, three distinct land frontiers emerged in Africa: settler colonies, concessionary colonies, and zones of autonomous peasant production. Settler colonialism was most characteristic of southern, eastern, and northern Africa, concessionary exploitation confined to Central Africa and the Congo basin, and autonomous peasant production predominant in West Africa (Wallerstein 1974; Amin 1972 as cited in Amanor, 2012).

Uganda, during the end of the 19th century became a British protectorate and its land tenure and management system led to 'haves' and 'have-nots' in its ownership. The land reforms instigated by the British in Buganda, led to a grossly unequal land tenure system which emanated into vast tracts of land to the elites including politicians of Buganda as its tenant farmers. The colonial representatives entered into formal land agreements with then powerful kingdoms of; Ankole, Buganda, and Toro Kingdoms forming way for a surge of individualized land ownership. The Individualized land ownership or "freehold" system changed the focus of land use strictly from communal grazing and farming into a more changing industrial revolution in many parts of Europe and America thus leading to a surge in demand for more raw materials originating from Africa (Mwebaza, n.d).

The colonial period led to a twist from the obsolete communal use of land and uncovered it to market forces of demand and supply. By distributing freehold interests in land to some persons, social inequalities led to arise based on the British perception of land ownership. In some instances, land was dispersed to absentee landlords which led to the advancement of squatters on the undeveloped land of such landlord however, the squatters could be later evicted by the owners. As Uganda's population continued to surge, the gap between land 'haves' and 'have-nots' widened. Disputes over land use and ownership went up (Mwebaza, n.d). Nonetheless in Uganda, there have been attempts to restructure land tenure and management system over the past. Among them are the 1995 Constitution of the Republic of Uganda, Land Act of 1998 and its amendment in the year 2010.

1.1.2. Theoretical perspective

The study was guided by the replacement-theory which asserts that, titling and registration are means of fixing land related problems in Africa and elsewhere for land advancement, increase credit opportunities, and promoting advancement of land markets (Nkwae, 2006). Land administration reflects 'traditional' common law and civil code based land tenure only ('statutory land tenure'); however land

administration systems seem to have difficulty coping with other forms of tenure. According to Molen, (2002) Governments are sometimes weak in enforcement of the land law, which causes uncertainty and insecurity of rights and interest in land. Land tenure forms should be well thought-out, because they should be sustainable for a long time.

"Land is an essential input that is required to ensure increased agriculture production and has a direct connection to food-security and livelihood. Land is a major-source of collateral for obtaining credit from financial Institution and an avenue for economic advancement in Uganda, few vulnerable groups have access to land" (Burns, 2007). There are several demands for land as a resource for instance infrastructure, agriculture, urbanization, grass/pasture, and industry to name but a few and the campaigns for environmental protection.

Land has triggered social upheaval, while efforts are devoted to setting up systems to administer the systems and land rights (Burns, 2007). The surge in population has increased the number of inhabitants to land linkages specifically in urban localities; several parts globally are encountering unprecedented pressure over urban land. Housing and socio-economic widening has led to the demands, if needs are not realized, urban poverty will prevail (Palmer et al., 2015).

1.1.3. Conceptual perspective

A land administration system entails key processes of managing public-land, recording and registering-private-interests in land, valuing land, determining tax, defining land use, and supporting the process of its advancement, its application/ approval (Burns, 2007).

Baia (2016) argues that land value is driven by habitation-needs. The exodus of locals from locality to locality have caused demand surge for land and plots thus a surge in the cost for land. The cost for land is caused by macro-economic factor; other factors include accessibility, age, centrality, and transport systems among others. Urbanization causes socio-economic and environment issues. The UN (2014) highlights that living in urban areas has a link with levels of health condition, better education, and superior opening for cultural and political engagement.

Urbanization entails the social and spatial dimensions; it relates urban people with land. The association triggers formation of urban properties such as buildings, infrastructure or built urban environment more generally. Urban growth being vertical and horizontal and associated socio-economic

events are underpinned by the presence of urban land. The unmatched demographic dynamics trigger a more urbanized population.

According to facts documented in the UN-Habitat (2011), urban population has out-weighed the rural population while magnitude of the Urbanization nonetheless deviates in developed than LDCs. It is estimated that, over 80% of the recent urban population advancement and more than over 70% of the globe's mega-cities with populations larger than one million are within the LDCs (Cohen 2017). Projections reveal that the advancement of urban populations, specifically in the LDC, is expected to be twofold (between 2000-2030) while Angel et al., (2016) argues that their spatial boundaries are expected to be triple which implies that the urban population-to-urban land association will continue to be interested.

Urban Growth is a global situation which focuses on the relative growth of a country's urban population economically, politically, and culturally compared with rural areas. "Urbanization" describes a surge in human habitation associated with a surge in per capita energy, resource use, and wide-ranging landscape alterations argue McDonnell & Pickett, (2015).

Urban Growth refers to a expansion in a nation's population staying in urban areas of a specific size (Abercrombie et al., 2018) while Mayhew (2017) argues that urbanization reflects a surge in the number of people in a specific area because of socio-economic changes to urban-based localities/societies. From a demographic context, urbanization level is gauged by a fraction of people staying in urban localities as argued by Davis (2016).

Darin-Drabkin (2017) mentioned urbanization as (1) A surge in terms of % a world population staying in urban localities, the big cities encountering the fastest growth; (2) Employment drawing a more population (3) the population advancement is mainly occurs in the outlying locality of the metropolitans caused by the diffusion of scientific-medical- knowledge. Additionally, population rise in urban localities is driven by economic advancement, which is decreasing the number of inhabitants practicing agricultural in certain regions.

Structural dynamics in population have resulted into a surge in employment in the city center. Industrial activities have continued to trigger a vast skilled manpower, and access to localized consumer market. These dynamics have a diverse effect on population distribution in certain urban localities. In addition, a new infrastructure network has caused urbanization within the metropolitan areas.

1.1.4. Contextual perspective

The land system in Uganda is as laid in the 1998 Land Act, "Part II, Section 3 of the land Act 1998, states that, Subject to article 237 of the Constitution, all land in Uganda shall vest in the citizens of Uganda and shall be owned in accordance with the following land tenure systems" The land Act replaced the Land Reform Decree and it Act recognizes four (4) local land tenure systems namely leasehold, customary, mailo and free hold.

The urban sector has grown at an average rate of over 5.6% annually from 2004 to 2008 (MoLHUG Report, 2008). The sector on average accounts for over 7.0% of Uganda's Gross Domestic Product (GDP) with growth credited to the rapid population advancement, surge in income, direct foreign investment as well as immigrant remittances (NDP Report, 2010). In spite of the surge in real estate agency advancement, it is projected that about one hundred fifty units are required to match the increasing number of people within Kampala District (MoFPED Report, 2006). The real estate business was started in 1999 and constructs over fifty housing units annually for moderate income locals around the localities of Kakumiro District despite efforts made by urban developers to alleviating through housing, the issue of housing has remained a crisis in Uganda, it is unclear whether estate-development-agencies adhere to land-use-planning necessities on varying land-tenure-systems for instance availability of public services.

"In urban settings, land use and planning is regulated under the town and country planning Act Chapter 246 of 2000 and the Physical Planning Act of 2010". Important to note is that, urbanization is at a 4.5% p.a growth rate with over sixty percent of the population located in slums and seen as slum dwellers. This situation creates urban planning challenges. Urbanization is attached to a myriad of factors for instance employment, poverty, and absence of social services among others (Obaikol. 2017).

Strategic planning is a critical issue to urban advancement specifically on what and how such advancement may happen, when and where they may occur. Uganda's planning roots way back during the 1890s a period of the colonialists' settlement around Kampala. Most of the logics and theories of planning were adopted from colonialist and its such lessons learnt that cities were developed causing settlement localities. This manifested into a law via Uganda's Town and Country Planning Act of 1951. Physical planning paved a way for essential acquisition of land for Uganda (Obaikol, 2017)

The study was carried in Kakumiro District, specifically in Kakumiro and Igayaza Town Councils.

The District surrounded by: Hoima District (North); Kyegegwa District (North-East/South); Kiboga District (East); Mubende District (South-east); and Kibaale District (West). Kakumiro, houses the headquarters, is about 182 Kms (113 mi), by road, north-west of Kampala, Uganda's capital city. This location is approximately 80 kilometres (50 mi), by road, south of Hoima, the nearest large town (Kakumiro District, 2017). The challenge in urbanizing Kakumiro and Igayaza Town Councils is about the land tenure, a large portion of land in town areas is owned by individuals (private mailo). This has slowed development programs and infrastructure, since the town council has to compensate landlords before giving away their land to local governments.

1.2. Problem statement

“Land use in Uganda has been punctuated by radical disruptions, caused by the containment policy of the colonial period, recurrent droughts and by the intertribal conflicts during the post-independence period. Insecure borders have led to abandonment of more dependable pasture lands, while the more secure areas are over-used” (Stave et al, 2015). As a consequence, development all over the District is threatened leading to under urban growth and associated problems in administrative divisions such as Igayaza and Kakumiro town councils.

Despite of the continuous efforts by the government to manage land and ensure urban growth in Kakumiro District, there is slow transition of the town councils to desired urban status for example, industrialization and commercialization, infrastructure development, transport and communication are low. (Kakumiro District Development Plan 2019/2020, -report from District Commercial Officer). As a result, Kakumiro and Igayaza Town Council authorities have been left helpless to expand towns beyond where government has direct land ownership. If this is not addressed, the two urban councils may take decades to develop into municipal councils or cities since most of the land is in the hands of institutions and individuals who are not ready to surrender their land to government or individuals for infrastructural development.

1.3. Purpose of the study

The study aimed at examining the effect of land administration on urban growth in Kakumiro and Igayaza Town Councils of Kakumiro District.

1.4. Specific objectives

The study was guided by the following objectives:

1. To examine the effect of land dispute resolution on urban growth in Kakumiro District.
2. To examine the effect of land information system on urban growth in Kakumiro District

1.5. Research Questions

The study answered the following questions:

1. What is the effect of land dispute resolution on urban growth in Kakumiro District.
2. What is the effect of land information system on urban growth in Kakumiro District

1.6. Hypotheses

1. Land dispute resolution significantly affect urban growth in Kakumiro District
2. Land information system significantly affect urban growth in Kakumiro District

1.7. Scope of the study

The scope of the study was sub-divided into three sections. That is the geographical scope, content scope and time scope as indicated below:

1.7.1. Geographical scope

Kakumiro and Igayaza Town Councils in Kakumiro District Local Government of Bunyoro-Kitara Kingdom in Uganda informed the scope. The following wards in Kakumiro Town council will be considered; Kanyawawa, Kakumiro Central, Kabworo, Kasingo, & Semwema were considered in the scope of the study. In Igayaza Town Council, the following wards; Buramagi, Igayaza Central, Kaboijana and Rubazi were considered. Kakumiro District is one of the Local Governments in Uganda, under the Uganda Government decentralization policy, located in the Midwestern Uganda, boarded by Hoima and Kikuube Districts (North); Kyegegwa District (North-East/South); Kyankwanzi District (East), Mubende District (South-East), and Kibaale District (West).

1.7.2. Content Scope

The study focused on the relationship between land administration and urban growth in Kakumiro and Igayaza Town Councils of Kakumiro District. Land administration was measured using land tenure systems, land dispute resolutions, land use policy, land titling and systematic land demarcations, and land information system. The dependent variable, was urban growth which was measured in form of; level of infrastructural developments, level of education, health and environmental developments, crime rates among others.

1.7.3. Time scope

The researcher reviewed documents and Acts on land policies in Uganda period from 2016-2019. The period when Kakumiro started operating as a district, after being carved out of Kibaale District in the 2016/2017 financial year following a protracted debate in Parliament and heated pressure on government by local residents, leaders and other stakeholders on grounds of extending services nearer

to the people (Parliament Approved its creation on 3rd September, 2015). The study considered information on land administration as embedded in the 1995 Constitution of the Republic of Uganda, and The Land Act 1998. The study reviewed documents on land administration of Kakumiro and Igayaza Town Councils and any other available information for analysis for the research period July 2016- Aug 2021.

1.8. Justification of the study

Some research has been done in Kibaale and Kakumiro in particular for example the Kibaale land question, (Nsamba, 2003), the Kiyonga Report, 2002, 'how to defuse land conflicts in Bunyoro' (Mukama 2007), but no report is available particularly to urban land administration in Kakumiro and Igayaza Town Councils.

The study is important, because Kakumiro District has a task to implement a secure tenure system and good land governance in order to reduce conflicts and social tension. However failure to resolve land conflicts affects economic performance and can prolong or inflame social tension and decay local government developments and urban growth.

Implementing a secure tenure in Kakumiro is a direct investment in disaster recovery ability and resilience. The more secure, formal, and reconcilable the rights and systems are, the less vulnerable the land users are for eviction or loss of livelihoods in the case of a disaster. Also, comprehensive and secure land records offer critical protection of rights when population is displaced or resettled. Insecure tenure and lack of up-to-date land records has a direct impact on financing and implementation of public infrastructure investments, impacting safety, public health, access to energy solutions and extractives, and access to markets and trade.

Securing tenure has become more affordable, feasible, and accessible than ever before in history through digitalization, automation, new geospatial technologies, and crowdsourcing (Land, 2020). However, excessive legal and procedural requirements, lack of standardization, conservative professions, change resistance, and restrictive policies limit progress and cripple urban growth.

1.9. Study significance

The study might be appreciated by the different categories of people, organizations and a spectrum of academicians as pointed out below:

To the Government, the findings of the study might be of help in examining the political- threats to land use and management. This Study finding might help the MoLHUD in formulating appropriate policies

aimed at enhancing and bringing peace, social stability and Urban Growths.

To academicians, the study findings might be useful to future researchers since it might serve as an addition to the existing literature as well as knowledge especially in the field of existing threats on land developments.

Furthermore, findings might most likely provide a basis for stronger land management policies within the political and social context of Kakumiro District and the country at large. Land use information/data might be used to avail remedies for natural resource administration issues for instance wise utilizing of land resources, water quality, forest guarding, and a plant-based food production system. Studying land use land cover change data were significant for acquiring information for further land use and land cover change studies at the resettlement village.

1.10. Operational Definitions Key terms and concepts

Deforestation:-The concept referred to the clearing down f trees for varying purposes.

Land access: The term refers to access rights to land.

Land Administration: the processes of determining, recording, and disseminating information about tenure, value, and use of land when implementing land management policies (UN/FIG 1999). Land Administration are entities administer rules on land, make the rules relevant and effectively operational (UN, 2009).

Land and property development: This mean the activity comprising of processes laid by several actors to support infrastructure development (Williamson et al., 2009).

Land degradation: This was used to mean the drastic change of land components which are irreplaceable (Taffa, 2002).

Land Development - The concept refers to the application of resources to better land for a more efficient use (UN, 2009).

Land Governance – This referred to the decisions made pertaining issues of land access, its use and manners of implementing such decisions to deter any conflicts hence its governance (UN, 2009).

Land Management: The term referred to events linked with land administration as a resource, from the economic and environmental perspective geared towards sustainable advancement (UN/FIG 1999)

Land Policy - This is the set of intentions mapped in numerous land policy utilized by the state to manage

land tenure and its use. Policy will be seen as guided by basic principles of some are based on both national and international agreements (UN, 2009).

Land sub-division: This referred to partitioning of land into smaller junk of land separated by boundaries to combine small pieces of land into a whole (Wickramasuriya et al., 2011)

Land Tenure: This concept meant a set of rules which define the rights of access to land and how it may be used. The rights may include the rights for minerals, water, air and soil on that particular land. Additionally, how land may be purchased (sold/bought) (UN, 2009).

Land Tenure System: This may refer to the various forms, degrees of formality and varying types of land tenure systems may prevail side by side. The concept may further be referred to as formal titles or customary law. Several governments reserve the right to take control of individual's/ communities over land for public purpose (UN, 2009).

Land use: - Referred to the operations on land instigated by humans (Duhamel, 1998).

Landlord – The term referred to the owner of property (UN, 2009).

Resettlement:- This referred to change of original place to another place elsewhere (Yntiso, 2004).

Urban development: Referred to the events ranging from creation of extensive urban areas in terms of constructing new structures for instance buildings (Williamson et al, 2009). In addition, it entails “making of material change in the use of or density of buildings or land or the subdivision of any land or the erection of buildings or carrying out associated building operations (Section 2 (a), Physical Planning Act 2010)”.

Urbanization: The concept referred to the social and spatial dimensions. Urbanization looks at the linkage between urban persons and urban land including buildings and infrastructure. The urban growth may be vertical and horizontal and linked with socio-economic events are underpinned by the presence of urban land.

2. LITERATURE REVIEW

This chapter presents the review of existing literature from previous writers on land administration and urban growth. It presents the theoretical framework, concept of land administration such as; land tenure systems, dispute resolution, and the influence of urbanization.

2.1. Theoretical review

This section presents a theoretical framework that aims to show that, understanding land policies and the

extent to which land administration influences, shapes and even determines urban growth. This framework can be seen as an attempt to incorporate land management and cadastral systems advancement as influenced by land policy and land-associated theories. The study recognizes the following land administration theory on urban development;

2.1.1. Replacement theory

The theory considers customary-land-tenure to be an obstacle to the advancement of land and it proposes for the swapping to a more suitable system including private property rights. For replacement-theorists, titling and registration are means of fixing land related problems in Africa and elsewhere for land advancement, increase credit opportunities, and promoting advancement of land markets (Nkwae, 2006). Arko-Adjei (2011) summarizes the conventional logic behind the theory as including:

- Customary tenure systems are insecure.
- Customary rights do not promote investment, they only derail advancement.
- Property associated to customary systems may vanish in the future.

The colonial legal systems looked more superior than the African customary law hence suppressing on customary tenure (Arko-Adjei, 2011). “There was, therefore, no need to acknowledge, let alone develop, customary law as a viable legal system and customary land tenure as a system of rights and duties”.

According to Enemark, (2005), land administration systems fall under the influence of land policy, which is the “highest level in a land hierarchy” (Törhönen, 2004). Land reform initiatives are dictated by land policy, which is itself informed by the underlying land reform theories. Hence the manner of land administration reform and the interplay between customary and formal tenure systems are influenced by higher level policy and theory. The tension between land registration programmes driven by land titling theory, and customary land tenure systems that rely on more social forms of land ownership, is a challenge for land administration reform (Burns et al., 2006). There are three main issues at stake (Arko-Adjei, 2011): whether tenure security should be provided through the provision of land titles (land titling theory) or alternative, unconventional approaches; whether existing land tenure systems should be integrated into the formal system (unified model), replaced with land ownership and formal land rights (market-based models), or secured using approaches that emphasise the existing social and economic structures (traditionalist theory); and whether land administration should vest in centralised state or decentralised local institutions.

Globally, land tenure information system (LTIS) research is dominated by land titling theory (LTT) (Barry & Roux, 2012), which proposes that “economic benefits are a likely outcome of land titling”: a land title provides security of tenure that can then be used as collateral for mortgage finance, stimulating economic development, and rapidly reducing poverty (Feder & Nishio, 1999; de Soto, 2000; Griffith-Charles, 2004; Steudler, Törhönen & Pieper, 2010). Replacement theorists embrace the ideas behind land titling theory and see individualisation, titling and registration as the means of solving land management and administration problems in Africa. They consider customary land tenure to be a hindrance to the development of land markets and modernisation of the economy, and propose to replace it with a ‘better-suited’ tenure system, namely individual private property rights. This is perceived to foster successful land development, increase credit opportunities, and promote the development of land markets (Platteau, 1996; de Soto, 2000; Nkwae, 2006).

Weaknesses of the replacement theory

Bruce (1993) warns that comprehensive tenure reform programs in customary contexts are often ineffective and usually expensive. He suggests that more attention be given to “community-based solutions to tenure insecurity and a ‘state-facilitated’ evolution of indigenous land tenure systems.” Per Hornby et al. (2017), “Land titling is a questionable means of securing tenure and is thus not necessarily appropriate as a way to increase investment in land.”

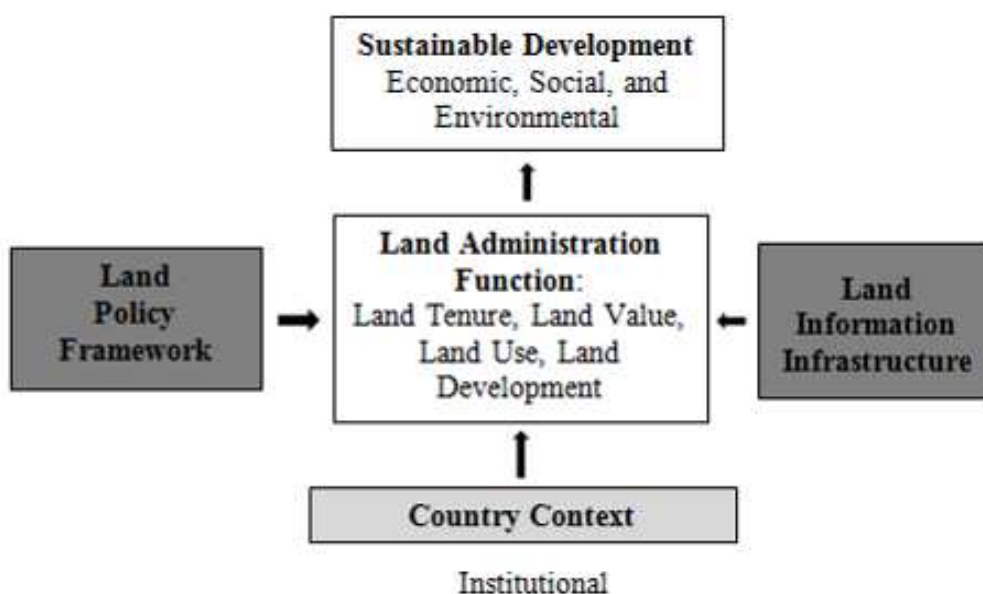
According to Platteau, (2000) some scholars have strongly criticised the introduction of land titling and

registration in Africa, especially sub-Saharan Africa. They cite the failure of tenure reforms, using as evidence the increased marginalisation of the poor and vulnerable and their exploitation by the elite. By contrast, traditionalist theory sees customary tenure as providing sufficient tenure security because “land acts as a social, political and economic tie between kinship groups” (Nkwae, 2006). Land titling programmes in these sorts of contexts fail because individualisation of land title breaks down the social structure of rural African communities (Nkwae, 2006.).

2.2. Land administration

Burns, (2007) asserts that, land administration is an approach that marries land policy, legal, socio-environmental perspective of a specific authority. The land administration system may entail events to administer land, assess its value and determine what tax that should be paid, and support the step by step advancement application and approval (UN/FIG 1999). Land management are events linked to the administration of land as a resource, from the environmental-economic context towards sustainable advancement. Land administration is a state implemented system by the state to manage all rights in land. The system components include:

- Administration of public land
- Recording and registration of all private rights in land
- Recording, all transfers of the above rights
- Administration of the fiscal components associated to land rights for instance assessments fees, local taxes and compensations
- Control of land use.



In countries with colonial background, dual land administration systems exist. Land systems imported tend to prevail in urban localities previously occupied by colonial masters and customary systems tend to work elsewhere. Several legal avenues for colonial systems exist for instance the 1925 English common law, Civil Codes of Spain, France and Holland.

In many LDCs land management systems are urban and rural systems. “This is characteristic of transition economies however, this dissimilarity is not common in much of the most-developed world, where it is impossible to realize a breakdown of formal land events into urban and rural components” (Burns, 2007).

Conversely, land administration entails a series of systems, from formal systems that are state established to record land rights to informal community-managed systems (Lavadenz et al. 2002).

2.3. Land Tenure Systems and urban growth

Land ownership of Uganda are categorized into leasehold, mailo, freehold and customary tenure systems and are stipulated in Article 237 of Uganda’s 1995 constitution (MoLHUD & UNDP, 2008). . These are laid below;

Leasehold Tenure

The system means holding of land for a specified period from a certain date of commencement. The terms and conditions under this tenure are that there are certain agreed issue by the lesser and the lessee. The land is privately owned. For full leases are provided for a period of 49 or 99 years. The leases are provided by Uganda Land Commission or from other Authorities.

Leasehold tenure is categorized into two namely private and statutory leases The former is given to persons while the latter is that given to persons or corporate groups under public Act terms (Okuku, 2006) The merit of the leasehold system is that the lessor can attach terms/conditions to the leases and has the right to revoke ownership in cases of abuse On the other hand, the tenure system is expensive and does not address the environmental problems say Bantungi and Rüter (2008)”.

Freehold-Tenure

This tenure entails registered land held by in private individual or organization perpetuity subject to statutory and common law qualifications. It enables the holder(s) to exercise full powers of land ownership guided by the law.

Mailo tenure

This tenure means holding of registered land in perpetuity with traces to the allotment of land pursuant of 1900 agreement. The land is private individuals owned and is administered by Buganda Land Board. Its ownership is constitution guided (Bantungi & Rüter, 2008).

Customary tenure

The land system is regulated by customary rules where land is owned in perpetuity by individuals or families. The rights of customary tenure are restricted. The tenure is guided by the 1998 Land Act anchored on three principles:

- A. The tenure supports agricultural advancement. It allows individuals with rights to sale their land.
- B. This tenure system should not evict locals off the land. It protects people’s rights on land.
- C. The tenure system should be uniform over nationally (Bantungi & Rüter, 2008).

2.4. Land Disputes Resolutions and urban growth

Land conflicts occur in many forms. There are conflicts between single parties, for instance boundary conflicts between neighbours and inheritance conflicts between siblings. These conflicts are comparably easy to solve. Those that include several parties though – such as group invasions or evictions – are more difficult to deal with. By far the most complex land conflicts are those that are marked by asymmetry of power, often involving corrupt land administration and state capture (Wehrmann, 2017).

Land conflicts are a widespread phenomenon, and can occur at any time or place. Both need and greed can equally give rise to them, and scarcity and increases in land value can make things worse. They especially occur when there is a chance to obtain land for free or at a very low price regardless of whether the land is state, common or someone’s private property. Some examples are:

- Inheritance conflicts;
- Boundary disputes;
- Influential individuals accumulating land through illicit practices – involving abuse of position, fraud, corruption and bribery, in particular in (post-) conflict situations or during the early phases of economic transition, when regulatory institutions, controls and mechanisms of sanctions are not (yet) in place;
- Unauthorized (multiple) sales of customary, collective or public land for which the seller did not pay anything; as well as
- Investors rushing for cheap land ignoring local/customary rights because they are not formally recognized (Wehrmann, 2017).

Lombard (2012) asserts that, urban conflict is an issue of increasing global concern, and conflict over land is seen as a particularly acute form. This is often understood to be linked to processes of urban growth, and particularly to urban informal settlements which develop as a result of informal urban growth (e.g. Schteingart 1988). More than 50 per cent of the global population now lives in urban areas, with the majority of urban growth occurring in cities, giving rise to suggestions that the ‘urbanisation of poverty’ is occurring (Martine et al. 2008). In developing cities where state and market housing provision is unable to keep pace with rapid urban growth, urban informal settlements may house up to 70 per cent of inhabitants, usually (but not always) from lower-income sectors; thus land for housing the poor is a key urban question in most cities (Satterthwaite 2009). Land tenure is thus seen as a critical issue: rising land values in many cities, compounded by urban growth, have resulted in a severe security of tenure crisis.

2.5. Urbanization

Urbanization is associated with monetary advancement. Several studies suggest that urbanization was associated with GDP per capita (Chenery & Taylor, 2018). The OECD-CDRF Report (2019), highlights that urbanization measures the advancement of urban population which manifests into monetary advancement.

Van den Berg et al., (1981) argues that urbanization entails four processes (1) urbanization stage covers town; town span into neighboring municipalities; reduction in town-populations, coupled with monetary decline. In addition, Honjo (2017) argue that most of the Asian LDCs is still in their early phase of urbanization, where it presents industrialization developed countries.

Bhagat and Mohanty (2019) argue that urbanization is associated to migration. Drewett and Rossi (2018) found out that population dynamics trigger migration. Jansen and Paelinck (2014) analyzed and found out that pull factors were responsible for migration to urban areas (Mazumdar, 2017) “and the main push factors of migration from the rural area were conditions in the rural settings due to over population and low agricultural productivity (Kaida, 2015) While strong push factors and weak pull factors of migration in the Asian countries triggered rapid advancement of the urban informal sector and led in expanded slums area around big cities” (Kaida, 2015).

2.6. Gaps to be filled

Nakatudde, (2010) while referring to a study on real estate development, found out land tenure and land value dynamics in the peri-urban areas surrounding Kampala city. The real estates studied were Kakunguru, Kirinya, Lubowa and Naalya. The findings revealed that, real estate agencies influenced land costs of areas within and outside their parameters. Most real-estate-agencies purchase Mailo-land because of the freedom/security as compared to the leasehold whose ownership was uncertain.

Despite Nakatudde, (2010) study focused on land development, tenure system, and land value, her study did not bring out whether land tenure system influences urban growth, and land disputes can be managed, and the extent land administration influenced urban growth; which the current study ought to present.

Muinde (2013) study on land tenure systems indicated that urbanization process comprised of 60% of all urban developments. The study found out diversity of circumstances which led to informal urban developments. In addition, findings revealed that land in Kampala was categorized as leasehold, mailo, customary, leasehold and freehold with mailo taking the lion’s share and customary being negligible.

To deter informalities in accessing land, land sub-divisions and advancement events in the freehold and mailo tenure systems have been considered. It was noted that Kibanja rights played a significant role where the local authorities including LCs are tasked to register, demarcate and adjudicate Kibanja rights. However the study never showed how land administration improves urban growth which the current study is based on.

Karolienna, et al (2012) researched on urban growth and development of Kampala. Their study noted that, Kampala is one of the fast evolving “African cities with a per annum rates estimated at about 5.6% The rapid urban advancement causes foremost socio-economic and environmental challenges that affect the quality of life of the urban dwellers; Urban advancement of Kampala was mapped using LANDSAT images of calendar years 1989; 1995; 2003; and 2010 The model of advancement was applied to three scenarios to predict patterns of urban advancement to 2030; despite the study was about urban growth, it never brought how land administration systems influence urban growth, which the current study focuses on”.

2.7. Conceptual framework

Miles and Huberman noted that a conceptual framework explains either graphically, or by narration, the main things to be studied the key factors, concepts or variables and the presumed relationship among them (Miles and

Huberman, 1994, p18). Therefore, the below conceptual model depicts a relationship land administration and urban growth.

Figure 1.1 conceptual framework for analysis of land administration and urbanization

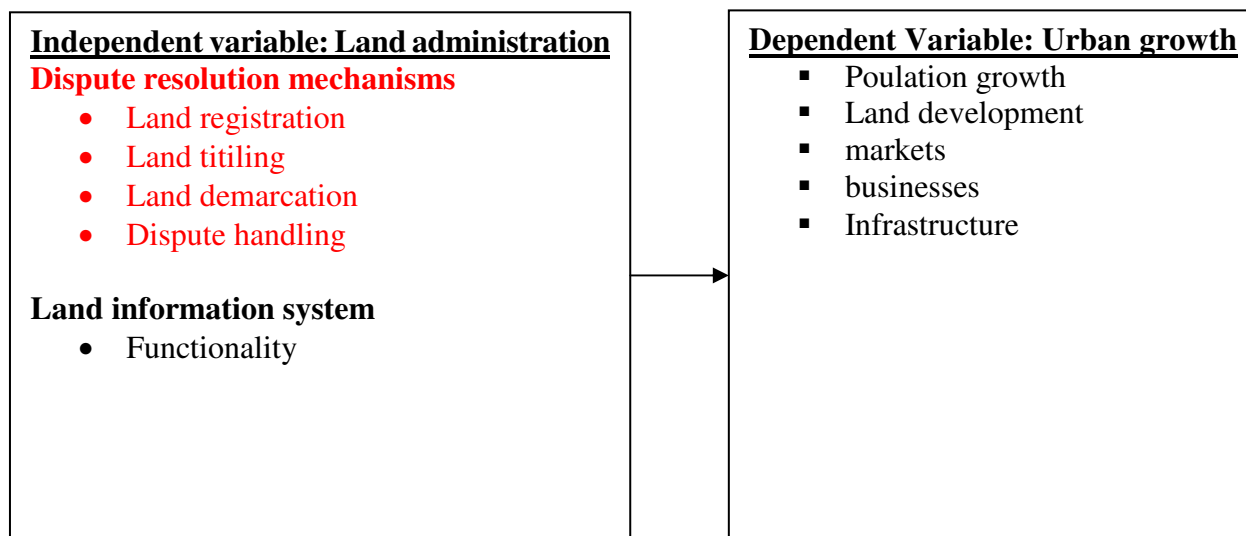


Figure1.1 Conceptual framework for land administration and urban growth

A number of factors were identified as contributing factors of land administration and Urban Growth. For purpose of this study land administration involves land conflict resolution and the information system. Land conflict resolution was conceptualized to include the land registration process, land titling and land demarcation which are the critical activities involved. The land information system mainly focused on analysis of its functionality and how it affects urban growth. It was anticipated that a proper land resolution system and a well-functioning information system would positive lead to urban growth characterized by; population growth and development of land, infrastructure, business and markets.

3. METHODOLOGY

In this chapter presented is the research design, population and sample size. More still are the sampling techniques, data methods and instruments, QC, data collection procedures, analysis and ethical considerations.

3.1. Research Design

The cross-sectional study design was used. The design allows information gathering which represents what is transpiring at a specific point in time. In addition, the qualitative and quantitative data has been obtained because cross-sectional studies gather information/data aided by interviews and questionnaires (Olsen & Marie, 2004). The latter will focus on quantified data (descriptive/inferential statistics) which produced results in form of tables, figures and graphs, which will form a basis for drawing discussions and conclusions. The former gives opinion, suggestions for realising non-quantified results. In addition, it provides a basis for a detailed account about the study. The design will enable check on the relationship between land administration and urbanisation of town councils of Kakumiro District.

3.2. Area of study

The study was conducted in Kakumiro District in selected Town Councils of Kakumiro and Igayaza. These Town Councils were identified due to their convenient location and have relatively high urban population. The population of the town councils permit strategic sampling.

3.3. Study Population

The above concept is a summation of individuals who share a common characteristic for instance sex and age (Bell 2009). The group of 27,069 respondents will be studied for different reasons, such as their response towards Urban Growth on land in Kakumiro District. Of the total population; 12,402 respondents will be from Kakumiro Town Council and 14,667 from Igayaza Town Council (National Population and Housing Census, UBOS, 2014). The study population will comprise of both District officials and residents of Kakumiro.

3.4. Sample Size Determination

Sample size is the act of choosing the number of observations or replicates to include in a statistical sample. The sample size is an important feature of any empirical study in which the goal was made in references about a study population. The sample size for this study was selected basing on the criteria set according to Roscoe's

rule of thumb (cited in Sekaran, 2003). From a population of 27,069, a sample size of 394 respondents was selected, however 232 (58.89%) respondents participated in the study.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{27069}{1 + 27069 * 0.05^2}$$

$$n = \frac{27069}{1 + 27069 * 0.0025}$$

$$n = \frac{27069}{1 + 67.6725}$$

$$n = \frac{27069}{68.6725}$$

$$n = 394$$

Where: n= Sample Size

N = Population

e = 0.05

Table 3.1 Distribution of respondents

Categories of respondents	Population	Sample size proportion	Data collection methods
District Technical Staff	1,278	394*1278/27069= 18.8	Purposive
Political Leaders and groups	2000	394*2000/27069= 29.1	Purposive
Religious Leaders & followers	900	394*900/27069= 13	Purposive
Cultural/Opinion Leaders	800	394*800/27069= 11	Purposive
Residents	21,291	394*21,291/27069= 309	Simple random
NGOs/CBOs	800	394*800/27069= 11.6	Simple random
Total	27,069	394	

Source: Primary Data 2020

3.5. Sampling Techniques and Procedure

Sampling methods was classified as either probability or non-probability. The study used simple random, and purposive sampling methods.

3.5.1. Purposive Sampling

Purposive sampling was involved in selecting a certain number of respondents basing on the nature of their occupation. This method was used on District staff and political leaders in Kakumiro District. This method was deemed appropriate for informed respondents (persons) who possess vital data that is good to allow an insight to the phenomenon under study.

3.5.2. Random sampling

Simple random sampling was used to select respondents from the study population by chance. In this process every respondent had an equal chance of being included in the sample. Here residents of Kakumiro District were focused on. Simple random sampling removed “bias from the selection procedure and results in representative the sample” (Gravetter, & Forzano, 2011). The researcher got a list of all residents of Kakumiro District (sampling frame) beforehand, and marked out the ‘n’ element in the population. This was done with the use of random number table. However, Simple random sampling is the purest and the most straight forward probability sampling strategy. It is also the most popular method for choosing a sample among population for a wide range of purposes.

3.6. Data Collection Methods

The study used three data collection methods including the: questionnaire survey, interview, observation and documentary methods as indicated below.

3.6.1. Questionnaire survey

A questionnaire contained structured questions to which respondents record their answers usually with closely defined alternatives and pre-formulated (Sekaran 2003). Questionnaires are completed at the respondents convince hence increasing chances of getting valid information and they also offer greater assurance of anonymity (Sarantakos, 1998). The researcher used structured questionnaires covering a number of closed-ended questions for the collection of qualitative data of respondents' opinions on land administration and urban growth. The questions were a list of possible alternative answers on likert scale.

3.6.2. Interview Method

This method was used to collect qualitative data from key informants (see Table 3.1). Interviewing refers to a conversation carried out with the purpose of obtaining certain information by means of spoken words, (Amin, 2005). The interviewer pursues an in depth information around the research topic. Its advantage is that the method is adoptable and flexible to a given situation.

3.6.3. Observation

In this method the researcher employed vision to examine what is happening in real life situation and then classify and record persistent happenings (Amin, 2005). An observation checklist (Appendix III) was used to capture images regarding urban growth in Kakumiro District that are not orally described. During the study, photographs of urban activities, and images of urban growth were captured. These observations were used to provide valid data on actual events. The information obtained under this method is related to what is happening in Kakumiro District. This method is not complicated by either past behaviour or future intentions or altitudes. The observation method is free from errors due to memory lapse, because everything was recorded as seen or observed, thus no interruptions between the data collector and the interviewee as compared to questionnaires and interviews were faced

3.6.4. Document Review

A document review method sourced secondary data from existing documents. Among the documents was legal government policies on land management and land developments, journals, text-books and other relevant reliable e-sources. The researcher used various sources like libraries and internet. Guba and Lincoln (1994) define a document as any written or recorded material the preparation of which is not evaluation purpose or the request for the inquiry. Therefore documentary review is a process of reading various extract found in offices or a place dealing with issues related to what the researcher investigated (Miles and Huberman 1996).

3.7. Data Collection Instruments

Various data collection instruments were used to collect both primary and secondary data. They include:

3.7.1. Self-administered Questionnaires

Cooper and Emory (1995) define a questionnaire as a set of questions designed to gather data from sample respondents on the subject matter. Self-Administered Questionnaire (SAQs) (Appendix I) was administered to all the valid respondents (residents and key informants) in Kakumiro District.

The instrument comprised of closed-ended-questions that elicited responses from sample respondents about the study. The study used self-administered structured questionnaire (Appendix I) to collect data from all the 394 respondents, the instrument was administered to valid respondents.

These questionnaires help to capture socio-demographic characteristics of the respondents and their knowledge about land administration and urban growth. The questionnaires were administered in Runyoro which is popularly spoken in Kakumiro District and since most respondents cannot read and write English.

The questionnaires consisted of closed ended questions. Closed ended questions assisted in soliciting for responses that were easy to analyze using quantitative analytical techniques.

Questionnaires gave adequate time to respondents to gauge their answers. In addition, questionnaires are a cost effective way of information gathering.

The researcher was personally distributed questionnaires to research participants through a random sampling exercise and pick them up after four days.

3.7.2. Interview Guide

The instrument facilitates a conversation between the investigator and key informant intended to elicit information using direct questioning using either telephone or face to face (Wagner, 2007). The researcher prepared for interviews, conducted interviews and recorded findings accordingly using a set of non-numeric identical questions.

An interview guide (Appendix II) was formulated to aid discussion with the 18 District staff and 29 political leaders (Key informants). It was a face to face interaction between the interviewer and the interviewee and English and Runyoro language was used. An interview guide containing open-ended-questions were designed to enable the researcher conduct the interviews. Interviews were used to supplement the information gathered from the use of questionnaires. This enabled the researcher to clarify on any question that was not clear. It helped to generate instant answers and therefore, not giving a chance to the respondents to consult a third party.

Each interview was scheduled to last approximately 20-30 minutes, although many continued on well after the allotted timeframe. Interviews were also conducted in local Language where necessary. The researcher would provide each participant with an informed consent form prior to the interview (Appendix II), and inform them of their right to withdraw from the study at any point during or after the interview. Each interview was recorded using a digital recorder and (translated then) transcribed for analysis.

Interviews were advantageous because they enabled the researcher to manage the environment for collecting data and provided room for serious attention. The interviews provided room for feedback and clarity on sensitive and inexplicable issues.

3.8. Data Quality Control

3.8.1. Validity

The study established the content validity. The instruments provided adequate traits due consultations with the researcher's supervisor, classmates and a research expert was used in strengthening of the items in the instrument using rating. The CVI was used computer based on the equation below;

$$CVI = \frac{\text{Number of relevant items}}{\text{Total number of items}} \times 100$$

The CVI score above 0.70 suggested a valid tool as recommended by Amin (2005).

3.8.2. Reliability

The researcher used Cronbach Alpha to determine the consistence of the instrument. Data was be checked step by step, and correction of errors to ensure data accuracy was done as recommended by Morse et al., (2002).

3.9. Data Processing and Analysis

3.9.1. Process

The data collected was; coded, summarised and compiled in accordance with the questionnaires. The results were triangulated in frequency tables to harmonise the findings hence omitting any errors and inconsistencies.

3.9.2. Data Analysis

After the process of data collection, the researcher summarised the data and analysed it. The data was categorised and entered in to the computer by use of Statistical Package for Social Sciences (SPSS) program version 22. The quantitative data from questionnaires was analysed using descriptive statistics such as measures of central tendency and presented in frequency tables. Qualitative data from interviews on the other hand was analysed using content analysis following Amin (2005) in line with the research questions. Observed data including photographs of urban developments was taken and presented.

3.10. Ethical Clearance

During the study, the researcher got an introductory letter from the Dean UMI School of Civil Service, Public Administration and Governance which introduced the researcher to Kakumiro District for permission to carry out research. As a result, the researcher stated that, during the face to face interviews all information provided by the respondents would be used for research purposes only, and would be treated with strict confidence. This ensured privacy and confidentiality, the dignity and welfare of all participants particularly the community of Kakumiro District.

A consent of potential participants and explanation to them the purpose and nature of the research, not only to ensure that participation in the research is voluntary, and also given to the fill. When respondents volunteered to participate in the research, they would be assured of confidentiality, and the assurance of their rights to withdraw from the research especially if and when questions asked, or if the process in general, tended to trigger emotional responses and affected self-understanding.

4. DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1. Introduction

This chapter presents the results on the role of land administration on urban growth in Kakumiro District. The chapter has five sections that is; findings on the background characteristics of the respondents, the second section covers findings on the extent of land ownership type on urban growth in Kakumiro and Igayaza Town Councils, the third section covers results on land dispute resolution on urban growth in Kakumiro District, the fourth section presents results on the effect of land demarcation to urban growth in Kakumiro District and finally the fifth section examines the effect of land information system on urban growth in Kakumiro District.

4.2. Response rate

Table 4.1: Percentage response rate

Category of respondents	Target sample	Actual sample size	Percentage response rate
Residents	309	220	71.2
NGOs/CBOs	116	85	73.3
Total	370	305	82.0

For the quantitative approach, the study set out to utilize a sample of 394 respondents categorically including; residents and NGOs/CBOs,. The response rate for all the categories of respondents was above the 70% recommended by Yin (2010). This response rate implied that the study had enough responses to adequately represent the target respondents and findings would therefore be representative and generalizable to the study population.

The findings are presented in tables and analyzed using frequencies counts and percentages, the interpretation has been done in narrative form as presented in the sections below.

4.3. Background characteristics of respondents

The researcher used the help of individuals during the study who gave relevant information for the study. The respondents' background data comprised their gender, age group, level of education attained, marital status, and place of residence. Responses on these were as shown in table 4.1 below;

Table 4.1: Background of Respondents

Items	N (232)	Percent (%)
Gender		
Male	149	64.2
Female	83	35.8
Age group		
20-29	85	36.6
30-39	84	36.2
40-49	45	19.4
50+	18	7.8
Education level		
Never attended school	33	14.2
Primary education	11	4.7
Secondary education	85	36.6
Tertiary education	87	37.5
None	16	6.9
Marital status		
Married	91	39.2
Single	83	35.8
Separated	25	10.8
Widow	18	7.8
Widowed	15	6.5
Residence		
Kakumiro Town Council	125	53.9
Igayaza Town Council	107	46.1

Source: Field data

4.3.1. Gender of respondents

The results in the table 4.1 above indicate that 64.2% were male and 35.8% were female. The men participated more in the study than the women. This was because the study mainly targeted men who own majority of the land. The women are less involved in land ownership because they are more marginalized. However, women are more involved in farming and agricultural activities on the lands which meant that women had more access to land.

4.3.2. Age groups

The composition by age groups provides statistics showing that majority of respondents were aged 20 to 39 years, not only old enough to provide reliable information on the study, but also the most productive and development-oriented category of the sample.

4.3.3. Education level

On the issue of education level, 81% of the correspondents were literate with educational attainment at secondary and tertiary education. The results show that respondents from Kakumiro and Igayaza Town Councils literacy rate was generally above the average, therefore the study population had the potential and ability to understand the rationale of the study.

4.3.4. Marital status

On the issue of marital status, the results show that, 39.2% of the respondents were married, 35.8% were single, 25% had separated, 7.8% were widows and 6.5% widowed, all affected by issues of land administrations, such as ownership, disputes to mention.

4.3.5. Residence

The study also noted that all the respondents belonged to Kakumiro district varying from one to ten persons. At least Kakumiro Town council was represented by 125 (53.9%) of the total respondents, and 107 (46.1%) from Igayaza Town council.

4.4. Descriptive statistics on urban growth

This study leveraged on the problem of low urban growth in Kakumiro district which was based on documented reports of the district. As matter of triangulation, the study obtained views of respondents in the status of urbanization in line with the indicators. Table 4.2 presents the percentage distribution of respondents by opinion on urban growth

Table 4.2: Percentage distribution of respondents by their opinion on urban growth

Urban growth	S.D	D	N	A	S.A
The population in Kakumiro district has increased	0	73.9	2.4	13.9	9.8
There has been a significant improvement on road infrastructure in Kakumiro district	0	68.5	0	31.5	0
There has been an increase in the businesses in Kakumiro district	0	61.0	2.4	34.1	2.4
The housing infrastructure has significantly improved in Kakumiro district	0	68.5	0	29.0	2.4
The social facilities such as hospitals and schools have increased in Kakumiro district	0	78.5	0	19.0	2.4
Kakumiro district is experiencing urban growth	0	78.5	0	19.0	2.4

The majority (73.9%) of respondents disagreed that the population in Kakumiro district has increased. The majority (68.5%) further indicated that there is no significant improvement on road infrastructure in Kakumiro district. In addition, the majority (61%) of respondents indicated that the level of businesses is still low. There has not been any significant increase in the number of businesses enterprises. In terms of housing infrastructure, the majority of respondents indicated that there has not been any significant increase in number of buildings. They have not seen any big housing facilities or projects coming up. Similarly, there has been no big boom in social facilities such as hospitals and schools as indicated by the majority (78.5%) of respondents. Overall, the majority of respondents indicated that they have not noticed a significant urban growth in Kakumiro district.

The above findings clearly indicate that there is no noticeable urbanization in the perspective of respondents. The level of population, housing and road infrastructures as well as social facilities such as schools and hospitals have not significantly increased. To affirm this, some key informant had this to say;

I don't think we are urbanizing. I see old buildings no major construction projects. The roads are still very poor. The hospitals are old, no new hospitals have come up. Just very few schools have come up and generally the

level of business is low. I only see small merchandise shops. I have not see big supermrkets ro any industry come up. (KII3, May 2021)

4.5. Descriptive statistics on land administration

The analysis of land adminsitration established the opinion of respondents on land ownership, despite resolution, land demarcation and information systent types on urban growth in Kakumiro District. The percentage distribution of respondents' opinion by these land administration variables is provided in table 4.3.

4.5.1. Descriptive statistics on land dispute resolution

Table 4.3: Percentage distribution of respondents by opinion on dispute resolution

Dispute resolution measures	S.D	D	N	A	S.A
Land registration					
The town council has provided for effective meachnisms of land registration/ titling	0	30.0	0	66.6	4.0
Most of the land is registered on Block, County, Gombolola and Plot Numbers	0	27.0	17.0	53.4	2.6
The Land Act is properly implemented to handle land issues	2.0	62.5	0	37.9	3.0
It is easy to trace race the title in the Kakumiro district	0	65.0	0	32.9	2.0
Demarcation					
The land demarcation exercise is often done lawfully in the town council	6.4	63.0	0	27.0	3.6
Land boundaries have been adequately stablished through neighbor-to- neighbour relations	5.8	23.8	0	66.2	4.2
The land demarcation exercise if quite impotanT to urbanization of the district	0	6.4	3.6	85.0	5.0
Case handling					
Courts of law are doing well on arbitrating and settling land conflicts in the area	1.0	76.6	0	19.4	3.0
The elders often handle well distribution of the deceased's wealth according to tradition	1.0	56.6	0	39.4	3.0

S.D=strongly disagree; D=disagree; N=neutral; A=agree; S.A=strongly agree

4.5.2. Land registration/titling

Regarding land registration and titling, the majority (70.6%) of respondents agreed that in Kakumiro Town Council has provided effective meachnisms of land registration/ titling This system has lessened land conflicts in the area as people get proper documentation on land. However, it should be recalled that some of the land is owned by Baganda, some of whom are absent landlords that have up to now refused to sell it off under the Bunyoro Land Trust Fund yet they are not using it, they conflict with occupants of the land or squatters and tenants who are also not ready to give up on the land, and the new settlers whom they consider unwelcome, the foreigners (Bafuruki) from Kigezi who have also claim over the land. And according to the interview,

“the 2002 conflicts were an epitome to such and it coincided with the tribal politics of the time. Further attribution to Okuku (2006), land registration and titling has to a great extent made it easy for developers to access land for substances and commercial purposes, thus making it easy for the Towns councils to see physical developments in terms of buildings, businesses and others despite the abrasive relationships with some people who want to utilize the land for their ends. So registering and titling land has been and will remain a welcome ideal in this situation and minimize land wrangles and orchestrate urban development.

The Ugandan government sought to upgrade the land information system through land mapping starting in 2002. The majority (53.4%) of respondents further indicated that most of the land is registered on Block, County, Gombolola and Plot Numbers. The land is registered on Block, County, Gombolola and Plot Numbers with information fed into the Information and Technology System at the District (under the District Land Board) and national levels (Uganda Land Commission) as cited in Meinzen-Dick et al., (2008), with this annotated process, the land is well known and can be followed up regarding the ownership and location so that conflicts can be dealt with amicably. As one respondent noted during the interview,

With a flexible registration and land system in place, investors such as Barak Hotel have been able to lease land and develop hotels in Kakumiro Town Council, a coffee Processing Plant (Hrans is being set up in Kakumiro town which will support coffee growers in both Kakumiro and Igayaza as well as the

outlying areas to obtain market for their raw produce and employment, thus expanding the urban realm, the health Ministry has been able to utilize the land for Kakumiro Health Centre IV, many external and local investors are able to occupy land from genuine source and set up commercial premises and others developments.

Igayaza Town Council is also experiencing increase in settlements and business because of the areas and its outlying neighbours being sources of agricultural products like cassava, ground nuts, beans, sweet potatoes, commercial accommodations and markets for produce such as maize collected and taken to Kenya, South Sudan, Kampala and elsewhere. But Kakumiro Town Council is growing faster because it offers more proximity to business and open routes than Igayaza, thus being more developed and urban.

The majority (over 60%) of respondents however indicated that the Land Act is not properly implemented to handle land issues and it is easy not easy to trace race the title in the Kakumiro district. This indicates that registering land ownership or tracing the title for the land is hard as a lot of bureaucratic redtapism is involved and each stage requires bribery, there are a lot of extortions at the district and sub-county levels before one can have their file opened and located whichever the case may be. But after a protracted, genuine or corruption fed process, one can have the land registered, titled and or leased through the land acquisition process as directed by law. This is in line with Lund and Boone (2013) who state that since the process is available and flexible though time consuming, it has enabled many developers such as investors to obtain land on which they have set up investments like buildings, gardens, groceries, hardware, wholesale shops, garages and other developments in both Kakumiro and Igayaza Town Councils, but the developments are still low making the town councils develop at a creeping pace.

The 1998 Land Act was enacted against the background to make land questions manageable and solve the conflicts overland. The Act made it possible for a tenant who had been on land for 12 years and over to be given priority as a bonafide occupant, allowed people to own land and have it as their property, allowed government to intervene and solve land conflicts as well as ascertain the; and ownership and introduce where necessary an amicable land tenure system to benefit all. Findings reveal that 41.1% of the respondents in Kakumiro Town Council and 35.8% in Igayaza Tonw Council noted that the 1998 Land Act as in Gar-on Yeh (2005) and Ma (2007), was implemented to handle land issues in the areas as it defines the customary, freehold, leasehold and mailoland tenure systems and how any disputes can be handled by the Lands tribunals at all levels from Town Councils, District and National Levels. However, the knowledge of the people on the ways the Land Act can be implemented or is being used to manage land issues is so limited, the local people see it as a tool being used by government to manipulate them and take their land, and their fears are ignited by the fact that in Buganda, Hoima, Masindi, the Oil belt of Albertine region and elsewhere in the country, land disputes are so common due to the discrepancies created by the Land Act which deprives the land lord of many powers over their own land. But it is being applied to align land regulations on acquisition, use and tenancy of the land in order to streamline land ownership in the area.

4.5.3. Land demarcations

The study findings on whether there is legal land demarcations in Kakumiro District revealed that 66.1% of the respondents in Kakumiro and 66.7% in Igayaza Town Councils agreed that through the courts of law and the lands and survey department, the land is demarcated after it has been surveyed and the land mark stones are rooted at the vital points. Sometimes when a land conflict breaks out and requires legal redress, what the local councils and the land boards or committees cannot resolve is resolved by courts of law at magistrate and high court (land Division) levels. Usually the permanent marks are drawn but on the country, the court process is long and one party may become exhausted more so the poor people while the rich may fraud the process and take the land of the innocent people.

Green (2008) in the same line noted that the size of the demarcated land is also vital to put into considerations as the size and proximity for business and regard for the future prospects of physical development determine how much it would cost on the market as the demand may be. Generally, Kakumiro Town Council has more demarcated land because the demand for it is high whereas Igayaza has less demarcated and tiled land as it still straddles to get to its fit and develop.

There are established land boundaries through neighbor-to-neighbour relations where they use plantain to mark the boundaries through systematic land demarcation that was piloted in wards of Kasingo, Kabworo and Masonde in Kakumiro Topwn Cpouncil under MoLHUD and there is a general agreement that it there is need for an access route each side forfeits 3 to 5 feet, surveyors and mapping contractors who establish and plant stone marks on titled land, cell local councils who draw localized maps and show the measurements or

dimensions of the piece of land and neighbours in the land sale agreements, the town council land committees who ensure that the commercial land and any other is well known by extent for their records, and elders who have lived in the area and have known everybody occupying land to help in settling disputes over land; they are usually called upon to ascertain who owns the land for a longtime.

With land demarcation, it becomes easy to advise and apportion land uses in the area for example access roads, sewerage and water systems, public utilities like health facilities, education centres and authorities would advise the developers on the best plans to have for which areas. The urban councils have to construct and develop the roads, light up streets, demarcate the industrial centres, market places and any other purpose for which they may need the land. Information from interviews shows that,

The private developers are required to follow the physical development plans of a particular urban council to have their plans approved. On the contrary though, many developments are illegally undertaken for example commercial building constructions without approved plans, the urban authorities hardly focus on enforcing proper planning because of the fear to lose political popularity and as such urban sprawls have been enormous!

Demarcation was also found to support land and property taxation as well as environmental management. It was generally observed by key informants that individuals who apply to get licenses for planting trees more so Eucalyptus and Pines are required to pay some fee in the range of 1,750,000 to 5,000,000 which government gets before even the commencement of the projects (NFA Act). Some of the areas where this has happened include Rubasegura cell in Igayaza Town Council. The developers in the area for example commercial houses like hotels, guest houses, markets, lodges, groceries and so on pay license fees and property tax which raises income or tax revenue for the local government. The money can be used for other statutory developments like roads. However, the areas' land has not been much developed and the amount of tax revenue generated is low and can hardly support even the administrative costs involved.

The significance of land demarcation to urbanization was also expressed in terms of its support to development. It was observed that demarcation facilitates urban planning and land development citing examples of forestry, physical or spatial infrastructures like commercial buildings, markets, roads, education which have been developed according to plan. For example in both Kakumiro and Igayaza, the government health centers have been developed on demarcated government land, the market centres have been set-up in planned areas alongside the access roads and the public Boma (play grounds) are also set aside for public use. However, the land uses are not well planned which is making the areas have a mixture of developed urban and peri-urban or rural setting of unplanned agriculture, commerce and trade as well as open grounds which are not inhabited. But there is reminiscent of developed urban areas with sprawling of buildings, roads, businesses, concentrations of vehicles and high populations-characteristics of urban environments, mostly in Kakumiro which hosts most government establishments like administration, urban housing, public utilities and well interconnectedness to the rest of Bunyoro

Demarcation was also reported to enhance revenue generation through levy license levies on the individuals and groups who bid lease land for forestry activities like silviculture in Myooma Forest Reserve in Igayaza Town Council where Eucalyptus and Pines have been planted and harvested. However, there are many people who have encroached on public land and use it for farming (including subsistence food crop growing and animal rearing) without remitting any funds to the government. But for those who are engaged in commercial tree growing and lumbering, have to pay licenses which raises tax revenue for the government.

Demarcation also facilitates zoning of land for various purposes like forestry, public playgrounds, public schools, health facilities, animal inoculation centre, and also religious foundations have benefited using it. In both town councils for example Myooma forest reserve in Igayaza, public land is fully utilized by the people and the government (including local government) for hosting the district and Town Council administration in Kakumiro, and Rubasengura in Igayaza Town Councils. On the other hand, not all the public land has been gazetted for public use because some of it like the chunks near the swamp fringes available are not demarcated for any activity but instead left idle for now, and used by hunters, gatherers and small scale farmers for growing yams, sweet potatoes and rangeland grazing. Whether demarcated or not, public land is being utilized by and for the benefit of the local and the central government as well as the local people who exploit the available trees, swamp materials for their purpose.

Demarcations have also ensured protection of state lands Much as the government does not own much land, but what they have available in Bugangaizi South is Myooma Forest reserve in Igayaza Town Council are

safeguarded after they were well demarcated against intrusion by settlers and farmers. But because of the laxity from the government and land grabbing bonanza in the area, some of the land has been intruded no by farmers, is used for grazing and afforestation after obtaining the licenses which is usually fraudulent. Thus it is only possible to protect 30percent of the government land in both town councils while 70% has been parceled from silviculture and farming.

4.5.4. Dispute handling

The majority (76.6%) of respondents indicated that courts of law are not doing well on arbitrating and settling land conflicts in the area. They delay a lot (delayed justice) and usually to deliver judgement which is detrimental to the poor person because of the high levels of corruption exhibited there. Findings obtained from interviews revealed that,

there were no land divisions in the magistrates courts in the town councils and they had to expedite the process faraway in Hoima or Masindi which is costly, time consuming and exhausting in strength with a lot of uncertainties like getting lost at the hands of rich claimants or being apprehended and intimidated by use of military and the police. The courts of laws more so the land division is however, vital and workable channel for resolving conflicts over land and where they have been applied, they have worked so well, much as such cases have been too few.

Courts have adjudicated the cases of land and passed judgment which has benefited certain sides and in some cases like the respondents revealed in Kakumiro, that at least 4 people have been able to win back powers over their land through court and 1 case was reported in Igayaza.

The majority of (56.6%) respondents indicated that the elders often handle well distribution of the deceased's wealth according to tradition findings on whether inheritance. When a father passes on or the mother or grandparent, the elders supervise the distribution of the deceased's wealth according to tradition for example the widow and the girls continue to occupy the land on which the ancestral homestead is located, heir gains powers of traditional control over the estate, each child of the deceased is allocated their piece of land which is usually by Will made by the deceased. In the event the deceased had not made a Will, (intestate) they use the traditions or the modern law of Uganda on inheritance which allots percentages to distribute the land for example the widow gets 15 percent of the deceased's estate, the heir 1 percent, 75% for descendant children and 9 percent for others dependants as the law rolls it out. But the people apply the traditions moreso because they harmonize land distribution and occupancy and avoid conflicts. Where traditional system has been found unsatisfactory, arbitrators have been involved, and in extreme circumstances, courts of law have used the Will, the law and situation to pass judgment in the case accordingly. This is in line with Katusiime (2014) who noted that that unstable customary land tenure right systems in Uganda creates an insecure environment leading to encroachment and depletion of natural resources, but through legal means, land rights are streamlined, restored and consolidated.

Proper and lawful land demarcation is necessary to improve urban planning and infrastructure development, protect state land, support land and property taxation, support environmental management, promote land utilization as way of land development with an ultimate impact on enhancing revenue generation in the district that would foster urbanization.

4.5.5. Descriptive statistics on land information system

Table 4.3: Percentage distribution of respondents by opinion on land information system

Statement	S.D	D	N	A	S.A
The land formation system readily provides information about location of parcels and their boundaries	4.0	24.4	0	65.6	6.0
The land information system is facilitating land use planning	4.0	28.4	0	61.6	6.0
The land information system often provides relevant information in support of land markets	5.0	22.4	0	57.6	15.0
The land information system often facilitates coordination of land use activities	4.0	16.6	0	74.4	6.0
The land information system is reducing cases of land theft	7.5	34.4	0	56.6	2.5
The land information system is associated with reduced costs of land redesigning	2.5	54.4	0	39.6	2.5
The land information system has eased land land management	0	38.0	0	56.0	6.0

Findings of the study on whether the land information system provide information about the location of parcels and their boundaries, 65.6% of the respondents in Kakumiro and 65.4% in Igayaza Town Councils reveal that there is use of the electronic and manual land information system, but the electronic one is faster and better to undertake search for land titles and distribution of land. The majority (65.6%) of respondents indicated that the land formation system readily provides information about location of parcels and their boundaries. The land information system often provides relevant information in support of land markets.

The district land board and the Town Council land committee are involved in registering and exploring all the available public land and the private land as the public may wish where they make search for land titles and the mapped land of the town councils for administrative management (also cited in Bartley, Andersson, Jagger, and Van Laerhoven, 2008). This enables them to identify the land and the existing boundaries which can then be verified. However, because of the weak administrative and technical systems in the town councils, much of the land has been manually identified but not mapped which still makes it hard for the government to identify what belongs to them and private land. But the local and central government have identified much of the land they have to manage which they are yet to effectively govern and utilize.

The majority (61.6%) of respondents further indicated that the land information system is facilitating land use planning. Availability of information on the existing and state of the land enables the central government, district and town councils in that synergy to plan and uses like spatial infrastructures such as roads basing on the existing information on the land. The overall land use planning is by government at the local government level, but what is evident is that much as the plans could be in place, but they are not implemented as such there is limited land use planning or follow-up and supervision.

The results of the study on whether the land information system provides relevant information in support of land markets reveal that 57.6% of the respondents in Kakumiro and 56.1% in Igayaza Towns Councils shows that the available land maps at the town council headquarters, the available online (electronic) land maps and land titles from the department of Survey and Mapping of Uganda guide the potential purchasers in form of lease and total acquisition to know the location, proximity and nature of topography of the area so that they can seek for land they already know and can plan land use types accordingly. However, this is not very common among the majority of those who wish to acquire land, they investigate about the land, its ownership and feasibility, so they acquire it and use it as appropriately as they wish. The prime plots in the urban areas of Kakumiro town council and Igayaza Town Council have more expensive or highly priced land than the periphery. It emerged from key informant interviews that having information about land is crucial in decision what to do with it, how useful it can be, the suitable activities that you can undertake on it and how to get it and the terms under which it should be utilized.

The land information system was also considered to facilitate coordination of land use activities as indicated by the majority (74.4%) of respondents. Information is power, and actual power for better decision making; Information is important to indicate land availability and potential outcomes from it to effectively coordinate the land use patterns for instance where certain land use activities like construction of roads should be undertaken. On the contrary though, the information tends to be kept among the few in leadership because they can parcel out some land and get money from it, take it for their own expansion and business as well as utilizing it for their own good the proceeds from licenses which is evidence of corruption. Actually respondents noted that the information about land is available, but it is kept secret since land is a potential source of money for enrichment, hence the hoarded information can hardly help in land use planning and actions.

Fraud in land matters is common in Uganda, and particularly for Kakumiro and Igayaza town councils, may not be exceptions. The findings on whether the land information system reduces the cases of land theft revealed that 56.6% of the respondents acknowledged that some of the available and accessible information has helped the town council administration and individuals/families to identify and safeguard their land from getting grabbed because they have been able to keep records of its existence and extent which they can use to defend themselves even in courts of law or provide evidence to the buyers. But with dominance of the customary and freehold tenure system in the area, much of the information available on land is informal but is well cultivated and known in the realms of society which has helped in safeguarding land matters in the two town councils.

54.4% of the respondents revealed that information about land does not necessarily determine land use and designing, redesigning because much of the land uses was planned long before even the town councils became operational. In support, however, the land information system provides land by topography and extent so that for public benefit, they can plan for various activities on it which would reduce costs of adjusting use to meet the urban designs and demands.

The results of the study on whether land information system promotes efficiency of land management revealed that 56.0% of the respondents indicated that the available information on land is used to guide land use decision making for instance allocation to government programmes like model farming under Operation Wealth Creation, public education system, for constructions of spatial infrastructures, as well as the community for grazing, crop growing, tree planting and other land use activities. However, the land information is not available to all apart from those who dare to search for it, but when they get it, it is very beneficial to obtain and use existing land.

4.6. Land administration and urban growth: inferential statistics

This section presents inferential statistics on land administration and urban growth in Kakumiro district. The inferential statistics are presented objective by objective. For each objective, correlation results are presented to indicate the significance and strength of the relationship between the variables. This is followed with regression analysis results which indicate the significance and magnitude of effect of land administration and its dimensions on urban growth

4.6.1. Land dispute resolution and urban growth

Table 4.5: Correlation results for the relationship between land dispute resolution and urban growth

Correlations		URBAN_GROWTH	LAND_DISPUTE_RESOLUTION
URBAN_GROWTH	Pearson Correlation	1	.632**
	Sig. (2-tailed)		.000
	N	305	305
LAND_DISPUTE_RESOLUTION	Pearson Correlation	.632**	1
	Sig. (2-tailed)	.000	
	N	305	305

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

The correlation results in table above indicate a significant positive relationship between land dispute resolution and urban growth. This is because the p-value (0.000) for the person correlation coefficient (0.632) was less than 5% significance level. The statistics indicate that a positive statistically significant relationship between between land dispute resolution and urban growth.. In other words, proper land dispute resolutions is positively associated with enhanced urban growth. The analysis went further to establish the significance and magnitude of effect of land dispute resolution and urban growth.. Results are presented in table below

Table 4.6: Regression results for the effect of dispute resolution on urban growth

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632 ^a	.436	.421	.59137

a. Predictors: (Constant), LAND_DISPUTE_RESOLUTION

ANOVA ^a						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.126	1	12.126	34.672	.000 ^b
	Residual	10.492	30	.350		
	Total	22.617	31			

a. Dependent Variable: URBAN_GROWTH
b. Predictors: (Constant), LAND DISPUTE RESOLUTION

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.015	.520		-.029	.977
	LAND_DISPUTE_RESOLUTION	.760	.146	.632	5.888	.000

a. Dependent Variable: URBAN_GROWTH

The coefficient of determination (Adjusted R²) for the variation in urban growth explained by land dispute resolution was 0.421. This indicated that dispute resolution account for 42.1% of the variation in urban growth. It implies that the situation of urban growth in Kakumito District is partly explained by landdispute resolution.

Regarding the significance of the regression model or the significance in variation in urban growth accounted for by land dispute resolution, the p-value for the F-statistic was less than 5% significant level. This indicated that land dispute resolution had a significant effect on urban growth.

In terms of magnitude of effect, the b-coefficient was 0.632 indicating that proper land dispute resolution would enhance urban growth by 73% and vice versa. In other words promoting urban growth in Kakumiro district necessitate that proper district resolution measures are implemented. Such measures include; proper land titling, proper and lawful land demarcation, effectiveness and efficiency of courts of law in arbitrating and settling land conflicts in the area as well as proper handling of distribution of the deceased's wealth according to tradition. Failure to properly resolve disputes will significantly undermine urban growth in Kakumiro district.

4.6.2. Land information system and urban growth

Table 4.5: Correlation results for the relationship between land information system and urban growth

Correlations			
		URBAN_GROWTH	LAND_INFORMATION_SYSTEM
URBAN_GROWTH	Pearson Correlation	1	.514**
	Sig. (2-tailed)		.000
	N	305	305
LAND_INFORMATION_SYSTEM	Pearson Correlation	.514**	1
	Sig. (2-tailed)	.000	
	N	305	305

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

The p-value (0.000) for the person correlation coefficient (0.514) was less than 5% significance level. This correlation results indicated a significant positive relationship between land information system and urban growth. The statistics implied that functionality of the land information system was significantly and positively associated with urban growth. In terms of strength, the relationship was strong as indicated by the Pearson correlation coefficient of 0.514 which was above 0.5. The analysis proceeded to predict the effect of functionality of the land information system on urban growth.

Table 4.8: Regression results for the effect of the land information system on urban growth

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514 ^a	.28	.253	.68836

a. Predictors: (Constant), LAND_INFORMATION_SYSTEM

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.346	1	8.346	17.614	.000 ^b
	Residual	18.480	39	.474		
	Total	26.826	40			

a. Dependent Variable: URBAN_GROWTH
b. Predictors: (Constant), LAND_INFORMATION_SYSTEM

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.099	.446		2.465	.018
	expenditure_control_overall	.574	.137	.514	4.197	.000

a. Dependent Variable: URBAN_GROWTH

The coefficient of determination (Adjusted R²) for the variation in urban growth explained by the land information system was 0.253. This result implied that the land information system account for 25.3% of the variation in urban growth. This variation accounted for was lower than that explained by land dispute resolution. It means that the land information system accounts for a less variation in urban growth than land dispute resolution.

Regarding significance of the regression model or the significance in variation in urban growth explained by the land information system, the F-statistic was less than 5% significant level. This indicated that the land information system had a significant effect on urban growth. In terms of magnitude of effect, the b-coefficient was 0.514 indicating that having a fully functioning land information system would enhance urban growth by 51.4%. This is because, the land information system was reported to play key role in provide accurate information about location of parcels and their boundaries, facilitating land use planning, coordination of land use activities, reducing cases of land theft, reduced costs of land redesigning and easing land management. The are critical aspects of land administration which are wuite paramount to promote urban growth by ensocuraging investment in socio-economic infrascrtaure such as roads, schools, hospitals, businesses among others.

5. SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The study was designed and carried out to examine the effect of land administration on urban growth in Kakumiro and Igayaza Town Councils of Kakumiro District. Leveraging on the results presented and interpreted in the previous chapter, this chapter presents a summary of the findings, discussion, conclusions and recommendations.

5.2. Summary of the findings

5.2.1. Land dispute resolution and urban growth

Correlation results identified a strong positive and significant relationship between land dispute resolution and urban growth. Regression results confirmed that appropratet and proper dispute resolutuin through proper land titling, proper and lawful land demarcation, and propoer handling of land related cases will signifciantly enhance urbanization. Descriptive statistics and qualitative views of key informant reveled that despite the efforts by the district to resolve land related conflicts using measures such as land titling, implementation of the land act, and handling land conflicits, a number of challenges undermine effectiveness of the dispute resolution process. Sich challenges include; limited awareness and knoweledge about landadminsitration process and procedures, the beuracratc process of land registration, delated process of land registration, titling and other services, high costs of land registration, corruption, limited coordination, limited skills and limited fiunding for land administration services

5.2.2. Land information system and urban growth

Correlation results identified a strong positive and significant relationship between land information system and urban growth. Regression results confirmed that functionality of the land information system significantly affect urgban growth. Descriptive statistics and qualitative findings specifically revealed that the land information system provides accurate information about location of parcels and their boundaries, facilitates land use planning, coordination of land use activities, reduces

cases of land theft, reduces costs of land redesigning and eases land management which ultimately ensocurages investment in socio-economic infrastructure leading to urba growth. A number of challenges were reported to undermine effectiveness of the of the land information system with a negative impact on its functionality and urban growth.. Sich challenges include; limited awareness and knoweledge about landadminsitration process and procedures, the beuracratc process of land registration, delated process of land registration, titling and other services, high costs of land registration, corruption, limited coordination, limited skills and limited fiunding for land administration services in the district.

5.2.3. Land ownership type on urban growth in Kakumiro District

The study revealed that, respondents were aware that, there are presently four types of land tenure systems in Uganda also applicable to Kakumiro and Igayaza Town Councils including customary, mailo, freehold and leasehold in Kakumiro District. As shown in Table 4.2 respondents noted that leasehold is a system where land is held based on an agreement between lessor and the lessee. This tenure is not safe as terms and conditions can easily be manipulated and ownership revoked. Under customary systems, land is owned and disposed of under customary regulations. The land can be owned by an individual, a family or a community, and is the most dominant system in Kakumiro District.

5.3. Discussions

5.3.1. Land dispute resolution and urban growth

The study established a significant positive effect of land dispite resolution on urban growth. This finding suggest that propoer land registration, titling, demarcation, and handling of conflicts will enhance land security, attract investment, immigration and their by constibute towards urbanization. This finding is consistent with the argument of several other studies such as IFPRI (2016) and Elin & Lindberg (2018) which underscore the significance of land dispute resolutuin to developmet.

The study has gone further to identify challenges which undermine effective land registration, land

titling, demarcation. These challenges include; limited awareness and knowledge about land administration process and procedures, the bureaucratic process of land registration, delayed process of land registration, titling and other services, high costs of land registration, corruption, limited coordination, limited skills and limited funding for land administration services in the district among others. Similar challenges in land administration were reported by IFPRI (2016) in the context of land administration in Nigeria including; hierarchical and outdated organizational structures, bureaucratic processes, and high costs and fees for service.

Challenges related to land administration hinder land registration and land titling. For example, lack of proper title makes it difficult for people to use their land as collateral, which in turn reduces their access to finance for investment hence hindering urbanization (IFPRI, 2016). The failure to register property ownership also has consequences for governance, growth, and development. The long and expensive land registration process damages the business environment and disproportionately affects women and low-income groups.

The challenge of inefficiency in terms of a very long time taken to acquire land administration services is compounded by very low levels of education and limited knowledge about the land registration process or procedure. The long process of land registration increased the cost of land registration through back and forth visits to the land offices and paved way for corruption. Similarly, a study by IFPRI (2016) revealed that payments for land administration services informally were so high in the land registration process which indicated incidences of corruption through requests for payment to expedite the highly bureaucratic land administration processes compounded by limited knowledge on the process and requirements from the beneficiaries side.

Regarding awareness and knowledge, the study findings revealed that clients seeking land administration services had limited awareness of the mechanisms to express their low level of dissatisfaction with the process and provide public feedback to the land administration service providers. They were also not aware of their rights. Likewise, the involvement of land service providers in dispute resolution activities was limited. Similar experiences were reported in Nigeria (IFPRI, 2016) and Rwanda (Elin and Lindberg, 2018). For example experience in Nigeria indicated that the beneficiaries had limited awareness about and access to guidelines for land administration particularly for processes like land registration, demarcation etc (IFPRI, 2016).

The town council faces a problem of inadequate funding which constrained efficiency and effectiveness in providing land administration services. In addition, the district faces challenges of lack of the needed technical skill to perform all land administration functions adequately.

The challenges of delays in accessing land administration services particularly land registering, titling and demarcation as well as resolving land conflicts by courts of law can be attributed to limited coordination, limited skills and limited funding for land administration services in the district. For example, limited coordination between the different actors in land administration was reported to curtail efficiency in flow of information and approvals of clients' requests. Similar experiences were reported in Nigeria and Rwanda. In Nigeria specifically, the IFPRI (2016), reported that the most common coordination were for GIS registry issues. Limited cooperation existed between offices for the other issues examined, including Systematic Land Tenure Regularization and land use allocation and planning, however.

The demarcations are determined to verify the size of land one owns, and to fix the boundaries well, there are instances when the courts of law consult with the local councils and the elders in the area. Related to this, Kobusingye (2010) pointed out that the legal land demarcations often are meant to augment the agreements signed by the local councils or in land transfers for titles. This guarantees ownership and eliminates conflicts as it is intended, and for those whose land is well fixed, they tend develop it without any delays and repercussions thus bringing about developments as being seen in both Kakumiro and Igayaza Towns Councils, but more registered in Kakumiro as the most attractive and administrative centre of Kakumiro District, unlike Igayaza which is some distance away.

5.3.2. Land information system and urban growth

The study established a significant positive effect of the land information system on urban growth. This finding suggest that a properly functioning land information system will improve land management and administration of land related matters, attract investment, immigration and their by contribute towards urbanization. This finding is consistent with the argument of several other studies such as IFPRI (2016) and Elin & Lindberg (2018) which underscore the significance of land dispute resolution to development. Molund and Vestin (2014) identified similar studies in the context of land administration in Botswana. The purpose of the study was to

describe and identify the land related issues and related disputes that could be in two selected peri-urban areas.

However findings from the study revealed that despite its existence and functionality, the land information system is inefficient and subject to manipulation, hence capable of causing land fraud. The inefficiency of the land information system was partly explained by unreliable internet and limited knowledge of the clients to use the information system. Consequently, application for land titling and registration is done by direct contact to submit hard copies of different forms for their land registration. Online means of communicating with land administration agencies was very limited. Communication via a third-party was also very restricted. This means contacting land administration institutions was very expensive and quite cumbersome. Similar findings are reported by a similar study in the context of the land administration challenges in Nigeria (IFPRI, 2016).

Manipulation of the land information system by self-interest individuals with an aim of committing fraud for their personal benefits undermines objectivity and effectiveness of the land information system. It undermines the key role data can play to solving land related conflicts and making rational decisions in management and administration of land. Todorovski, Manirakiza, Zevenbergen and Boerboom (2018) shares similar arguments in their article on how land records can solve disputes about land ownership and boundaries in support of land administration, this with focus on post-conflict buildings in Rwanda. Further, it is established by Todorovski et al. (2018) that records containing information that concern ownership, value and land use. The definition of a good land record when it comes to land use, is described as when the land use works as an ensure in order to gain an efficient resource management. The conclusion in this article claimed that a good management land record has a positive input in supporting Rwanda in resolution processes in land questions that concerns post-conflict related buildings and land use considerations (Todorovski et al 2018). However, when subjected to manipulation, it can be argued that the role of records to solving land conflicts will be highly undermined. This is the case in the context of the findings in this study in Kakumiro district.

5.4. Recommendations

The management and leadership of the land administration process in Kakumiro district need to develop easily usable land registration guidelines and disseminate them widely in a bid to address the

awareness and knowledge gaps about the land administration process.

There is need to change public attitudes to corruption and fraud. Some authorities publicise the risk of land fraud and inform property owners about what they can do to minimize this risk. Land Registry can do this on its website or through sensitization campaigns over social media. It would equip the public with knowledge about fraudsters and the tactics they use such that they can be avoided. The sensitization should also target to create an anti-fraud culture, in which all staff understands the standards of conduct required as well as their personal responsibility in preventing fraud (and the importance of controls) is vital in the combat of external fraud.

The management and leadership of the land administration process in Kakumiro district need to strengthen for efficient and effective delivery of land administration services. This can be done through lobbying council for prioritization and allocation of more budgetary resources in terms of human financial, facilities to boost capacity of the land administration structures and employees. Training sessions, group meetings, posters, employee newsletters, payroll bulletins or awareness pages on internal websites are some of the means that can be exploited to build awareness, knowledge and skills of all stakeholders in land administration.

Communication should be ongoing and a combination of methods is usually most successful. Some methods authorities have used to raise awareness include:

- Training in the detection and prevention of fraud for all personnel involved in the registration process.
- Formal training for technical and administrative staff, tailored to the type of work on which they are employed.
- Regular validation of employees' qualifications.
- Some awareness training for all staff.

Strengthening internal controls and checks. Overall responsibility for the authority's system of internal control normally lies with its board of directors, or equivalent governing group. It is important that the effectiveness of controls is continually reviewed. The board should maintain a sound system of internal control to safeguard stakeholders' interests in property and the authority's assets. This should include procedures designed to minimise the risk of fraud. The board should satisfy itself that the system is effective and report that it has undertaken such a review to its stakeholders.

Imposing sanctions. Where investigations find evidence of fraud, authorities will usually seek to impose some form of sanction. The purpose is to deter others from carrying out similar types of fraud,

recover the money defrauded (especially where the authority operates a compensation scheme) and punish the fraudster by prosecuting them criminally in the courts. Some authorities have published their approach to deter potential fraudsters and ensure that a consistent approach is taken. For instance, HM Land Registry, the authority for England and Wales, publishes the fact that it has an anti-fraud strategy and that it works closely with the police and other agencies to reduce the risk of property fraud. Authorities need to consider whether the level and range of sanctions imposed on fraudsters provide a sufficient deterrent

5.5. Conclusions

5.5.1. Land dispute resolution and urban growth

The first objective of the study was to determine the effect of land dispute resolution on urban growth in Kakumiro District. Based on inferential statistical results, the hypothesis that “*Land dispute resolution significantly affect urban growth*” was accepted. Hence the study concludes that land dispute resolution significantly affect urban growth. In other words land dispute resolution is critical to stimulating urban growth. The study however identified gap in land dispute resolution which undermine urban growth.

5.5.2. Land dispute resolution and urban growth

The second objective of the study was to determine the effect of the land information system on urban growth in Kakumiro District. Based on inferential statistical results, the hypothesis that “*Land information system significantly affect urban growth*” was accepted. Hence the study concludes that functionality of the land information system significantly affect urban growth. In other words the land information system is quite paramount to enhancing urban growth. The study however identified gap in the land information system which undermine urban growth.

5.6. Recommendations of the study

The study recommends the following in order to enhance urban growth through proper land administration in Kakumiro District,;

5.6.1. Recommendations to land dispute resolution on urban growth

For effective urban planning, Kakumiro District urban area authority must ensure that physical infrastructures are set up according to plan. Indeed with proper land demarcation, it becomes easy to advise and apportion land uses in the infrastructures for example access roads, sewerage and waters systems, public utilities like health facilities, education centres and authorities would advise the developers on the best plans to have for each area.

The government does not own much of the land; this has slowed out most of government projects. The study recommends the government to purchase a lot of land from individuals and families or organizations underutilizing the resource. This will enable local government to easily develop areas at lower costs.

There is also need for compulsory acquisition of land by Urban Authorities especially idle land in Town Councils in order to propel infrastructure development. A time frame under which unutilized land by owners should be put in place by Act of Parliament.

5.6.2. Recommendations to Land information system on urban growth in Kakumiro District

Kakumiro district should strengthen the operating land information system to deter and protect from misuse. This is because such information on land is used to guide in decision making on land use, for instance in allocation of government developments even programmes like model farming under Operation Wealth Creation, public education system, constructions of spatial infrastructures, as well as the community for grazing, crop growing, tree planting and other land use activities.

A special land fund for urban councils to compensate the affected private developers should be created through MoLHUD while Uganda Land Commission should issue land titles to Urban Councils before any acquisition and urban development can take place.

An independent Ministry of Urban Development should be created to enable proper management of contemporary urban development issues.

REFERENCES

- [1] Abercombie, N., Hill S., and Turner, B. (2018). Dictionary of Sociology, Penguin Books, p.212
- [2] Alcock, R.; Hornby, D. (2017). Traditional Land Matters—A Look into Land Administration in Tribal Areas in KwaZulu-Natal. Available online: <https://www.researchgate.net/publication/267260749%0ATraditional> (accessed on 18 May 2017)
- [3] Amanor, K.S. (2012). “Land Governance in Africa: How historical context has shaped key contemporary issues relating to policy on land”. Framing the Debate Series, no. 1. ILC, Rome. ISBN: 978-92-95093-72-0. Retrieved from. <https://d3o3cb4w253x5q.cloudfront.net/media/documents/FramingtheDebateLandGovernanceAfrica.pdf>

- [4] Amin, A. (2005). *Social science research, conception, methodology and analysis*: Kampala
- [5] Amin, S. (1972) "Underdevelopment and Dependence in Black Africa: Origins and contemporary forms", *Journal of Modern African Studies*, vol.10 (4): 503-524.
- [6] Arko-Adjei, A. (2011). *Adapting land administration to the institutional framework of customary tenure: The case of peri-urban Ghana*. Ph.D. Thesis, Delft University of Technology, Delft, The Netherlands, 2011. [Google Scholar]
- [7] Bartley, T., K. Andersson, P. Jagger, and F. Van Laerhoven (2008) *The Contribution of Institutional Theories to Explaining Decentralization of Natural Resources Governance, Society and Natural Resources* 21: 160–174. [Taylor & Francis Online],
- [8] Bhagat, R. B. and Mohanty, S. (2019). Emerging pattern of urbanization and the contribution of migration in urban growth in India. *Asian Population Studies* 5 (1). DOI: 10.1080/17441730902790024.
- [9] Bradbrooke, Maccallum & Moore, (1996). *Australian Property Law: Cases & Materials*, LBC Casebooks, Sydney.
- [10] Bruce, J. (1993). Do Indigenous Tenure Systems Constrain Agricultural Development? In *Land in African Agrarian Systems*; Basset, T., Crummey, D., Eds.; The University of Wisconsin Press: Madison, WI, USA, 1993; pp. 35–56.
- [11] Bruce, J. (1993). Do Indigenous Tenure Systems Constrain Agricultural Development? In *Land in African Agrarian Systems*; Basset, T., Crummey, D., Eds.; The University of Wisconsin Press: Madison, WI, USA, 1993; pp. 35–56. [Google Scholar]
- [12] Bruce, J.; Migot-Adholla, S.; Atherton, J. (1994). The findings and their policy Implications: Institutional adaptation or replacement. In *Searching for Land Tenure Security in Africa*; Bruce, J., Migot-Adholla, S., Eds.; Kendall/Hunt: Washington, DC, USA, 1994; pp. 251–265. [Google Scholar]
- [13] Burns, L. S. (2018). The metropolitan population of United States: Historical and emerging trends. In *The Dynamic of Urban Growth*. Klaasen, L. H., Molle, W. T. M. and Paelinck, J. H. P. (Eds.). *Proceeding*. St. Martin's Press New York, N. Y., United States. Pp. 197-224
- [14] Burns, T. (2007). *Land Administration Reform: Indicators of Success and Future Challenges. Agriculture and Rural Development; Discussion Paper 37*. World Bank, retrieved from: <http://siteresources.worldbank.org/EXTARD/Resources/ARDDDiscussionPaper37.pdf>. Accessed on the 9th January, 2020.
- [15] Carfield, M. (2011) *Land Justice in Uganda: Preserving Peace, Promoting Integration; In Working With Customary Justice Systems: Post-Conflict and Fragile States*, edited by E. Harper, 1–35, Rome: International Development Law Organization (ILDO).
- [16] Castilla (ed.), *The New Global Frontier. Urbanization, Poverty and Environment in the 21st Century*. London: Earthscan, 1-13.
- [17] Chanock, M. (1991). *Paradigms, Policies and Property: A review of the customary law of land tenure*. In *Law in Colonial Africa*; Mann, K., Roberts, R., Eds.; Heinemann Educational Books, Inc.: Portsmouth, UK, 1991; ISBN 0-85255-602-0. [Google Scholar]
- [18] Chanock, M. (2001). *The Making of South African Legal Culture, 1902–1936: Fear, Favour and Prejudice*; Cambridge University Press: Cambridge, UK, 2001; ISBN 0521791561. [Google Scholar]
- [19] Chenery, H. B., and Taylor, L. (2018). Development patterns: among countries and over time. *The Review of Economics and Statistics* 50: 391–416. DOI: 10.2307/1926806
- [20] Cheshire, P.C. (2015). A New Phase of Urban Growth in Western Europe? The evidence for the 1980s. *Urban Studies* 32 (7). Pp. 1045-63.
- [21] Claassens, A. (2008). Power, accountability and apartheid borders: The impact of recent laws on struggles over land rights. In *Land, Power & Custom: Controversies Generated by South Africa's Communal Land Rights Act*; Claassens, A., Cousins, B., Eds.; UCT Press: Cape Town, South Africa, 2008; pp. 262–292. [Google Scholar]
- [22] Clarissa A, (2003). *Comparative Analysis of Land Administration Systems: African Review. With special reference to Mozambique, Uganda, Namibia, Ghana, South Africa*. Work Undertaken For the World Bank, Funded By DFID

- [23] Darin-Drabkin, H. (2017). Land policy and Urban Growth. Pergamon Press.
- [24] Davis, K. (2016). Urbanization in India: past and future. In India's urban future. Turner, R. (ed.). University of California Press, Berkeley, CA. pp. 3-26
- [25] de Soto, H. (2000). The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else; Basic Books: New York, NY, USA, 2000. [Google Scholar]
- [26] Deininger, K.W., and R. Castagnini (2006) Incidence and Impact of Land Conflict in Uganda, Journal of Economic Behavior and Organization 60: 321–345.
- [27] Delius, P. (2008). Contested terrain: Land rights and chiefly power in historical perspective. In Land, Power & Custom: Controversies Generated by South Africa's Communal Land Rights Act; Claassens, A., Cousins, B., Eds.; UCT Press: Cape Town, South Africa, 2008; pp. 211–237. [Google Scholar]
- [28] DLA (1997). White paper on South African land policy; Department of Land Affairs (DLA): Pretoria, South Africa, 1997.
- [29] Eck, K. 2014. "The Law of the Land: Communal Conflict and Legal Authority." Journal of Peace Research 51 (4): 441–454. [Crossref], [Web of Science ®], [Google Scholar]
- [30] Enemark, S, (1997). "Evaluation of the cadastral reform in Denmark - Training the Old Lady for the Skateboard", in Enemark, S (ed), Concepts of Cadastral Systems: General Overview and Examples from Countries throughout the World, Aalborg University, Denmark, June 1997.
- [31] GoU. 1998. The Land Act Cap. 227 Laws of Uganda, Entebbe: Uganda Government Printing and Publishing Corporation.
- [32] GoU. 2013. The Uganda National Land Policy. Kampala: Ministry of Lands, Housing and Urban Development. [Google Scholar]
- [33] Gravetter, F. J & Forzano, L. B. (2011). "Research Methods for the Behavioural Sciences" Cengage Learning p.146
- [34] Green, E. (2008) District Creation and Decentralization in Uganda; Crisis State Working Papers Series No. 24, London: Destin LSE
- [35] Henderson, V. (2015). The urbanization process and economic growth: The so-what question. Journal of Economic Growth 8. Pp. 47–71
- [36] Honjo, M. (2017). Urbanization and Regional Development. UNCRD. Nagoya.
- [37] Hornby, D.; Royston, L.; Kingwill, R. (2017). Cousins, B. Introduction: Tenure practices, concepts and theories in South Africa. In Untitled: Securing Land Tenure in Urban and Rural South Africa; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 1–43. [Google Scholar]
- [38] Hornby, D.; Royston, L.; Kingwill, R.; Cousins, B. (2017). Introduction: Tenure practices, concepts and theories in South Africa. In Untitled: Securing Land Tenure in Urban and Rural South Africa; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 1–43
- [39] Hull, S., Babalola, K & Whittal, J. (2019). Theories of Land Reform and Their Impact on Land Reform Success in Southern Africa. Land 2019, 8(11), 172; <https://doi.org/10.3390/land8110172>. Retrieved from: <https://www.mdpi.com/2073-445X/8/11/172/htm>. Accessed 9th January, 2020.
- [40] Jansen, J. C. and Paelinck, J. H. P. (2014). The urbanization of phenomenon in the process of development: some statistical evidence. In The Dynamic of Urban Growth. Klaasen, L. H., Molle, W. T. M. and Paelinck, J. H. P. (Eds.). Proceeding. St. martin's Press New York, N. Y., United States. Pp. 31-46.
- [41] Kaida, Y. (2015). Integrated rural development and land use. In Proceeding of International Symposium: Rural Land Use in Asian Countries, October 7-8, 1992, Japan National Committee for Rural Planning, pp. 220-221
- [42] Karoliena, V. et al (2012). Urban growth of Kampala, Uganda: Pattern analysis and scenario development. Retrieved from: https://www.researchgate.net/publication/233415115_Urban_growth_of_Kampala_Uganda_Pattern_analysis_and_scenario_development. Accessed on 16th January, 2020.
- [43] Kingwill, R. (2011). Lost in translation: Family title in Fingo village, Grahamstown, Eastern Cape. Acta Juridica Plur. Dev. Stud. Access

- Prop. Africa 2011, 2011, 210–237. [Google Scholar]
- [44] Kingwill, R.; Hornby, D.; Royston, L.; Cousins, B. (2017). Conclusion—Beyond “the Edifice”. In *Untitled: Securing Land Tenure in Urban and Rural South Africa*; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 388–430. [Google Scholar]
- [45] Kobusingye, D.N. (2010) The Efficacy of Creating New Districts as a Channel of Service Delivery in Uganda: A Case Study of Kayunga District.” Unpublished Master of Arts in Development Studies Dissertation, Mbarara University of Science and Technology
- [46] Lahiff, E. (2007). ‘Willing buyer, willing seller’: South Africa’s failed experiment in market-led agrarian reform. *Third World Q.* 2007, 28, 1577–1597. [Google Scholar] [CrossRef]
- [47] Land (2020). Retrieved from: <https://www.worldbank.org/en/topic/land>
- [48] Lavadenz, I., J. Sanjak, G. Barnes, and G. Adlington. (2002). “Concept Paper and Annexes—Comparative Study of Land Administration Systems.” Unpublished. World Bank, Washington, DC. January.
- [49] Lieberman, D, (1995). “Property, commerce and the common law: Attitudes to legal change in the 18th century”, in Brewer, J & Staves, S (ed), *Early Modern Conceptions of Property*, Routledge, London.
- [50] Lombard, M. (2012). Land tenure and urban conflict: A review of the literature. Global Urban Research Centre Working Paper #8. The University of Manchester, M13 9pl United Kingdom
- [51] Martine, G., G. McGranahan, M. Montgomery and R. FernándezCastilla (2008) 'Introduction'. In G. Martine, G. McGranahan, M. Montgomery and R. Fernández
- [52] Mayhew, S (2017). *Oxford Dictionary of Geography* (2nd edition). Oxford/New York: Oxford University Press.
- [53] Mazumdar, D. (2017). Rural-urban migration in Developing Countries. In *Handbook of Regional Economics*, 2, pp. 1097- 1128.
- [54] McDonnell, M.J. and Pickett, S.T.A. (1990) rural gradients: An unexploited opportunity for ecology. *Ecology* 71, 1232–1236
- [55] Megarry & Wade, (1984). *The Law of Real Property*, 5th edition, Stevens & Sons Ltd, London.
- [56] Miles, M.B. & Huberman, M. A. (1994). *Qualitative Data Analysis: An expanded source book*. 2nd edition, Beverly Hills, Sage.
- [57] Ministry of lands, housing and urban development (2013). *The Uganda national land policy*. Retrieved from: <http://extwprlegs1.fao.org/docs/pdf/uga163420.pdf>. Accessed on 7th January, 2020
- [58] Molen, P. V (2002). *Land Administration Theory: Thinking in Terms of Migration of Systems*. The Netherlands. Retrieved from: https://www.fig.net/resources/proceedings/fig_proceedings/fig_2002/Ts7-5/TS7_5_vandermolen.pdf
- [59] MoLHUD, & UNDP. (2008). *National Slum Upgrading Strategy and Action Plan*, . Kampala: Republic of Uganda.
- [60] Muinde, D. K. (2013). *Assessing the effects of land tenure on urban developments in Kampala*. Thesis submitted to the Faculty of Geo-Information Science and Earth Observation of the University of Twente in partial fulfillment of the requirements for the degree of Master of Science in Geo-information Science and Earth Observation. Netherlands
- [61] Mwebaza, E. (n.d). *A Historical Perspective of the Land Problem in Uganda*. Retrieved from: https://hrapf.org/images/researchpapers/a_historical_perspective_of_the_land_problem_in_uganda.pdf. Accessed on 7th January, 2020
- [62] Nakatudde, R. (2010). *Real estate development, land tenure and land value dynamics in the peri-urban areas of greater Kampala city*. A dissertation submitted to the school of graduate studies in partial fulfillment of the requirements for the award of Master of Arts in land use and regional development planning of Makerere University
- [63] Nkwae, B. (2006). *Conceptual Framework For Modelling and Analysing Periurban Land Problems in Southern Africa*. Ph.D. Thesis, University of New Brunswick, Fredericton, NB, Canada, 2006. [Google Scholar]
- [64] OECD-CDRF]. *Organisation for Economic Co-operation and Development – China Development Research Foundation*. (2019). *Trends in urbanization and urban policies in*

- OECD countries: what lessons for China?. Retrieved from: <http://www.oecd.org/urban/roundtable/45159707.pdf>
- [65] Okoth-Ogendo, H.W.O. (2002). The Tragic African Commons: A Century of Expropriation, Suppression and Subversion; Land reform and agrarian change in southern Africa, Occasional paper series; University of the Western Cape: Cape Town, South Africa, 2002; Volume 24. [Google Scholar]
- [66] Okuku, A.J. (2006) The Land Act (1998) and Land Tenure Reform in Uganda, Africa Development XXXI (1): 1–26
- [67] Olsen, C & Marie, D. M. (2004). Cross-Sectional Study Design and Data Analysis. College Entrance Examination Board.
- [68] Platteau, J. (2000). The evolutionary theory of land rights as applied to sub-Saharan Africa: A critical assessment. *Dev. Change* 1996, 27, 29–86. [Google Scholar] [CrossRef]
- [69] Royston, L. (2017). “Entanglement”—A case study of changing tenure and social relations in inner-city buildings in Johannesburg. In *Untitled: Securing Land Tenure in Urban and Rural South Africa*; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 196–234. [Google Scholar]
- [70] Royston, L.; Abrahams, G.; Hornby, D.; Mtshiyi, L. (2015). *Informal Settlement Upgrading: Incrementally upgrading Tenure under Customary Administration*; Housing Development Agency: Johannesburg, South Africa, 2015. [Google Scholar]
- [71] Runde, D. (2015). Urbanization will change the (developing) world. Retrieved from: <http://www.forbes.com/sites/danielrunde/2015/02/24/urbanization-development-opportunity/>
- [72] Satterthwaite, D. (2009) 'Getting land for housing; what strategies work for low income groups?', *Environment and Urbanization* 21: 299-307.
- [73] Schteingart, M. (1987) 'Expansión urbana, conflictos sociales y deterioros ambiental en la ciudad de México. El caso de Ajusco', *Estudios Demográficos y Urbanos* 2(3): 449-477.
- [74] Simpson, SR, (1976). *Land Law and Registration*, Cambridge University Press.
- [75] Ting L., Williamson I. P., Grant, D. Parker J. R. (1999). Understanding the Evolution of Land Administration Systems in Some Common Law Countries. *Survey Review* 35(272):83-102. https://www.researchgate.net/publication/233552358_Understanding_the_evolution_of_land_administration_systems_in_some_common_law_countries
- [76] Toynbee, A, (1884). *Lectures on the Industrial Revolution in England*, ChIII: “England in 1760: Agriculture”, Internet at “http://www.berkeleycentral.com/DrPseudocryonym/TOYNBEE_Industrial_Revolution.html”.
- [77] Ubink, J.M., Hoekema, A.J., and Assies, W.L. (eds.) (2009) *Legalising Land Rights: Local practices, state responses and tenure security in Africa, Asia and Latin America*, Leiden: Leiden University Press.
- [78] Ubink, J.M.; Quan, J.F. (2008). How to combine tradition and modernity? Regulating customary land management in Ghana. *Land use policy* 2008, 25, 198–213. [Google Scholar] [CrossRef]
- [79] UBOS (2014). *National Population and Housing Census*
- [80] UN (2009). *Land and Conflict: A Handbook for Humanitarians*; Draft September 2009
- [81] UN/FIG. (1999). *Report of the Workshop on Land Tenure and Cadastral Infrastructures for Sustainable Development* Bathurst, Australia. October 18–22. <http://www.sli.unimelb.edu.au/UNConf99/sessions/session1/bathurstdec.pdf>
- [82] United Nation (2014). *World Urbanization Prospects. The 2014 Revision*. ISBN: 978-92-1-151517-6.
- [83] Wabineno, L. M, Musinguzi, M, & Ekback, P. (2011). *Land Information Management in Uganda: Current Status*. Retrieved from: <https://cedat.mak.ac.ug/publications/land-information-management-in-uganda-current-status/>
- [84] Wallerstein, I. (1974) “Three Stages of African Involvement in the World Economy”, in P.C.W. Gutkind and I. Wallerstein, *Political Economy of Contemporary Africa*, pp.30-57.
- [85] Wehrmann, B. (2017). *Understanding, preventing and solving land conflicts: A practical guide and toolbox*. Deutsche Gesellschaft für