

**INFORMAL MECHANISMS OF LAND DELIVERY AND THEIR IMPACT ON
HOUSING AND THE BUILT ENVIRONMENT IN PERI-URBAN KISUMU, KENYA**

BY

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university or for or any other award.

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DEDICATION

I dedicate this document to my wife, Faith Dama and my children Leah, Silas and Nnena, for the encouragement, understanding and hope for the future. In memory of my father Mr. Silas Ragalo who instilled in me a spirit of self-belief and to my mother Masliana Atieno, for believing in the value of education as a transformative tool in the society.

ABSTRACT

Kisumu's formal channels of land and housing delivery are largely malfunctioning. This has forced residents to seek buildable land through 'informal' channels on the city's periphery, resulting into unplanned and rapid conversion of peri-urban agricultural land into residential property. While this is currently the predominant mode of housing production and peri-urban transformation in Kisumu, there is hardly any detailed analysis on the actual operations of the informal mechanisms of land delivery in peri-urban Kisumu. The study sought to fill this gap by looking into how the informal land market actually works in Kisumu. The main aim was to examine the informal mechanisms of land delivery (IMLD) and their impact on housing and the resultant built environment. Specifically, the study sought to examine the actors and operations of the informal land market in peri-urban Kisumu; to assess the impact of informal mechanisms of land delivery on housing development in peri-urban Kisumu; and to assess the impact of informal mechanisms of land delivery on the spatial character of the emergent built environment in peri-urban Kisumu. The research employed a case study design, with the empirical focus being Kisumu Central Location, given the massive spatial transformation currently underway there. Both quantitative, qualitative and spatial methods of data collection were employed. Household survey, focus group discussions (FGDs), field-based observation and mapping, and key-informant interviews were used to gather data. Sample frame of 984 households was developed, from which a sample size of 169 households was drawn by snowball sampling technique. The FGDs targeted elders, women and youths from the constituent sub-locations; key informant interviews focused on public officials, built environment professionals and developers active in the area; while field-based observation and GIS techniques were used to collect data on the spatial character of the peri-urban built environment. The study results were presented in statistical summaries, tables, charts and graphs integrated with thematic narratives, photographs and maps. The study established that informal land market involves various actors and both in the formal and informal realms, all of whom play different – if complementary – roles in land assembly and development. IMLD have negatively affected the adequacy of housing, while also producing patchy development. There is also fragmentation of land sizes due to rapid subdivisions that has negatively affected livelihoods of the native households and even displaced some. The study recommends valorization and realignment of both formal and informal processes of land assembly and development, both in policy and practice, to ensure sustainable peri-urban development in Kisumu.

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LIST OF ACRONYMS

CBOs	Community Based Organizations
CCK	County Council of Kisumu
CGK	County Government of Kisumu
CDS	City Development Strategy
FGDs	Focus Group Discussions
GOK	Government of Kenya
KII	Key Informant Interviews
NGOs	Non-Governmental organizations
SPSS	Statistical Package for Social Scientists
UN-HABITAT	United Nations Human Settlements Program
IMLD	Informal Mechanisms of Land delivery
CIDPs	County Integrated development plans
NEMA	National Environmental Management Authority
LPDP	Local Physical Development Plan
NCA	National Construction Authority
PSBO	Planning-Servicing-Building –Occupation’ model of land development

OPERATIONAL DEFINITION OF TERMS

Peri-urban area: Spatially, this is the transition zone between the fully urbanized core and the fringe areas of the city, which was predominantly in agricultural use but are gradually turning into urban land use.

Formal land market: This refers to the official land market system operating within the realms of government-sanctioned land delivery, regulations, planning and land use conditions, with clearly laid down procedures anchored in the state laws.

Informal land market: Informal land markets are those operating outside the formal public/market domain. They may not be officially recognized by law or not officially registered in the government's systems. In this study, the term 'informal' land market is used to describe a variety of urban land transactions, exchanges and transfers that are yet to be recognized by the state as legal at some point, but which are nevertheless socially accepted as legitimate by a variety of urban actors.

Institution: A set of rules and procedures that govern the conduct of social, economic and political relations between groups and individual actors, with respect to resources.

Formal institution: Procedures and rules of the game that are explicitly drawn up and defined in a particular state law or regulation governing urban land access, assembly, use and development.

Informal institution: Procedures and rules embedded in social norms and practices, including customary rules and traditions. In this study, informal channels, informal institutions or informal systems have been used in some instances to refer to informal mechanisms of land delivery.

Mechanism: This is used in this study to refer to the practices and processes of land delivery.

Land delivery: Mechanisms employed in land access, assembly and use for urban development.

Housing: A multi-dimensional product that includes physical shelter, the socio-economic and cultural dynamics, related services and infrastructure and the inputs.

Housing Development: Is used in this study to refer to the processes, in coming up with the final output i.e. housing as a product

Built environment: refers to activities that culminate in production and utilization of houses and other built forms whether for residential or commercial purposes. In this study, it is used to refer to the human-made space in which people live, work, and recreate on a day-to-day basis and the associated spatial transformations.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Ordinarily, urban land and housing markets are supposed to efficiently, allocate land and housing resources between suppliers and demanders. Similarly, housing supply should reasonably match the housing demands of households in terms of price, location, and quality attributes (Dowall, 2006). This is however seldom the case in many cities as has been repeatedly reported (Vermeulen & Rouwendal, 2007, Dowall & Ellis, 2009). While orderly urban development should proceed on the premise of buildable land supplied by formal mechanisms of land delivery, in practice, informal land and housing delivery is often the most predominant form of urban development (Leduka, 2006). Nevertheless, informal urbanism is associated with a number of challenges, including lack of infrastructure, lack of secure land titles, poor physical condition of built structures, and an irregular settlement layout (UN-Habitat, 2011). In Brazil for instance, urban housing production relies predominantly on informal housing construction, a situation that is largely attributed to the failure of formal urban housing and land markets to generate sufficient supply at affordable prices (Dowall, 2006).

Access to serviced land for housing as one of the major problems facing cities of the global South. He goes further to talk of the urban poor or the lower middle-income group having to step outside the formal land market in order to gain access to land and housing, invariably through informal mechanisms of land delivery,(Amaoko ,Patrick B, 2014).

In Africa, the continued growth and expansion of cities has increased the gap between the supply and demand of urban land and housing. Housing developed and sold through the formal market is simply not affordable for the vast majority of African urban residents. It is unaffordable, not just -because incomes are too low, but also because the key components

affecting housing cost and access are too expensive (UN-Habitat, 2011). Urban land for housing development is increasingly scarce, poorly regulated and therefore expensive. The high cost of housing is often due to high land prices, which are themselves a result of inadequate land policies that constrict the supply of serviced land for housing development (UN-Habitat, 2011).

Various researchers in different African cities (UN-Habitat 2012; Kombe, 1995; Kombe and Kreibich, 2000; Payne, 2002b; UN-HABITAT, 2003; UNDP, 2005) have, reiterated that formal land delivery has been hampered by high planning standards, corruption and costly formal procedures of assembling and registering land. All these have worked to exclude many people from the formal system of urban land access. Consequently, informal land delivery mechanisms have sprung up to fill this deficit in land supply, catering specifically for the needs of the urban poor and low-income groups.

In practice, most land for urban development, especially those occupied by the poor, is supplied and developed outside state regulatory frameworks. The alternative (informal) land supply system that has evolved involves activities such as land acquisition, transfer, subdivision, land sale transactions and the management of relations between the various actors involved in the process (Nkurunziza, 2007). Informal land delivery and housing construction is, therefore, the prevailing mode of developing former agricultural land in the urban periphery.

It also features in the densification of the already built-up core in most cities in sub-Saharan Africa (Akunnaya *et al*, 2018). That informal mechanisms of land delivery are vibrant is manifest in the proliferation of informal settlements that provide shelter opportunities for the urban poor, albeit outside the framework of formally sanctioned city planning and development.

Despite being regarded as informal by the authorities, studies have increasingly shown that these processes have continued to enjoy a high degree of social legitimacy among the users, particularly in the absence of affordable formal options (Kombe, 1995; Kombe and Kreibich, 2000; Payne, 2002b; UN-HABITAT, 2003; UNDP, 2005). Nevertheless, Kaitilla (1993) asserts that such development (under informal mechanisms) does not proceed in an orderly manner, making planning objectives of convenience and efficiency unattainable. Consequently, such development proceeds without service provision and infrastructure development in the peri-urban zone.

Access to affordable land is identified as a key factor-influencing housing development in urban Kenya (Kenya, Republic of, 2013). Yet currently, only a few privileged individuals and corporate sector housing developers, who wield political and economic power, have systematic access to urban land, whether through government allocations or in the formal land market. It is therefore not difficult to see that the struggle for land and the inability of the average income earner to gain access to urban land for housing development will continue to be a major challenge in the country (Odum & Ibem, 2011).

Kenya's urban population has increased from (5.4 million) in 1999 to (27.5 million) in 2019 and is expected to reach the 50% mark by the year 2030 (World Population Prospects, 2010). This rapid growth is happening against the backdrop of a dwindling supply of planned land and housing in the urban areas. Therefore, many urban residents are increasingly becoming unable to access decent and affordable housing in locations commensurate with their lifestyles and livelihood pursuits. Syagga (2009) asserts that, acquiring land through the formal system is rather cumbersome and expensive for most urban dwellers. To put this into perspective, less than 10% of the land demand for housing is met by the formal supply system, leaving the majority to rely on the (alternative) informal system for accessing land (Syagga, 2001). The informal system is preferred because it is simple, well understood, low-

cost and suitable for trading relatively small plots of land (Leduka, 2006). However, the processes involved are not clearly documented as opposed to the formal systems that are anchored in law.

Forms of land tenure that do not necessarily conform to the statutory procedures of land administration characterize the informal system of accessing land. These could either be (a) a quasi-customary tenure in which the influence of the clan has diminished and the authority to transfer the right lies with the individual rights-holder, local administrators or leaders; (b) informal tenure which does not require authority from others but comes through occupation of the site and social recognition (Musyoka, 2004).

While devolution has the potential of reversing this glaring underperformance in urban Kenya with national institutions of land management having been changed to enhance transparency, accountability and to ensure sound urban development – a lot remains to be done by way of implementation. This is despite the recent enactment of various policy and legislative frameworks, including the National Housing Policy 2016, The Physical and Land use planning Act 2019, Urban Areas and Cities Act 2011, the National Land Policy of 2009, the Land Act 2012, the National Land Commission Act 2012, and the Environment and Land Court Act 2011 (Kenya, Government of, 2012).

Kisumu's urban core population stood at approximately 721,081 people as per the 2019-population census (Kenya, Republic of, 2019). The city is also among urban centers with the highest population growth rate in the country, bringing with it numerous complexities in urban planning, especially pressure on land for urban housing (World Bank, 2016). The annual housing demand in Kisumu is at 5,000 housing units, while official channels can only deliver an average of 500 units per annum (Kenya, Republic of, 2013). This shows that majority are unlikely to get their own means of housing in the city, thus resort to informal

channels of housing supply as reiterated by (Olima and Obala, 1993) that, rapid expansion of the secondary towns has seen the existing pockets of publicly owned land exhausted, necessitating expansion of the town onto peri-urban land.

This process of expansion has seen land that was previously under freehold tenure being brought into the ambit of contemporary land markets. The rapidly growing urban areas are affecting land relations and exerting pressure on peri-urban land (Kombe, 2005). The gradual erosion of the pre-existing customary land tenure relations in these peri-urban locations accompanies the process of urbanisation. Instead, there is an emergence of new and urbanized forms of man-land relationships both formally within the legal framework and informally outside the legal framework (Adam, 2014). This may point to both formal and informal land delivery mechanisms being at play in the provision of land in the urban periphery.

Like most Cities in Sub-Saharan Africa, the informal conversion of agricultural land into urban property is prevalent in the peri-urban areas of Kisumu City. Olima and Obala, 1993, Rakama et al, 2017 and Wagah et al. 2017, have confirmed this. However, there is limited in depth analysis of the processes and actors involved in the informal land assembly and development and how their actions shape the Peri urban development in Kisumu city. Thus, its contribution to the urban development process cannot be properly valorized. This study therefore aims at unraveling the operations of the informal mechanisms of land delivery in peri-urban Kisumu, through the processes and actors involved in the informal land assembly, and analysing how the informal mechanism of land delivery effects housing development processes and the resultant built environment in peri-urban Kisumu.

1.2 Problem Statement

Whereas land development process in the formal systems follows the Planning, Servicing, Building and Occupation sequence (the P-S-B-O model), the informal system often takes the reverse of the formal system whereby development starts by Occupation, Building, Servicing and finally Planning, if at all. This process has seen the emergence of uncontrolled housing development in the peri-urban areas, characterized by the absence of basic infrastructure and amenities, insecure tenure, and development in fragile physical environments. The unfolding scenario has influenced negatively on the quality of housing development and the general spatial character of the peri-urban area.

As observed by Olima (1993), Kisumu City is experiencing rapid expansion and conversion of agricultural land into residential development. Rakama et al. (2017) found that urban land use is increasing in the peri-urban areas of Kisumu while agricultural and forestland use is diminishing further confirm this. Nevertheless, this conversion of land is undertaken informally, and devoid of any planning or development control measures. Wagah et al, (2017) observe that the urbanization process is largely informal, due to weak statutory urban land use frameworks in Kisumu City, this has exacerbated the informality, leading to the growth of squatter and informal settlements in the peri-urban zones. Remarkably, there is hardly any analysis of the actual operations of these informal mechanisms through which people access land and develop housing in peri-urban Kisumu, despite the important role this mode of urbanism plays in Kisumu's development. This study will therefore seek to fill this gap by examining the informal mechanisms of land delivery and their impact on housing development and the spatial character of Kisumu's peri-urban area.

1.3 Objectives of the study

The main objective of this study is to examine the informal mechanisms of land delivery and their impact on Housing and the built environment in peri-urban Kisumu.

The specific objectives of the study are:

1. To examine the operations and actors involved in the informal land market in peri-urban Kisumu.
2. To assess the impact of informal mechanisms of land delivery on housing development in peri-urban Kisumu.
3. To assess the impact of informal mechanisms of land delivery on the spatial character of the emergent built environment in the peri-urban Kisumu.

1.4 Research questions

1. Who are the actors involved in the informal land market and how does the informal land market operate in the peri-urban Kisumu.
2. How do the informal mechanisms of land delivery impact on housing development in the peri-urban Kisumu?
3. What are the impacts of informal mechanisms of land delivery on the spatial character of built environment in peri-urban Kisumu?

1.5 Justification of the study

The study is inspired by the fact that the informal mechanisms in the provision of urban land continue to be ignored in official discourses on urban development, despite their significant contribution in urban land delivery and housing development. While there exists many points of co-production between the formal and informal mechanisms of land delivery and housing development, official planning policy and practice still treats informal land delivery as inconsequential. This is despite the fact that the bulk of land for residential development in Kisumu today is delivered through channels beyond the official land supply mechanisms. This study therefore seeks to bring to light the operations of the informal mechanism of land delivery, their impacts on housing development, as well as the spatial character of the peri-urban Kisumu.

The findings of this study will help in guiding policy, legislation and practice, by finding a common ground where both the formal and informal mechanisms, processes and roles can be recognized and integrated by policy makers and planning practitioners. The study also hopes to point out areas of weaknesses, which need strengthening to ensure that the process of development in Kisumu City delivers optimal qualities of sustainable urbanism.

1.6 Scope and limitation of the study

The study was conducted in Kisumu County, with Kisumu Central Location in Kisumu West Sub County being the case study area. It focused on exploring how informal mechanisms are employed in acquisition of land for housing development, actors involved and the resultant impact on housing and the spatial character of the peri-urban built environment. This was achieved through examining the Actors, their roles, and process in the informal land delivery and housing development and the spatial transformation of the peri urban Areas.

The limitations encountered were the difficulties in getting some key informants, for example the Director of Housing. Some respondents were suspicious and feared referring their neighbors to be interviewed, others also wanted to be paid to give information. The problems were however sorted by rescheduling an interview with the Director of Housing at his convenience, while respondents were shown the research permits, assured of data confidentiality and the primary purpose of the research explained to them.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature relating to the study topic, it analyses the process of informal land assembly and development, the actors involved and how it influences housing development and the resultant spatial character of the built environment in the peri-urban area.

2.2 Actors and the operations of the informal land market in peri-urban areas

In many African cities, an acute shortage of well-allocated, serviced land for housing has caused prices to rise sharply. Therefore, formal sector housing developers (both public and private) have to look for low-priced land on the urban periphery. However, the cost of servicing the land in the case of the latter often makes the housing developed thereon unaffordable to lower and even middle-income households (UNDP, 2005). Informal occupation of land is consequently increasingly growing in importance in many cities of Sub-Saharan Africa and it has led to a way in which the urban poor can access land for housing where formal supply is inadequate, inflexible and unaffordable. Growing demand for residential housing has led to informal land delivery systems becoming more and more commercialized. Thus, informal access to land, probably increasingly through rental, is likely to remain the most important means of affordable access to urban land for housing for the near future (Jenkins, 2006).

The result of land supply shortfalls is that the formal rules are ignored and the formal procedures bypassed. This is because the formal processes are very slow and bureaucratic to the extent that they hamper investment decisions; hence, a growing number of land seekers are increasingly finding the informal sector more responsive to the demands for housing and land (Kombe, 2005). This is in line with Rakodi's (2002), assertion, that increasing numbers

of those seeking land, especially for residential and small scale enterprises use, fail to comply, in whole or in part with the formal rules embodied in state law and administrative regulations. Musyoka (2004) further reiterates that formal land delivery has been hampered by high planning standards, corrupt and costly formal procedures of delivering and registering land, which have all worked to exclude many people from the formal urban system. However, lack of capacity to provide adequate land through the formal system has been compensated for by a policy of tolerance of informal delivery systems, which co-exists with elements of exploitation and manipulation. Consequently, poorly planned and inadequately serviced developments have come up on the outskirts of towns and cities (Rakodi, 2005).

The right to use, manage, generate income and permanently or temporarily occupy the land, as well as the right to exclude others and to compensation in a property is guided by institutions (Wehrmann, 2008). The formal and informal conversion and acquisition of land operate according to social rules that are well understood and complied to by actors in the system. The system under which actors interact based on the social rules can be considered as institutions. Institutions are devised to shape human interactions into a predictable and manageable way (Ikejiofor,C.2009).All transactions require some kind of governing mechanism to protect the transacting parties from various hazards associated with exchange. In the informal ways of acquiring land, where the process is apparently outside of the formal regulatory framework, trust as norms of behavior is an important source of stability in human interaction. It is only trusting agents that can enter into transactions or co-operate with each other (Rakodi and Leduka, 2003, Adam, 2014). The institutions are further responsible for conflict resolutions as land transaction in the peri-urban areas is mainly governed by trust sometimes without any legal document of exchange and the intervention of elders or leaders of traditional social institutions in the village as mediators. Whereas the formal channels rely

on defined rules and processes that are universally known, it is worth investigating whether the informal channels have a universal process or rules governing the procedure and determine the points of variation with the formal channels.

Land delivery in the peri-urban areas involves different actors who play different roles. Their actions and transactions make land available for urban users to develop or alternatively to hoard land as an investment for future use or for speculative purposes. Hence, there is a diverse relation between actors or agents in the informal land delivery system, which has social, political and economic implications (Mahitem, 2009).

The Actors in the Urban Land Market include both public and private actors, whereas the public actors include the national and county government agencies, the role of public agencies entails gazetted areas that are to be developed as urban areas, in addition to gazetting of urban areas, it supplies land for urban development through formal allocation of land (Musyoka, 2004). The public agencies also formulate by-laws to regulate zoning in respect of use and density of development; reserve and maintain all the land planned for open spaces, parks, urban forests and green belts in accordance with the approved physical and land use development plans. Consider and determine development planning applications made in respect of land adjoining or within reasonable vicinity of safeguarding areas, and grant development permission and transfer of property (Kenya, Government of, 2019). According to the Sessional paper No.3 of 2009 on National Land policy, public agencies thus have a vital role in land market operations; the government role is to facilitate the commercialization of land rights subject to principles of equity, sustainability and public policy considerations such as security and also develop instruments that will make land markets operations more efficient and effective by streamlining existing land transaction procedures. As reiterated by (Akunnaya et al., 2018) It may therefore be said that the role of the government in the real estate market in informal settlements is mainly that of

regularization of tenure. At this stage, it is often difficult to enforce zoning laws and land-use requirements, since the building structure would have already been constructed.

Local residents or households are either the original landowners or squatters who own plots through informal subdivisions. According to Adam (2014), local peri-urban landholders (farmers) who hold land for agricultural purpose are the principal suppliers of land for the informal market. The majority of poor people in urban areas in Africa access land through informal networks of friends and family, or socially dominated markets. Typically, a person moving into an urban area and needing to find land to occupy or a structure to rent activates informal networks to obtain information, meet the owner, enter and finalize the transaction, as well as access additional urban services and job (UN-Habitat, 2010).

The land market also involves Land Speculators who acquire several plots at cheap prices and hold the properties while targeting value appreciation to resell, (Akunnaya *et al*, 2018). Real property professionals can largely be divided into two categories. The first category includes town planners, quantity surveyors and architects who are primarily involved with the development process. The second category, which includes brokers, property management and asset management, focuses primarily on the facilitation of property investments and the management of these assets (UN-Habitat, 2010). Land brokers bring buyers and sellers together as they act as source of information about plot availability. Land brokers are the main diffusers of information about availability of plot for sell. They have wide-range of social interactions through which they can get information about plot availability for sale and potential buyers (Adam, 2014).

Land Buying Companies and Cooperatives: Land buying companies can be traced to the period immediately after independence, where the government encouraged people to pool resources and purchase the former white highlands collectively (Odhiambo and Nyangito,

2002). This led to formation of numerous land-buying companies/groups and cooperatives. As observed by Rutten (1992), the land buying companies were responsible for the unofficial fragmentation of farms. Upon acquisition, a large farm was unofficially subdivided among the shareholders of a company. This process initially took place in agricultural areas but the same practice seems to have later been imported into urban areas. Urban poor households, driven by the need to access affordable land for housing, and pooling resources, are forming today Land Buying Companies (LBCs) and other loose-fitting land associations in Kenya (Obala et.al (2005). This method has been applied in Nairobi where some land buying companies have benefited from alternative development control approaches adopted by Nairobi City Council. In Eldoret, land buying companies have played a significant role in the provision of urban land. Their formation as asserted by Musyoka, (2002), was aligned along tribal lines, restricting access to the purchased land to people from a certain ethnic group. Even though the initial acquisition was formal, subsequent subdivisions and transfers did not follow formal procedures.

Neo-customary land delivery systems: Customary land ownership refers to the communal possession of rights to use and allocate agricultural and grazing land by a group sharing the same cultural identity (Rakodi 2002). However, in most urban areas, customary land delivery still operates but has been eroded and recent empirical observations suggest that it is being replaced by what can be termed as ‘neo customary practice’ which is a combination of reinterpreted customary practices with other informal and formal practices (Durand-Lasserve, 2004). Neo-customary land delivery systems include all stakeholders and all the practice, which claim to be rooted directly, or indirectly in the custom, it works through individuals who sell as a market commodity more rights that they have received through customary channels (Durand-Lasserve, 2004; Kironde, 2004).Land supplied through customary channels is often supplied free (or in exchange for a token of appreciation). It is one of the few ways in

which poor households can access land for housing in contemporary African cities. Supplies of free land through this channel are however, decreasing rapidly.

The various researches indicate a thriving informal land markets albeit outside the state authorized mechanism. Kironde (2007) reiterated that informal land market involves a complex web of social factors, including family members, neighbors, local leadership structures, and sometimes, state officials, all of whom lend a credibility and legitimacy that allows the local land market to exist. Even though the existence of informal land market in the peri urban areas in developing countries is not contested, the processes involved in this mode has not been analyzed or properly captured in the existing literature thus need calling for further analysis.

2.3 Impact of informal mechanisms of land delivery on housing development in peri-urban areas

Urbanization increases the demand for affordable housing and urban infrastructure and services, which cities struggle to cope with. (UN-Habitat, 2012).As a result, urban growth in Asia, Africa and Latin America is associated with slums and informal settlements; shelters are built with little to no basic infrastructure and sanitary provision, and with negligible regard of formal planning and building regulations. According to Roy (2009), informal housing can include any type of housing that is ‘illegal’ by falling outside of government control or regulation, or that is not protected by the state. On the other hand, informal settlements are residential areas where inhabitants have no land rights or tenure, with modalities ranging from illegal occupation to the informal lease of houses and rooms (UN-Habitat, 2012). Such settlements, where housing often does not comply with safety regulations, generally lack urban infrastructure and basic services and are often found in hazardous areas prone to socio-environmental disasters.

According to the Population census of 2019, the population of Kisumu City is currently estimated at 721,081 people, with the peri-urban area housing more than 50% of the total population (USDGs, 2015). This population growth has increased demand for housing and has driven demand for land to the outskirts of the town, thus inclusion of the formerly agricultural land into urban use, both formally and informally for residential or industrial uses (UN-Habitat, 2005). However, the process of such housing development and general quality of housing in the outskirts need to be understood to influence policy directions.

Housing is recognized as a basic human right in the Kenyan constitution, and it contributes immensely to the socio-economic development due to its backward and forward linkages (Ministry of Land, 2014). At the same time, land is a major factor in housing development, comprising 60% of the cost of housing in urban areas. However, the dysfunctional land markets and institutions are largely responsible for the high cost of land in Kenya today (World Bank, 2014). The high cost of land is further fuelled by high stamp duty, legal and survey fees, taxation on rental fees, high financial and transaction costs among others. These enhance informal development as the poor have taken action to establish alternative regulatory regimes related to their own economic, social, cultural and environmental needs and priorities. However, as competition for land increases with urban growth, prices have risen to the level at which even middle-income households are finding it increasingly difficult to conform to official land administration requirements (Payne & Majale, 2004).

Secure tenure is one necessary foundation for all endeavors to improve the living conditions of the urban poor. According to Bruce and Migot-Adholla (1993), security of land tenure is said to exist when individuals or groups perceive that they have the right to a piece of land on a continuous basis, free from imposition or interference by outside sources. As well as the ability to reap the benefits of labor and capital invested in such land, either in use or upon transfer to another holder. It is important to note though, that informality does not

automatically spell a lack of secure tenure as Kironde, (2005), asserts that secure tenure can exist even without formal recognition by state authorities. This is because acceptance and acknowledgement by community institutions may in fact be valued more for fostering a feeling of tenure security among property owners, than the formal recognition through titles granted by the state, however, it is prudent also to check the applicability of the same in the context of the study area. According to Kombe (2005) and Payne and Majale, (2004), secure tenure is a necessary, but not sufficient, condition for creating sustainable urban livelihoods, at play may need to be investigated and considered. Given the complex nature of tenure categories in most cities, giving some households full individual titles is more likely to increase existing distortions in urban land markets and encourage further informal development through transfer, or intensive land transactions.

In Ghana, Amoateng et al, (2013) confirm that a number of local factors ranging from land tenure system and its associated traditional land management challenges; the categorization of planning institutions under different parent institutions; the syndrome of planning chasing development; and housing policy, influence the pattern of physical development. Land development on the two parallel supply systems, i.e. informal and formal, differ in that in the formal system, the process is characterized by sequence starting with planning and proceeding to servicing, building and occupation (PSBO). In informal supply, (Baross, 1990) argues that the sequence is reversed and starts with occupation then building, servicing and planning (OBSP). The result is rapid supply of affordable plots, with political recognition and housing consolidation. Such areas, he further argues, are unattractive to speculators and higher-income households not only because of poor service provision, but also due to the fact that they are often poorly located and planned and so relatively expensive to service. This fact is supported by Rakodi (1997) who argues that failure of land seekers to conform to laid down procedures has resulted into poorly planned and inadequately serviced developments

coming up in the outskirts of towns and cities. There is acute shortage of planned land for housing development,(Kenya, Republic of, 2013), however the need for shelter still pushes people to seek for land for housing in the peripheries of the cities,consequently outside the laid down procedures which may jeopardise housing quality.

In the city centre, there is proper planning with adequate services, while the peri-urban areas have had little intervention in service provision through the effort of the city authorities, residents, Civil Society Organizations and other stakeholders. The formally organized development in the core city areas diminishes as one move further out to the periphery. This is attributed to increased informal sub-division of land and developments that are coming up rapidly and against conventional planning regulations and there is need for planners to factor them in policy formulation to restore order in the city's development.

According to the Physical and Land Use Planning Act 2019, coupled with the County Governments Act (2012), the County Government has the mandate to initiate planning for the area they cover and ensure compliance with development standards and regulations by approving all developments within their jurisdiction. However, housing developments within the study area are constructed without approval permits from the responsible authorities. Generally, the spatial planing system has failed to anticipate urban development and to avail serviced land for development of housing, infrastructure and community facilities,(Kisumu, County Government of, 2019) Furthermore, individuals who have no experience or background in building construction mostly erect these developments (Pradoto,2012).

Rakodi (2005) notes that many studies carried out in Tanzania, Vietnam, Ecuador and Ghana, among others showed that informal land delivery systems are often more effective in delivering land for housing than the formal land delivery systems because of their user-

friendly characteristics and social legitimacy, however the actual process of housing development in this context is not analysed to enhance understanding on how the informal land market really impact on housing quality.

2.4 Impact of informal mechanisms of land delivery on the spatial character of the built environment in peri-urban areas

Peri-urban areas are not statutorily demarcated zones, but are transforming rapidly to accommodate groups ranging from low-income migrants to developers and investors. Like transitional zones whose boundaries are in flux, there is lack of clarity about legal and institutional processes associated with development permissions, land amalgamation, land alienation, and maintaining land and property records in peri-urban areas.(Dowall, 2006).

In the peri-urban areas, people of diverse backgrounds and social status live side by side. These areas experience rapid social change mainly due to constant migration, consequently leading to the juxtaposition of urban and rural lifestyles and creating a multitude of partly overlapping institutions (Wehrmann, 2008).

In analysing the peri urban land market and housing development in Brazil, Dowall, (2006) asserts that Depending on the metropolitan region, each additional 1,000-person increase in population requires between 6 and 37 hectares of land to be developed. The amount of land needed depends on a range of factors, such as persons per household, the density of residential development (houses per hectare), the extent to which new population is accommodated through urban redevelopment of older buildings, and the additional demand for urban development that comes from non-residential uses such as commercial and industrial activities.

In Latin America, the peri-urban development is characterized by precarious urban infrastructure, Poor public services, and collective equipment; inadequate construction;

environmental degradation; absence of public spaces and of leisure, community, and cultural facilities; and predominance of poor residents (Fernandes, 2011). In India, (Aijaz, 2019) reiterates that uncontrolled growth at the periphery of cities is occurring, as seen in the increasing population densities and haphazard development of built structures (residential, commercial, industrial) that fail to meet building safety norms. Further complications are created by the ambiguity in administrative boundaries and areal extent of peri-urban areas. Another factor is the shrinking in size of vacant lands and open spaces due to illegal constructions in peri-urban areas that also affects implementation of local and regional infrastructure projects. According to UN-Habitat (2012), Kisumu City has encroached into rural settlements, and this has posed great challenges for urban planning where most land is customarily owned and local cultural practices still predominant. Therefore, influencing urban development by extending infrastructure services such as roads to these 'rural homes' has been a challenge.

In Kisumu, the City is generally dispersing itself as new development leapfrogs the old slum belts of Nyalenda – Manyatta – Nyawita – Obunga – Bandani (Kisumu, County Government of, 2019). Kaitilla (1993) maintains that such development does not proceed in an orderly manner, making planning objectives of convenience and efficiency obsolete. He further argues that due to difficulty in acquiring land, only those lands that are easily acquired are developed, leaving large tracks of land undeveloped in between. Olima (1993) noted that the provision of facilities and utilities in the urban fringes has gradually fallen short of need and that the inability to control or guide land use development added to the rising costs of land thus making it virtually impossible for local authorities to find adequate and appropriate sites for low-income housing, schools, health services and other infrastructural facilities and utilities, this needs to be checked if it still applies and its implication on the city' development.

Land sales in the peri-urban areas have led to landlessness by the local population (indigenous landowners). Dispossession through clandestine sales by some household heads has led to impoverishment; there has also been a gradual increase in ill feeling between indigenous landowners and outsider buyers (Wehrmann, 2008). Further, resulting scarcity of land in the peri-urban area increases land value, making it difficult for the poor to access it while the middle- and high-income groups consider land as a hedge against inflation, thereby putting additional pressure on the emerging land market.

Amoateng et al, (2013) further affirms that resultant physical development that emerges has many negative effects on the residents of peri-urban areas. These adverse consequences include loss of agricultural land due to reduced plot sizes, lack of access to utility services, incidences of flooding, unregulated conversion of land uses, poor internal circulation and traffic congestion.

According to the (World Bank, 2016), Informal land markets are deemed to be the force behind the poor urban development trends in most towns in Kenya, notwithstanding that they cater for the large proportion of the urban population. Adam (2014), observed that the actors involved in the informal acquisition, transfer and development of land and the institutions regulating the informal settlement in the peri-urban areas calls for further detailed research. Understanding the prevailing situation of peri-urban areas and the factors that lead people to the acquisition, transaction and development of land outside the formal regulatory framework is an important requirement for sustainable urban land development. This study therefore investigated the informal mechanisms of land delivery particularly in the context of Kisumu City and ostensibly, to bring forth the processes and actors involved in land assembly and development, impacts on housing development, and the resultant built environment in the peri-urban areas.

2.5 The conceptual framework

The conceptual framework was derived from the reviewed literature that reveals informal land assembly and development (ILAD) as a product of urbanization processes and action of players involved in the processes. In the conceptual framework, informal land assembly and development come about because of urbanization processes. Natural population growth and rural-urban migration increases demand that surpasses the available stock of urban land and housing thus people opt to acquire land and housing in the peri-urban areas through alternative means (informal channels). This result into spatial changes in the urban peripheries that takes place beyond the legal framework and laid down procedure for land acquisition and development. Informally occupied and developed land and the associated actions of various players in the land and housing market results into uncontrolled subdivisions, change in land use and loss or changes in livelihoods, and uncontrolled urban growth with limited or poor basic infrastructure and amenities, visible spatial transformation and eventually a jeopardized quality of housing and the resultant built environment.

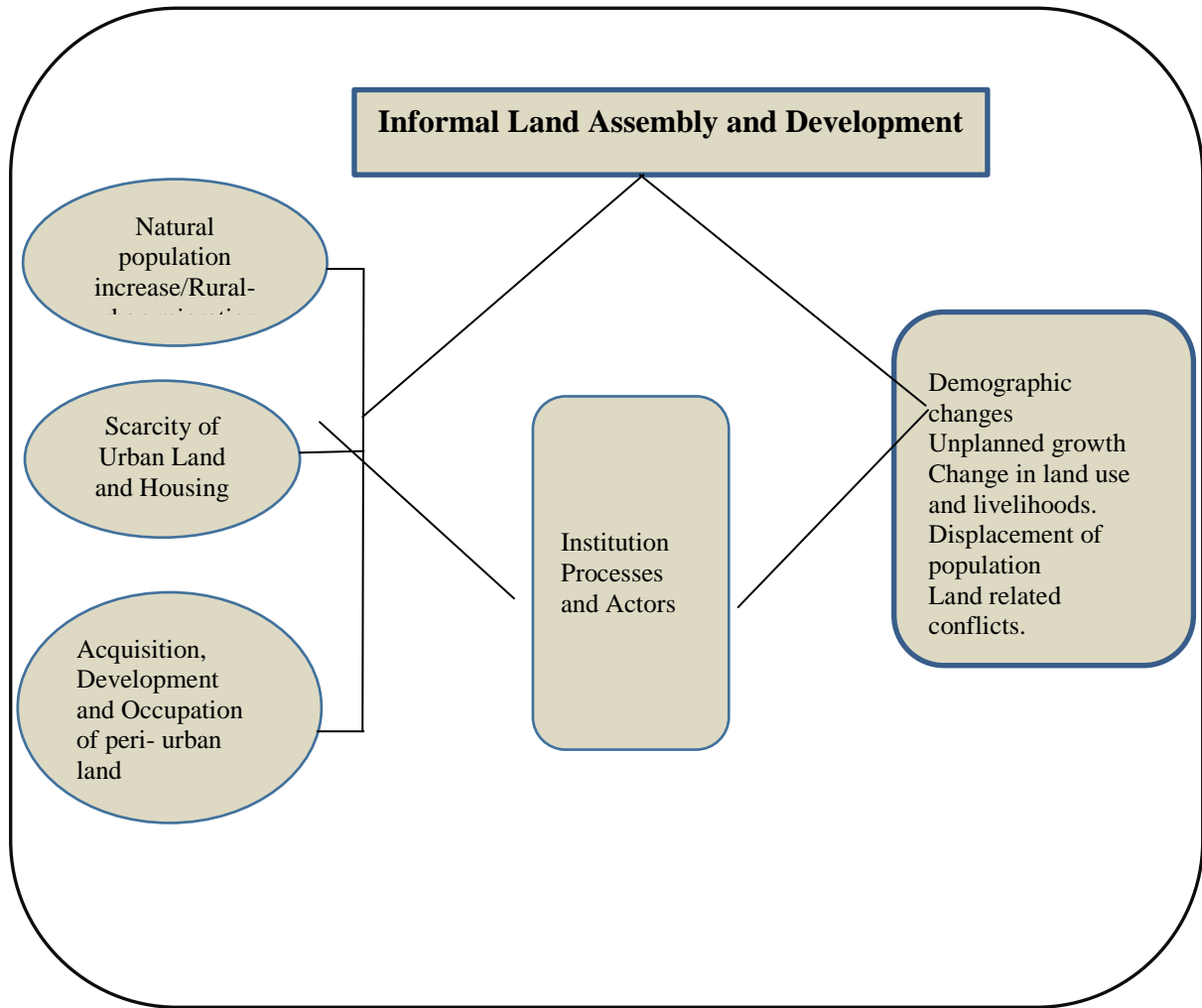


Figure2. 1: Conceptual framework for informal land assembly and development in the peri-urban area

(Source: Developed by the author)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter provides information on the study area and the approaches used in carrying out the study. It explains the research design, the study population and sample size, data collection methods, analysis and presentation and the ethical considerations.

3.2 The study area

The study was conducted Kisumu county with focus being Kisumu City, which is the third largest city in Kenya after Nairobi and Mombasa, respectively (UN-Habitat, 2005). It is the principal town, commercial and transport hub in western Kenya region. Geographically, Kisumu County is located between latitudes $34^{\circ} 35' E$ and $34^{\circ} 55' E$ and longitudes $0^{\circ} 00' S$ and $12^{\circ} 00' S$, (Kisumu, County Government of, 2019)

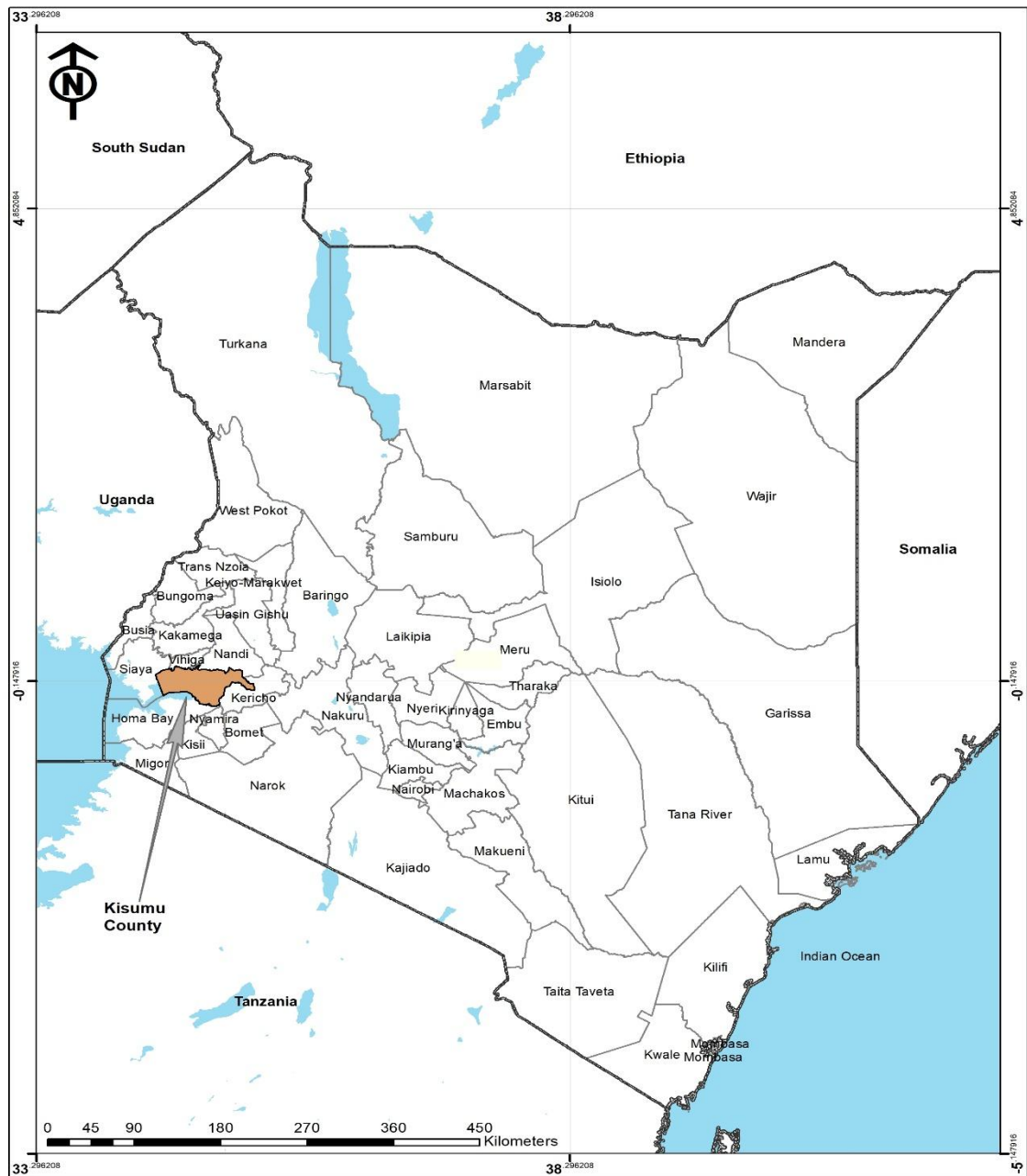


Figure 3. 1: Map of Kenya showing the location of Kisumu County.

(Source: Redrawn by Author from Kenya Geo-Database Maps)

Historically, the development of Kisumu City was marked by the arrival of the railway line in 1901 and its choice for the terminus was based on its ideal location on the shores of Lake Victoria. The unique locational advantages at the connection between East and West Africa and its qualities as a port made it a fast developing urban focal point (Anyumba,1995).

These development transformations increasingly changed the face of Kisumu into an important social and economic hub which has continued to attract more population. The structural plan of 1908-1930 shows segregation of land use characterized by zones for Europeans and Asians while the native Africans were resettled on the urban fringes and would come to town to look for employment during the day (UN-Habitat, 2005; Anyumba, 1995).

Kisumu City is experiencing rapid population growth mainly stemming from increased rural-urban migration, natural increase and the extension of boundaries (County Government of Kisumu 2018) According to the Population and Housing census report of 2019, Kisumu City has a total of 721,081 persons (Government of Kenya, 2019).

3.2.1 Case study Location

Kisumu Central Location, in Kisumu West Sub-County, in Kisumu County, was chosen for the purpose of this study, with focus being in Korando 'A' and Korando 'B' Sub-locations. The choice was informed by it being one of the areas that house the new middle-to high-income residential development in Kisumu city. This is evidenced by the rapid subdivisions and upcoming developments in the area. It is also characterized by presence of individual and corporate buyers as well as its accessibility and proximity to the international airport and the Kisumu-Busia highway traversing the location.

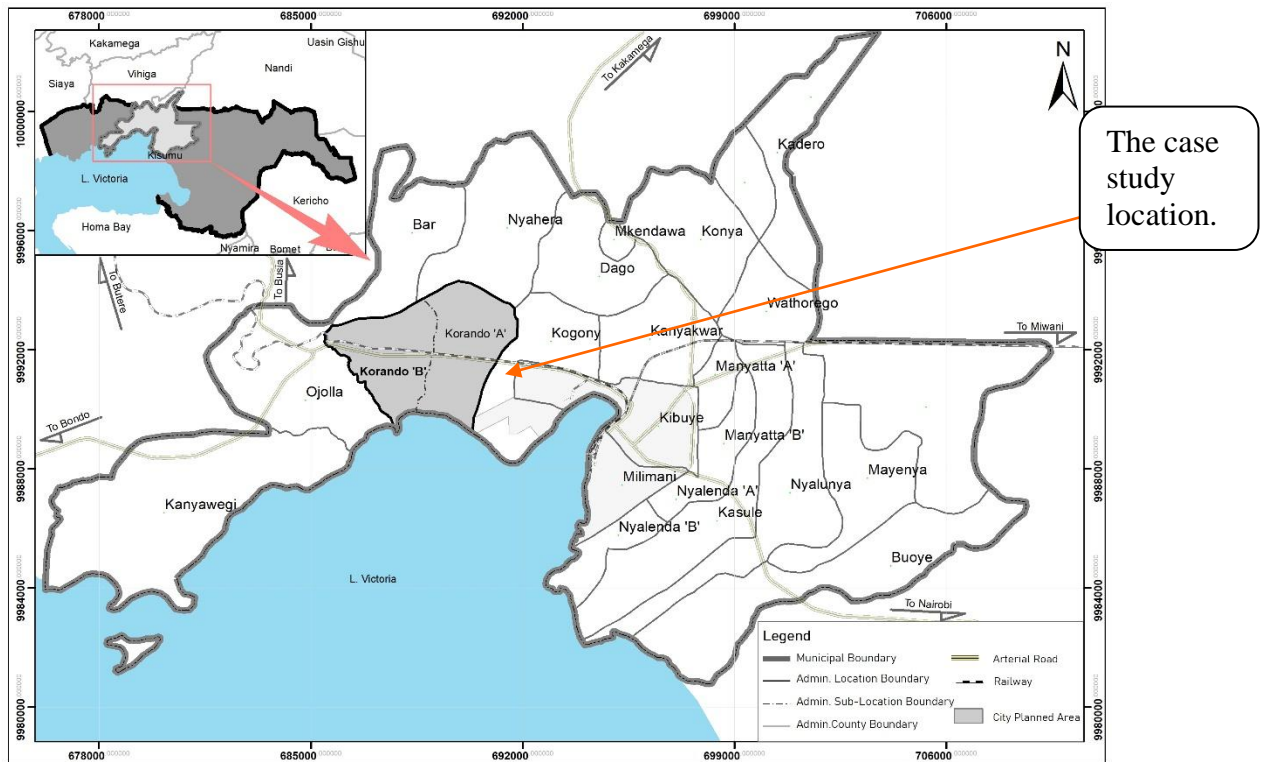


Figure 3. 2: Map of Kisumu City showing the location of the case study area.

(Source: Redrawn by Author from Kenya Geo-Database Maps)

3.3 Research design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data (Kothari,2004). It therefore provides a systematic approach in carrying out research in order to ensure relevance of information gathered.

A case study design was employed in this research to comprehensively assess how informal mechanisms contribute to land assembly for residential development in the city and the units of analysis were the actors and households involved in the processes of land assembly and development in peri-urban Kisumu. According to Yin (1994), a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context especially

when the boundaries between phenomenon and context are not evident. Baxter & Jack (2008) explain a case study design, as an approach to research that facilitates exploration of phenomena within its context using a variety of data sources. This assures that the issues are explored through various lenses, which allows for multiple facets of the phenomena to be revealed and understood. The study fulfilled the above conditions since the researcher was investigating the informal mechanisms of land delivery in order to unravel their operations and resultant effects on housing development and the spatial development in the peri-urban area.

The study also applied the mixed method approach by incorporating the use of both Qualitative, Quantitative and Spatial techniques of data collection and analysis were applied during the study because of their ability to reinforce each other thus use of Key Informant Interviews, Focused group discussions, observation, photography, document analysis, and Mapping. Mugenda & Mugenda, (2003) argue that integrating methodological approaches strengthens the overall research design, as the strengths of one approach offset the weaknesses of the other, and can provide more comprehensive and convincing evidence than mono-method studies.

3.4 Study population

The study population was 984 households in Korando 'A' and 'B' sub-locations of Kisumu Central Location. The study population was derived from the information got from the office of the area Assistant Chiefs on the number of persons, who have sold, bought and inherited land in the study area within the period of 2009 to 2019. This culminated into a sample frame totaling to 984 households as shown in table 3.1 from which the sample of 169 was derived for the purpose of household survey using the table of sample in table 3.2. This was imperative since the targeted population was not clearly known. The sample frame is as shown in the table below.

Table 3. 1: Households, who had inherited, bought and sold land in the last 10 years the study area

LOCATION	VILLAGE	BOUGHT 2009 - 2019	SOLD 2009 - 2019	INHERITANCE	TOTAL
KORANDO 'A'	Lower Kotetni	58	37	16	111
KORANDO 'A'	Kandalo 'A'	28	32	40	100
KORANDO 'A'	Karombo 'A'	32	9	14	55
KORANDO 'A'	Lower Karombo	48	61	50	159
KORANDO 'A'	Upper Kotetni	60	40	92	192
KORANDO 'B'	Kanyuto 'A'	30	30	15	75
KORANDO 'B'	Kateng'	25	21	37	83
KORANDO 'B'	Upper Karombo	20	25	30	75
KORANDO 'B'	Kodawo	29	21	15	65
KORANDO 'B'	Kandalo B	27	24	18	69
		357	300	327	984

(Source: Office of the Chief)

3.5 Sampling technique

The study employed both purposive and snowball sampling techniques. As explained by Lewin, (2005), purposive sampling is adopted when researchers target a particular group and is not seeking to generalize findings to the overall population. Accordingly, in snowball sampling, the initial subjects with desired characteristics are identified using purposive sampling techniques, the few identified subjects name others with required characteristics until the required number/cases are met. Using the original sampling frame as a guide (Table 3.1), snow ball-sampling technique was employed to help identify the households to participate in the study, this was because establishing the targeted population was difficult since the researcher did not know them. Neither were all households in the sampling frame able or willing to participate in the study. It was also not possible to determine the actual pattern of distribution of the study population. The study targeted households which previously bought, sold or inherited land in the study area within the reference period 2009 to 2019. We therefore proceeded by getting referrals to the next buyer/seller, following a successful engagement with a respondent.

For triangulation purposes, key-informants were purposively selected from the County Housing, Physical Planning Department, Office of the area Chief, a local CBO, property agents and Ministry of Land, Housing and Urban Development officials, identified buyers, and sellers, were selected purposively on the assumption that they had vast knowledge relevant to the study topic.

3.6 Sample size

The sample size was selected from the table developed by Yamane (1967). According to Baxter & Jack (2008) the use of published tables is recommended in determining the sample size from a given population. Since the study population was greater than 900 but less than 10000, a sample size of 169 respondents was selected at 0.05, precision level and 95% confidence level (see table 3.2 below).

Table 3. 2: Population size and sample size

Population Size	Sample size (n) for precision (e)
	±7%
500	145
600	152
700	158
800	163
900	166
1000	169
2000	185

Sample size for ±7% Precision levels where confidence level is 95% and P=0.05

(Source: Yamane 1967)

The sample was distributed in the two sub-locations as indicated in the table 3.3 below:

Table 3. 3: Distribution of samples by sub-locations

Sub-Location	Total households	Bought	Sold	Inherited	Sampled households
KORANDO 'A'	617 (62.7%)	39(36.6%)	31(29%)	36(34.4%)	106
KORANDO 'B'	367(37.3%)	22(35.7%)	21(33%)	20(31.3%)	63
TOTAL	984	61	52	56	169

(Source: Developed by the author after data collection and analysis)

To examine further the informal mechanisms of land delivery and their impact on the built environment in peri-urban Kisumu, several actors were interviewed to seek their roles, opinions and views on the workings of the peri-urban land assembly and development scene. For the professionals in the built environment, The County Physical planner and one Physical Planner in private practice were interviewed. A registered architect, county Surveyor and Engineer were also interviewed, together with a county director of Housing. The Area chief and the two Assistant chiefs for Korando A and Korando B were also interviewed. For the real estate developers, Kisumu Real Estates, Tom and Company agency and Milimani West Estate developers were interviewed since they were identified to be active in the study area. Three conveyancing lawyers who have participated in land transactions in the study area were also chosen together with four local brokers who were identified to be operating within the study area, for community based organizations, MAGNAM CBO was interviewed because they are actively involved in environment and land issues in the study area. Summary of the key informants interviewed is shown table 3-4 below.

Table 3. 4: Institutions and actors targeted for interviews

	Type of key informant	Number interviewed
1.	Built environment professionals	6
2.	Office of the chief	3
3.	Real estate developers	3
4.	Conveyance lawyers	3
5.	Local brokers	4
6	Local CBO	1
	Total	20

(Source: Developed by the author after data collection and analysis)

3.7 Data collection methods

The study relied on both primary and secondary data sources. Secondary information was obtained through literature review of books, research reports and administrative records, journals and other publications, mainly to establish the existing knowledge base with respect to research issue at hand, and supplement primary data collected during the fieldwork. Primary data collection entailed multiple data collection techniques, both of qualitative and quantitative nature as elaborated below:

3.7.1 Key informant interviews

Data on actors, and processes involved in land assembly and development was collected through semi-structured interviews with the Area Chief and the two assistant chiefs, built environment Professionals, Conveyance lawyers and Land brokers. In addition to that, local CBOs, two real property agents were interviewed to enhance deeper understanding of the impacts of land transactions on the indigenous populations, processes involved and the type of conflicts arising due to informal mechanisms of land delivery.

3.7.2 Household interviews

Household interviews were conducted to help in attaining information on their characteristics, opinions and views on the processes and the resultant impacts of informal mechanisms of land delivery on the spatial character of the peri-urban built environment, among other

factors. Structured questionnaires were employed and targeted the household heads that were identified by the village elders to have been involved in land transactions over the past 10 years, a snowball sampling method was used to identify the households to be interviewed. Four research assistants administered the questionnaires directly to the household heads, this was employed to help in clarification of the questions to the respondents and to ensure high response rate. The data collected included household characteristics, involvement in land delivery, Access to services, and how land assembly and development has affected them among other factors.

3.7.3 Focus group discussions (FGDs)

A discussion guide was developed for use in FGDs, which was to capture issues that are not fully explored through the household questionnaire. This captured information on informal processes of buying and selling land, actors involved, changes experienced by the community due to informal land delivery mechanisms. Four focused group discussions were held comprising of two Focused Group discussions with village elders from the two sub locations, an FGD with Women, and another with youths with each FGD comprising ten persons.

3.7.4 Validity and reliability of data

Reliability is the consistency throughout time whereas validity is the ability of data to actually represent the variable that it is intended. The study employed various strategies to get reliable and valid information that contributed to the building of knowledge in a sound and scientific manner. In order to achieve reliability, the questionnaires were pre-tested amongst 10% of the respondents and then revised accordingly prior to final administration. The pre-test was conducted in the case study areas in order to reflect the true expectations of the final field data. Observations were also carried out repeatedly for a period of two weeks to ascertain the dynamics of the study population. In order to avoid threats to internal validity, supplementary discussions and data were gathered from diverse sources such as

questionnaires, FGD, KIIs and secondary materials. Data from these sources were corroborated to establish their convergence and enhance internal validity. If, for example data obtained from field observations concurs with those obtained from KIIs or FGD, then it is safe to conclude that the data is valid and reliable for making generalizations.

3.8 Data Processing

The questionnaires were checked and verified to ensure that they were fully filled in and responses consistent and in case of anomalies, follow-ups and corrections were made immediately. The data was then coded and entered into a spreadsheet for analysis. Qualitative data was transcribed and summarized thematically for reporting purposes.

3.9 Data analysis and presentation

Quantitative data was analyzed descriptively by use of frequencies, and results presented as statistical summaries, tables, percentages, graphs and charts while spatial data was analyzed in ArcGIS and presented in the form of maps. Qualitative data was thematically analyzed and presented in narratives interspersed with photographs and flow diagrams.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter highlights the key findings of the study, the results and discussions are presented as per the objectives and provide in-depth understanding on the operations of the informal mechanisms of land delivery, their effects on housing development and spatial organization in the study area.

4.2 Actors and operations of the informal land market in peri-urban Kisumu

The first objective was to examine the operations of the informal land market in peri-urban Kisumu and Actors involved in the informal land assembly and development. This was to get a clear picture of the actors and their roles, and the processes involved in the informal land market. Actors are agencies, individuals or institutions involved in land delivery process in Kisumu Central Location. Agents of land supply were analyzed because of the roles they play in availing land in the area. From the household survey and FGDs conducted, the key players in the informal land market were found to involve, individual land sellers, Office of the Chief and village elders, family unit, land brokers, real property agents, private planners and surveyors, buyers themselves and practicing lawyers. The role of each actor is further elaborated here below.

4.2.1 Actors and operations of the informal land market in peri-urban Kisumu

4.2.1.1 Land buyers

Key informant interviews and the FGDs carried out showed that informal mechanism of land delivery is influenced by the purpose for which the land is bought and the type of land buyers which was found to involve individual housing consolidators, large-scale developers or speculators.

4.2.1.2 Individual housing consolidators

The study established that 67% percent of buyers do so with intentions of putting up individual housing for residential purposes, while 21% are large-scale developers and 12% being speculators. As shown in figure 4.1 below.

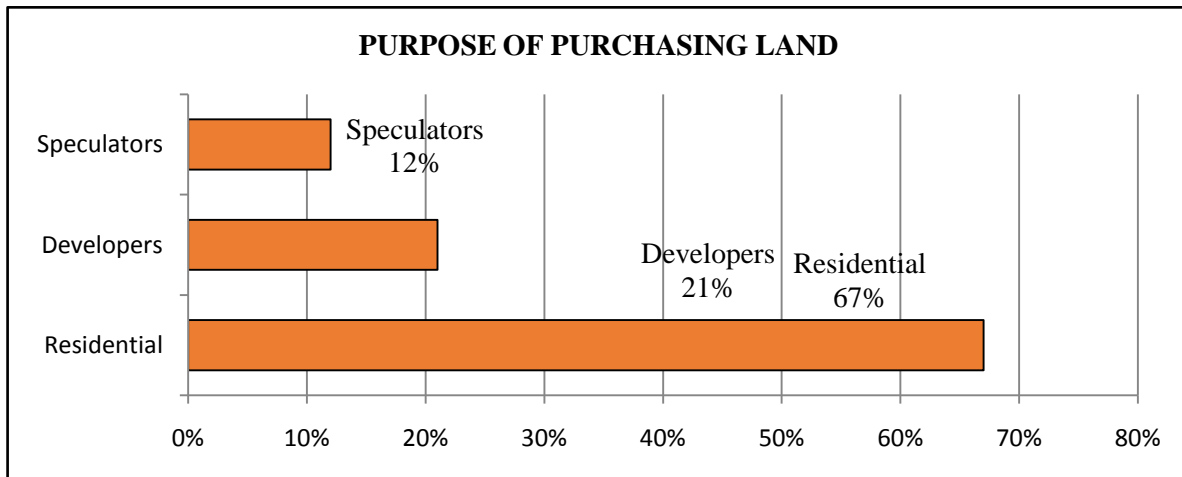


Figure 4.1: Purpose for buying Land

(Source: Developed by the author after data collection and analysis)

Through the focused group discussions and observations, the study confirmed that there are intense land consolidation activities along the lakefront, the Kisumu-Busia Highway, and the hill ridge, and that consolidators further comprised both outsiders and natives whereby natives are either buyers or inheritors. Through the Key informant interviews and FGDs, the study found that preference of the lakefront, Hill slope and the Highway by buyers was mainly by immigrants and was influenced by serenity and better accessibility. These areas are of high value hence native buyers could not afford except for the outsiders who are deemed to have a lot of money. The native buyers on the other hand were found to be evenly distributed in the study area and had no particular preference to buying but just to get a space to put up their homes.

4.2.1.3 Large-scale developers

Through the Key informant's interviews and the FGDs, large-scale developers were also found to be operational in the study area. This category of buyers purchase land in small

quantities then amalgamate them mainly to invest in housing development for rental purposes. Figure 4-2 below shows how amalgamation is done where by the small pieces of land marked ABCDEFG on the left are consolidated to make huge chunks of land shown in the right side image. This was observed along the main highway and near the lakeshore and Roundabout Shopping Centre. These locations were reported by the Key informants to be suitable and attract clients due to their proximity to the Highway and areas with improved accessibility i.e. access roads as observed in the study area. Among land buyers in this category were reported to be corporate entities who buy land for industrial or large-scale development purposes like Tuff Foam Mattresses, Green Technologies, Kisumu Real Estates, and Milimani West Estate developers, and a few individuals among other.

Figure 4.2 A schematic representation of land amalgamations in Pombo area, Korando

A Sub-location

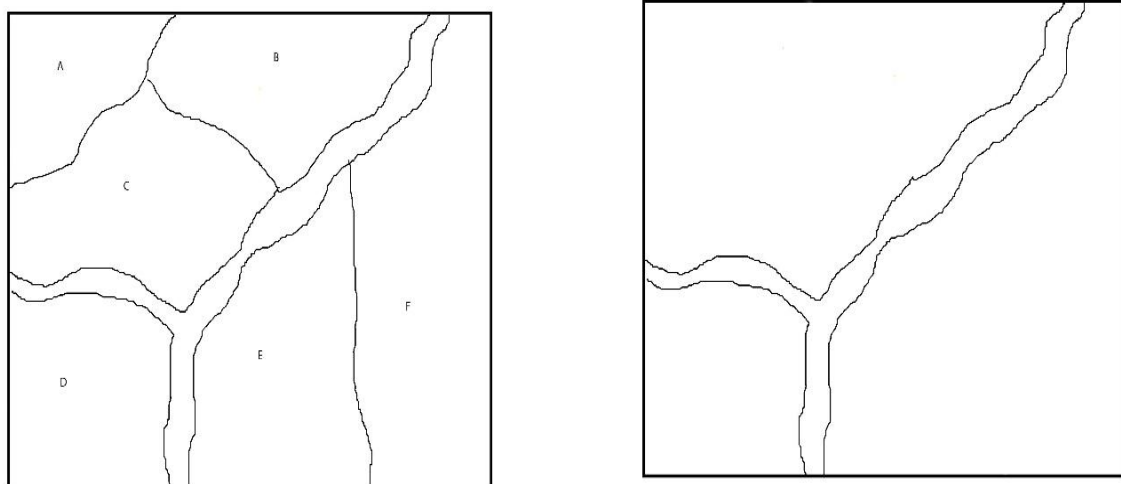


Figure 4.2: Schematic representation of land amalgamations in Pombo area, Korando A Sub-location

(Source: Field observation data)

4.2.1.4 Speculators

During the FGDs and Key Informant Interviews, the study established that 12 % of the buyers are for speculative purposes. These land buyers were said to hoard land in the hope of selling it in the secondary land market in future when the values increases. They were found to consist of both native ‘elites’ and immigrant buyers, they buy land particularly through distress sales for instance where a family is bereaved and are in a financial fix. Nine of such cases were reported during the focused group discussions where it was further revealed that they do not necessary develop the land immediately but keep it for sale in future. This category also includes outsiders who buy land in the area primarily to resell when the value rises.

Through the office of the chief, it was confirmed that speculative buying is one of the sources of conflicts in some instances, especially where the original seller dies and his/her heirs seek to reposes the land or demand additional payments by claiming they are not aware of such a sale occurred in the first place. A case in point is a respondent who claimed his grandfather’ land was sold when he was a toddler and being the only surviving heir, he claims the right to reposes the land. This has created conflict, with the land in question being placed under litigation. The assistant chef for Korando A confirmed eight of such cases within the year having been handled by his office with three among them being taken to the land and environmental court.

Through the discussions and Key informant interviews, it was generally agreed that the trend is widespread all over the study area evidenced by observed parcels of land fenced off but not developed, some reported to have been in that state for more than ten years. The FGDs further established that land conflicts emanating from double sales are also common in this category, particularly where the buyers do not do proper background checks on the parcel

they buy. The area chief further confirmed the above and pointed to one of the three cases referred to land and Environment court to have been sold to three different buyers, first in 1989, the son to the seller sold to another buyer in 1998 and later sold by the grandson in 2013. This confirms that speculative buying is a contributor to land conflicts in the study area.

4.2.1.5 Land brokers

This is a category of actors whose aim is to scout for land and act as a link between the potential buyers and sellers. From the discussions with the households, Focus group discussions and the Area Chiefs, the study established that there exist brokers whose work is often to look for land sellers and connect them with the prospective land buyers. As described by the Area chief of Korando “A” Sub-Location,

‘These brokers are many and they often convince residents with sizeable lands to sell even if the land owners do not have need to sell. The brokers usually get a commission from the land sale and this is their driving force’.

The commission the land brokers get from land sold is not standardized and depends on the agreement between the land seller and the land buyer. However, the Brokers interviewed revealed that they charge between 3%-5% percent of the total agreed cost. However, there was not an agreed standard rate as more often it was a verbal agreement between the parties involved.

When interviewed, one of the brokers within the area said that their work is to help willing sellers and willing buyers to acquire/sell land at a fee and they can help them in processing the transactions if this is required. However, facilitating the transaction often means payment of additional fees and involving other brokers/professionals in other related fields.

The study established there were two classes of land brokers involved in the land assembly and development in the study area these were classified into *primary brokers* and *secondary brokers*. The primary brokers, according to the FGDs conducted, neither have an office nor

registered to conduct this kind of business. However, due to their knowledge of the village, they can easily get wind of the willing sellers and help them look for buyers, it was also reported that many residents prefer them due to close ties, trust and because they charge cheaper rates for the services. The second class of land brokers were said to be ‘secondary brokers’, these are attached to real property agencies and collaborate with the local brokers as source of information on availability of land for sale.

They are usually found in town, around real property agencies, or at the Ministry of Land and Physical planning offices where they also target clientele and once they link the agencies to potential buyers, they are paid a commission, on interviewing them, it was established that all of them are driven by commission motive, and that their main aim is to scout for the available land and willing sellers. They were also found to be non-registered with relevant bodies and that is why the locals refer to them as “Freelancers”. The brokers are connected to the various built environment professionals to whom they could refer the buyers and sellers for service at a fee.

4.2.1.6 Real property agents

Through the Key informant interviews and FGDs, it was established that there are some real estate agencies that operate in the study area, these were, Lake Estates Agency, Paultop Agencies, and West Kenya property agencies. These agencies work as marketing agents, and they take charge of a property from the owner at a commission that they claim when the property is sold. Interview with the agencies’ officials confirmed that they are registered by relevant statutory bodies and managed by qualified professionals as per the provisions of the Estates Agents Act, cap 533 of 2012. They buy land in bulk from landowners, subdivide it and sell it in small pieces; this requires large capital outlay that most firms do not enjoy. In some instances, they said they do value addition to land through infrastructure provision or planning the site and can go ahead at times to subdivide and process title deeds for direct

transfer this was confirmed by the West Kenya property agency who have had such a project in the study area. On further interrogation, Key informants confirmed that the process often begins informally through various institutions and actors involved but eventually it is formalized by subdivision schemes, provision of basic infrastructure and tenure security provision. In most cases, they service the land and then leave the rest to the buyers as opposed to the large developers who build complete housing units for purchase or rental.

The real property agents not only deal on land sales but also on management of leases and rental properties and their operations are not restricted to study area but also to other parts of the city and even other towns as confirmed by the Manager , Paultop agencies.

Through the Key informant interviews and FGDs, it was confirmed that there are a number of ‘non-registered’ real property agents who deal in rental houses and land brokerage. The numerous notices they write on blackboards on the roadsides or displayed in strategic locations within the inner city neighborhoods of Manyatta, Migosi and others, evidence this. Most of them operate within and around the City center where they can be accessed by clientele.

4.2.1.7 Office of the Chief

The study established that office of the chief is the most involved in the transaction in the study area by about 70% of the respondents confirming to have engaged the office of the chief in the process of land acquisition as shown in Table 4.1below.

Table 4.1: Institutions involved in land transactions

	Frequency	Percent	Valid Percent	Cumulative Percent
Chiefs office	119	70.4	70.4	70.4
Lawyer	36	21.3	21.3	91.7
Others	14	8.31	8.3	100.0
Total	169	100	100.0	

(Source: Field data)

Further to that, around 21% confirmed having used advocates, though it was realized through the Key informants that both the office of the chief and the lawyers are used concurrently. FGDs, Key informant interviews and the discussion with buyers revealed that Village elders and the area chiefs play a vital role in the informal land delivery process; the office of the chief oversees signing of agreements, and is usually involved in conflict resolutions between families selling land, buyers and sellers. Informally, the Chief takes the responsibility of controlling land sales in his area. For instance, as reiterated by Assistant Chief of Korando 'B' Sub-Location,

“Sometimes I have to stop sale of land as some people sell without considering the fact that they have families who will need that piece of land in future. At times it is the family members or the village elders who notify me of such occurrences.”

This statement shows that the office of the Chief does not only arbitrate in land matters but also control land sales in the areas. During the FGDs, it was also established that some buyers use the office of the Chief to scout for land, this is based on the trust the Chief's office enjoys and many people see it as entry point to the community, the Chief then announces to his/her village elders who scout for anybody who has and is willing to sell land. This is a quicker means to getting information about land availability for sale. In the FGDs with the Village elders, it was however confirmed that this is done at a fee, which is incurred by the buyer. The fee is not always fixed but is dependent on the agreement between the buyer and the Chief, considering the fact that the village elders who do the scouting also get a share. In this process, the fee is paid with or without the land, in question being purchased and some of the village elders proceed to turn into primary land brokers, adding to the charges that are to be incurred by the land buyer.

The discussion with the youths and women further revealed that village elders often inflate the price of land in once they have known the amount that the seller wants, this is to enable them get a bigger or better commission for themselves. Interviews with various land buyers

in the area indicated that most natives trust in the office of the Chief and the agreement witnessed before the Chief is binding and respected, thus they are not worried of processing title deeds to enhance security of tenure. The key informants agreed that this is common where the sale is between natives themselves. However, where the sale is between a native and an outsider (buyer from outside the community), despite the sale agreement signed before the chief, the buyers often insist on agreements witnessed by an advocate and that the advocate uses the agreement signed by the Chief as an authority to draft the sale agreement and in some instances; the Chief is involved as a key witness. This shows that the office of the Chief is paramount in the informal land delivery process.

The area Chief and village elders are important particularly where conflicts may arise in future. During the focus group discussions and key informant interviews, there was a consensus that involving the Chief and village elders prevents conflicts because they ensure the land sale does not jeopardize the family's future and that all family members are aware of such sales. This has reduced instances of next of kin later disowning the sale and in some instances if the matter reaches the court, the chief and the village elders can act as witnesses to land transactions in which they participated.

Despite the wide acceptance of involvement of the area chiefs and village elders, some native land sellers skip the office, citing mistrust and fee demanded by village elders and the Chief.

For example, one land seller said:

“Sometimes the chief and his elders demand a lot of money for no reason and where the seller is a woman particularly a widow, the elders want to act like ‘their’ husband and take charge of the sales which in the long run is exploitative. They can even discourage the buyer from purchasing land by creating false stories pertaining to the land.”

These sentiments were confirmed in the focus group discussions. However, such cases are rare in the area as the village elders only participate where they are invited. They (village

elders) acknowledged that everybody has their own land and the communal system of doing things has been depleted with time hence they have little control over land transactions. Whereas the Chief is supposed to be the protector of the vulnerable persons like women and children during the land transaction process, in some instances they do not protect the vulnerable but instead ensure that the buyer gets a better deal at the expense of the seller and the family.

4.2.1.8 Land lawyers/notaries

Key informant Interviews and the FGDs revealed that land buyers and particularly non-locals preferred sale agreements witnessed by a lawyer compared to native land buyers whom did not prefer lawyers as sale agreement witnesses.

The interviews confirmed that several cases of the lawyer being a witness ignored by native buyers because of the fee involved and because native – to - native sales are usually based on trust and are usually witnessed by the area chief and village elders. Thus, many locals feel secure enough with the transactions contrary to non-natives who feel safe with sales witnessed by a lawyer.

In most cases, key informant interviews confirmed that sale agreement undertaken before advocates end up in court owing to conflicts, this was said to be borne of the fact that the lawyers don't verify the status of land on the ground and are not able to verify and ascertain the size of the land or whether the land has any issues or encumbrances. This has seen cases of double sales on the rise and thus majority of buyers now ensure the office of the Chief and village elders are involved in the process of land sales.

4.2.1.9 Public actors

Through the key informant interviews and Discussions with the Village elders, a local CBO, and women, it was reiterated that public actors involved in land assembly and development include officials from the Ministry of lands and physical planning, county physical planning

department and The National construction authority and the National land commission. The government gazettes areas that are meant to be developed as urban areas and supplies land for urban development through formal allocation of land. As stipulated in the Land Act of 2012: The National Land Commission (NLC) allocates public land on behalf of county and national government through a number of channels including public auction to the highest bidders at prevailing market value, application confined to a target groups of persons or groups in order to ameliorate their disadvantaged position, public drawing of lots as may be prescribed, or public request for proposals as may be prescribed (Kenya, Republic of, 2013). However, in Kisumu Central Location, it was realized there is no such land for allocation and that people seek land informally through their own means

The ministry of lands and Physical Planning and the County Physical Planning offices also play a major role in the informal land market, whereas they are formal institutions whose role ranges from preparation of the Physical and Land Use Plans, registration of leases and title Deeds, arbitration, development control guided by the Physical and Land use planning Act, 2019, Land Act, 2012, The Urban Areas and Cities Act, 2011 among other statutes. They are also involved in the informal land market at various stages of land assembly and development through The Physical planning, land registrar' and survey departments.

Through the FGDs conducted, the residents refuted existence of any development plan for the study area, they said that that the role of the Physical Planning Department is limited to paper work and not felt in the study area since there is no plan to guide development on the ground. Through the office of the County Physical planner, it was confirmed that the existing structure plan of 1984 had never been followed in approving development control since it was never implemented; he however confirmed the current initiatives to prepare a comprehensive Structure plan for the city, which will cover the study area. The area chief reiterated that without an official tool for development control in the area might one day turn

into a slum gauging from the current pattern, which are haphazard. Despite lack of development plan for the study area, Key informants and Focused group discussions confirmed that the physical planning department continue approving subdivisions and development applications in the area, this is in contrast to the law that demands that they prepare local physical and land use plans and control development in their area of jurisdiction by ensuring that conditions of approvals and planning standards are observed through conformity to spatial development plans as well as policy guidelines, regulations and standards.(Physical and Land use planning Act 2019).

The Land Control Board is mandated to give consent to subdivide land and amalgamate land (Land Act, 2012). This is to ensure orderliness and to avoid conflicts by ensuring that all parties interested in a particular parcel has their interests catered for. Their main role is to protect agricultural land. In the study area, it was found that 67% of the land transactions by the land sellers and land buyers had passed through the land control boards as shown in figure 4.3 below.

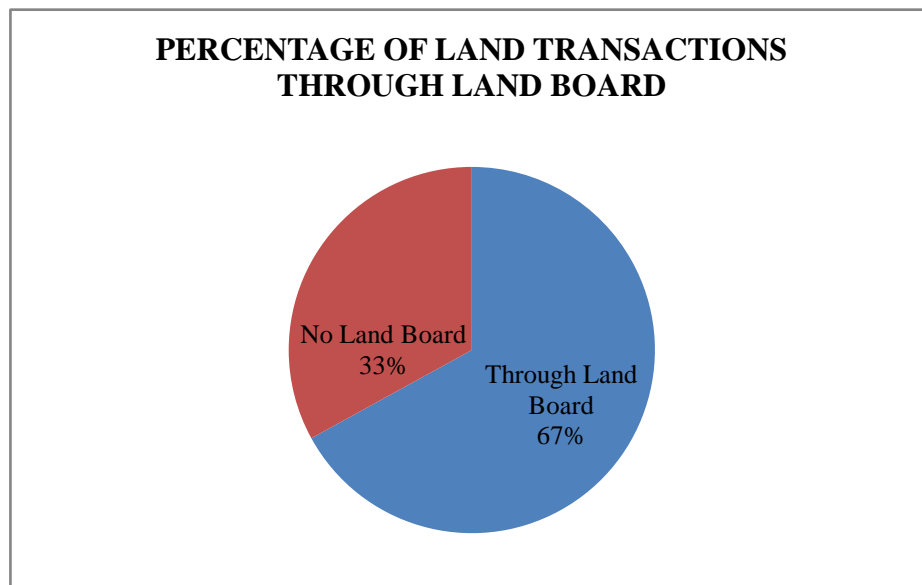


Figure 4.3: Percentage of land transactions through the land board

(Source: Field observation data)

The challenge raised by the sellers was that the meeting days for the Land Control Board, which is once per month is limiting due to the volumes of applications they receive. Moreover, the special board application is expensive to many. Respondents therefore, do not see the need for the board consents hence proceed without the board consents to subdivide the land. The residents also complained that the Land Control Board is more centralized administratively and do not have representation from each Location, thus do not have a clear history of land ownership and transactions in each locality but rely on what is presented on paper, this often lead to conflicts particularly among family members after sales. Generally, it the respondents felt that the public actor's role in the study area is limited to development control and approval of subdivisions, however without an official development control tools. During the key informant interviews, it was affirmed that Public land in the study area constitutes only areas with public utilities, institutions such as municipal health centers, schools and markets.

According to the County Physical Planner, the available public land in the study area is not adequate to meet the demand for housing development and that the available public land in the area is not earmarked for residential development but for institutional development, e.g. the piece of land neighboring Otonglo health center and the new proposed Sub-County Commissioners' office under construction as shown in Fig.4.4 below:



Figure 4.4: Institutional developments showing public health centre to the left and Chiefs office to the right

(Source: Field observation data)

4.2.1.10 Self-help groups

During the interviews, it was established that some people, particularly teachers, civil servants and even friends pool resources together and purchase land that they later sub-divide among themselves. One case was identified in Korando ‘B’, where a group of friends purchased pieces of land. Their main drive was to own homes and sell some land parcels to get profit. These groups are driven by common interest but not registered formally by relevant government institutions. From the discussions with the women, youths and village elders, it was confirmed that none of the native groups despite their existence has a land agenda as their objective. Instead, they usually focus on welfare, merry-go rounds, among others.

4.2.1.11 The family unit

Interviews and discussions during the focused groups indicated that the family as an institution plays a pivotal role in the informal land delivery process. This was pegged on the land ownership arrangements where despite the land being in the name of the household head, it belongs to all family members and they (family) can determine whether the transaction will take place or not. Although both buyers and sellers confirmed that they could

not undertake land transactions without the family members being involved, further inquiry with the office of the Chief and other key informants confirmed that some people still undertake land transactions in secrecy, i.e. without their close relatives' knowledge. This result into conflicts when the land buyer wants to occupy the plot or parcel sold. At times there can be a conspiracy by a family member to disown the sale particularly if the head of the household is deceased after the transactions has been undertaken but the buyer had not developed the plot. This is when heirs to the deceased demand additional payment from the buyer. This was realized in Korando 'A' where four such cases were confirmed in the study area. The office of the Chief had sorted two of such cases out since the Chief had participated in the transactions and had all the facts, while the other two are in court.

The key informants also confirmed the role-played by the private practitioners like planners and surveyors whose role is to identify and verify the land beacons and check whether they are correctly marked at the lands office to enable the buyer to see the land on the ground and know its shape and where the boundaries are. They prepare sub-division plans/schemes, prepare mutation and often follow up on the approval processes, and processing of title deeds to the buyers at a fee.

4.2.1.12 Civil Society organizations

There exists a local CBO (MAGNAM Environmental Network).The interview with the CBO chairperson revealed that even though their key role is in environmental protection and rights, the CBO has been instrumental in helping residents in circumstances where the families are in the process of losing land due to scrupulous sales and where constructions are undertaken without adherence to the provisions of the NEMA act. A case in point is where the organization took to court a developer who constructed is home right into the riparian reserve and another instance where the organization took a buyer to court for transferring all the property to her name and leaving the sellers family as squatters. Seven cases were found to

have been handled by the organization, three of which have been successfully won in favor of the complainants i.e. the local residents. It is however worth noting that the NGO mainly handle conflicts but not directly involved in housing development.

4.2.2 The informal land delivery mechanism

From the interviews and focus group discussions held it was confirmed that informal land delivery is the dominant means through which people acquire and develop land in the study area. The process was found to start by prospective land seller looking for a purchaser or buyer for his/her own piece of land after which negotiations are undertaken followed by the transactions and transfer of land to the buyer. Key informant interviews and Discussions further revealed that land sales are driven by sudden need for cash, emergencies or customary demand of building a home when a son comes of age as shown in figure 4.5 below on reasons for selling land. The focus group discussions confirmed that majority of land sellers are indigenous people who usually own land in freehold and either inherited the land or had bought the land informally. The pie chart below shows the results of means of acquiring land within the study area. As can be seen, 61% of respondents acquired their piece of land through inheritance while 38% acquired through purchase. The remainder was on the land and did not clearly state how they came to be on the land or means of acquisition, this could be a form of squatting.

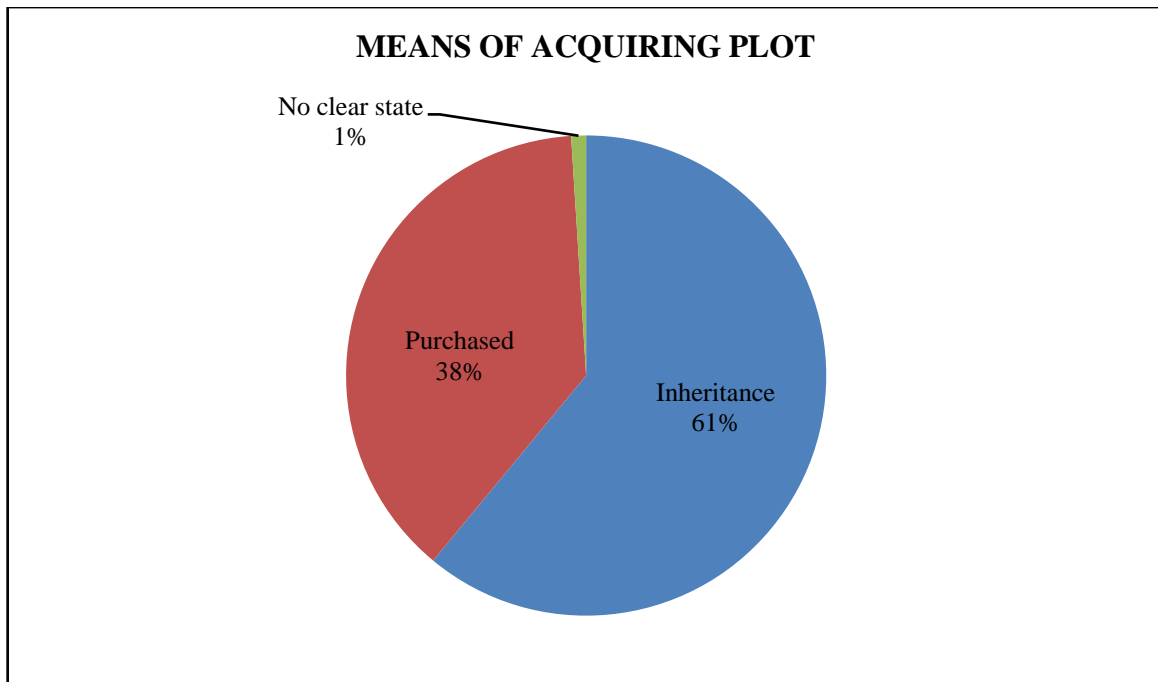


Figure 4.5: Means of acquiring land

(Source: Field data)

Through Key informant interviews, it was further revealed that those who inherited land have also sold part of the land despite the fact that they do not hold title deeds to the properties they own. The title deed in most cases was in the name of landowners' parents and it is during the process of sale that land succession is undertaken with the help of the buyer. This was reported as one of the factors that causes conflict. Some buyers use this situation to negotiate for better deals in land, some in the process of succession processing, they transfer the whole property to their names without the knowledge of the Sellers, and three cases were also reported in the study area, one of which is undergoing litigation. Discussions further revealed that individual land sellers are the primary players in availing land in the informal land market in the study area. The households become main actors in availing land to the informal land market and participate in the entire process until conclusion of sales and even post development and occupation phases. The households' drive to sell land was influenced by various needs ranging from the need to educate children, building a better house, buying another piece of land among others as shown in Figure 4.6 below.

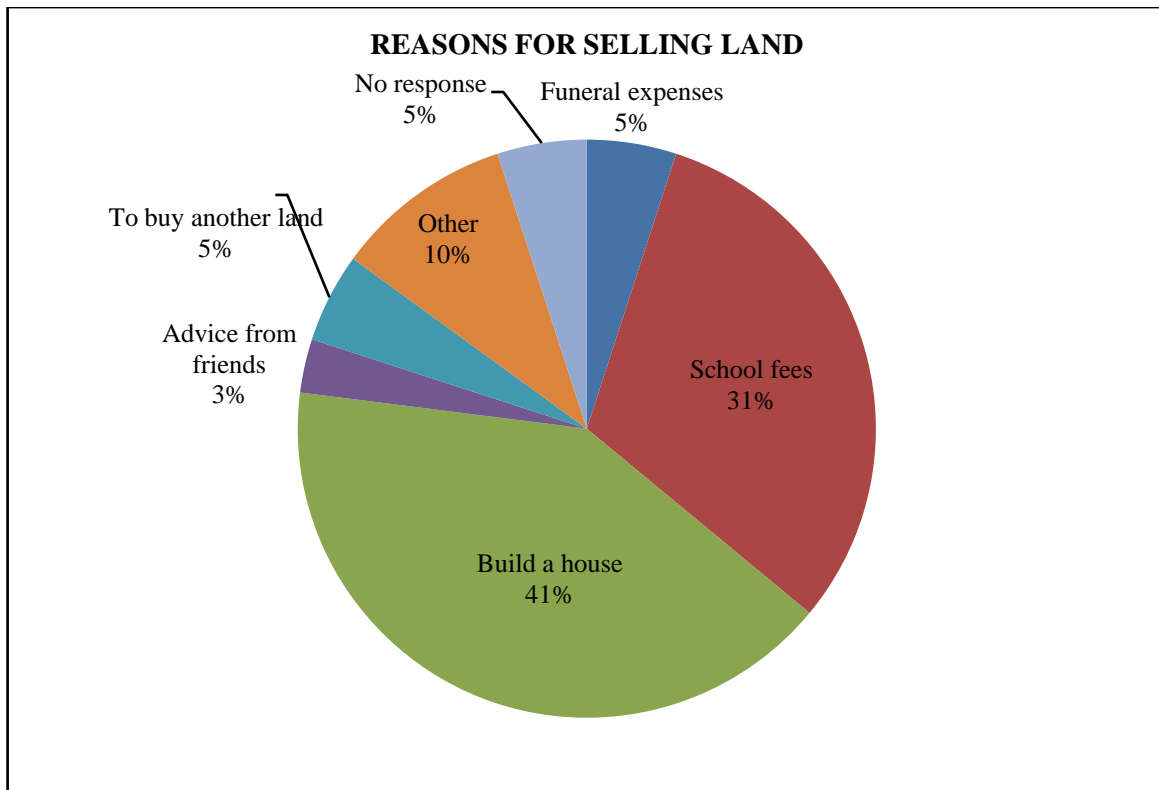


Figure 4.6: Reasons for selling land

(Source: Field data)

As indicated in the pie chart above, 41% of the respondents talked of selling their land to improve on the current house they are staying. They sell to enable them build a much better structure for shelter purposes and with improved rooms or facilities that they considered more modern. The 31% representing the second largest group of respondents talked of selling their land to enable them educate their children and/ dependents. From field interviews, if they had no school fees to pay, these sellers would not have sold their land. There was a tie at 5%, whereby some sold land due to hospital and funeral related expenses. Others sold land to purchase land in better locations or in areas that are more productive. The rest could not find any reason for selling land, though they had sold some.

Friends also played a role in giving opinions, suggestions that led towards someone selling his/her land, and this represented 3% of the respondents. The other 10% of respondents had other reasons for selling their land. A case in point was one elderly widow who had lost all her family members and hence decided to sell all her land, as she did not have any heir left.

In her case, the buyer had decided to take responsibility of building her a decent house and providing for her needs after taking possession of the land. This was nevertheless a unique case as the buyer was a distant relative to the woman land seller. On the other hand, buyers are driven by three factors in the informal land market as outlined in the purpose for buying land that ranges from building or constructing a better house, speculation purposes or to develop the land. The figure 4.7 below shows the percentages of the factors, with residential purpose being the main reason for land buyers acquiring land, followed by speculation purposes, and lastly, for development.

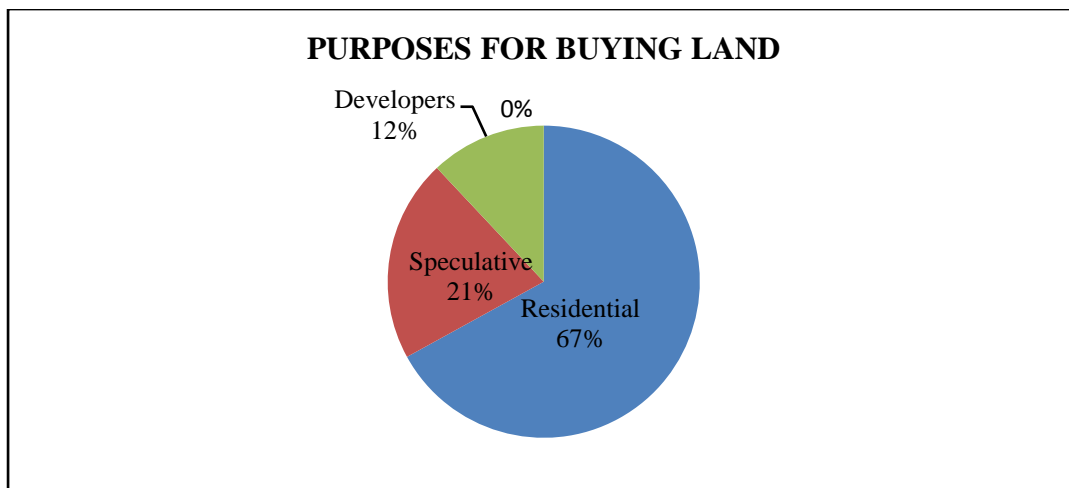


Figure 4.7: Purposes for buying land

(Source: Field data)

The study confirmed that majority of land buyers 67% buy with intention of putting up housing, while 21% buy for speculative purpose. Developers accounted for about 12% this was further observed in the study area whereby majority of new developments are homes of immigrants, few residential developments particularly along the main roads and several plots subdivided and fenced of as shown in the photographs below.



Figure 4.8: Residential developments by buyers

(Source: Field data)

4.2.3. The informal vs. formal land assembly and development in peri-urban Kisumu

To help in understanding how the informal land market operates in peri-urban Kisumu, it was prudent, to understand how the formal process works in order to appreciate the gaps in the system that results into informality as reiterated by (Wagah *et al* 20170)that, although it may be difficult to in-formalize formal government’s institutional frameworks, more research is needed on how land use planners can integrate or at best synchronize informal land market systems within formal government systems. The formal land delivery mechanisms were universally found to include formal land allocation, compulsory acquisition of land by the government and formal purchase of land. They are governed by regulations concerning title registration, tenure, conversion of agricultural land into urban use, subdivision and land development or construction. In order to get a clear picture of the informal land delivery mechanisms, formal land allocation was analyzed.

The Land Act 2012, prescribes that the NLC may on behalf of the national or county government allocate public land by way of public auction to the highest bidder at prevailing market prices, application confined to a targeted group of persons or groups in order to ameliorate their disadvantaged position, public drawings of lots as may be prescribed, public request for proposals as may be prescribed or public exchange of equal values as may be

prescribed, however, through the Key informant interviews with County planner and the area chief it was confirmed that currently there is no public land earmarked for such procedure within the study area. The county planner reiterated that the formal procedure followed has not changed and the procedure is still being followed until the regulations for implementing the Physical and Land use Planning Act 2019 are in place. on interrogating the new Physical and land use planning act 2019 further, it was evident that some responsibilities have been devolved to the County Governments particularly on preparation and approval of the Local Physical development plans and development applications by the Chief Executive Committee members, a task which was meant for the National Director of Physical planning, It was however noted that the new act is barely Two months in place and most of the development was undertaken in the era of the Physical planning act Cap 286 of 1996, which has been repealed. The formal process of land assembly is thus summarized in Table 4.2 below:

Table 4. 2: Government formal land allocation procedure

	ACTIVITY	TIME IN DAYS
1	Director physical planning prepares PDP showing various land uses (such as industrial, residential, commercial etc.)	180
2	Valuation of plots to establish their market value by the government land valuer	30
3	Commissioner of lands advertises available plots in the Kenya gazette. Showing closing dates and place where application forms can be obtained at non-refundable fee.	30
4	Interested parties collect and fill forms from the respective local authority	30
5	Submission of the completed application and payment of a refundable deposit	
6	Recording and listing of all received applications before the closing date,	90
7	Consideration of all applications by the district plot allocation committee and actual balloting for allocation.	30
8	Successful applicants are notified through the commissioner of lands	30
9	Commissioner of land issue a letter of allotment to the beneficiaries, normally with some development conditions and terms of allocation	30
10	Payment of stamp duty and other fees (e.g. ground rent, road charges etc.)	--
11	Director of survey initiates the plot survey, deed plan preparation and approval process	24
12	Preparation of title certificate and submission to commissioner of lands for signing and sealing	12
13	Registration of certificate of title by chief land registrar	6
14	Notification of owner to collect certificate of title.	30
	Total	522

(Source: Ministry of Land 2005, Land Act 2012)

The respondents had concerns during the interviews that the formal process takes too long and is expensive to the majority of both buyers and sellers. Besides, it favors those who have power and resources, in this case money. This tallies with the findings by Musyoka (2004), that the process of obtaining a government plot is long and expensive, and is therefore not an option to the ordinary person. She further observes that the information about public land availability is limited to a few persons. The above reasons have led to majority of persons in the urban areas resorting to informal land delivery in the peri-urban areas.

Interviews with the physical planning officials and the County Planner revealed that formal land subdivision and development in Kisumu follows a legally specified procedure as outlined in the Constitution of Kenya and Urban Areas and Cities Act, No. 3 of 2011 and the Land Act 2012. The formal procedure starts with an application to the local authority by a developer showing the intention to sub-divide the parcel of land and the number of portions. The applicant/developer then approaches a physical planner or the District physical planner to prepare the subdivision scheme. The subdivision scheme is then submitted to the District Physical Planning officer for scrutiny and recommendation for approval by the local authority, the developer then seeks consent to subdivide from the local Land Control Board. The applicant then submits the subdivision scheme proposal, together with a duly filled application for development permission form, the consent of land board and an Environmental Impact Assessment report where necessary to the County government for consideration for approval. The County Government may then circulate the proposal to other relevant departments e.g. Agriculture, Lands, Water, Public works, Public health, Physical Planning, among others. The County Government then approves or decline to approve or defer development permission and notify the applicant. Upon getting the development permission, the applicant may proceed to carry out further transactions on the land, e.g. survey, registration, transfer, or construction. The process is as shown in Figure 4-6 below.

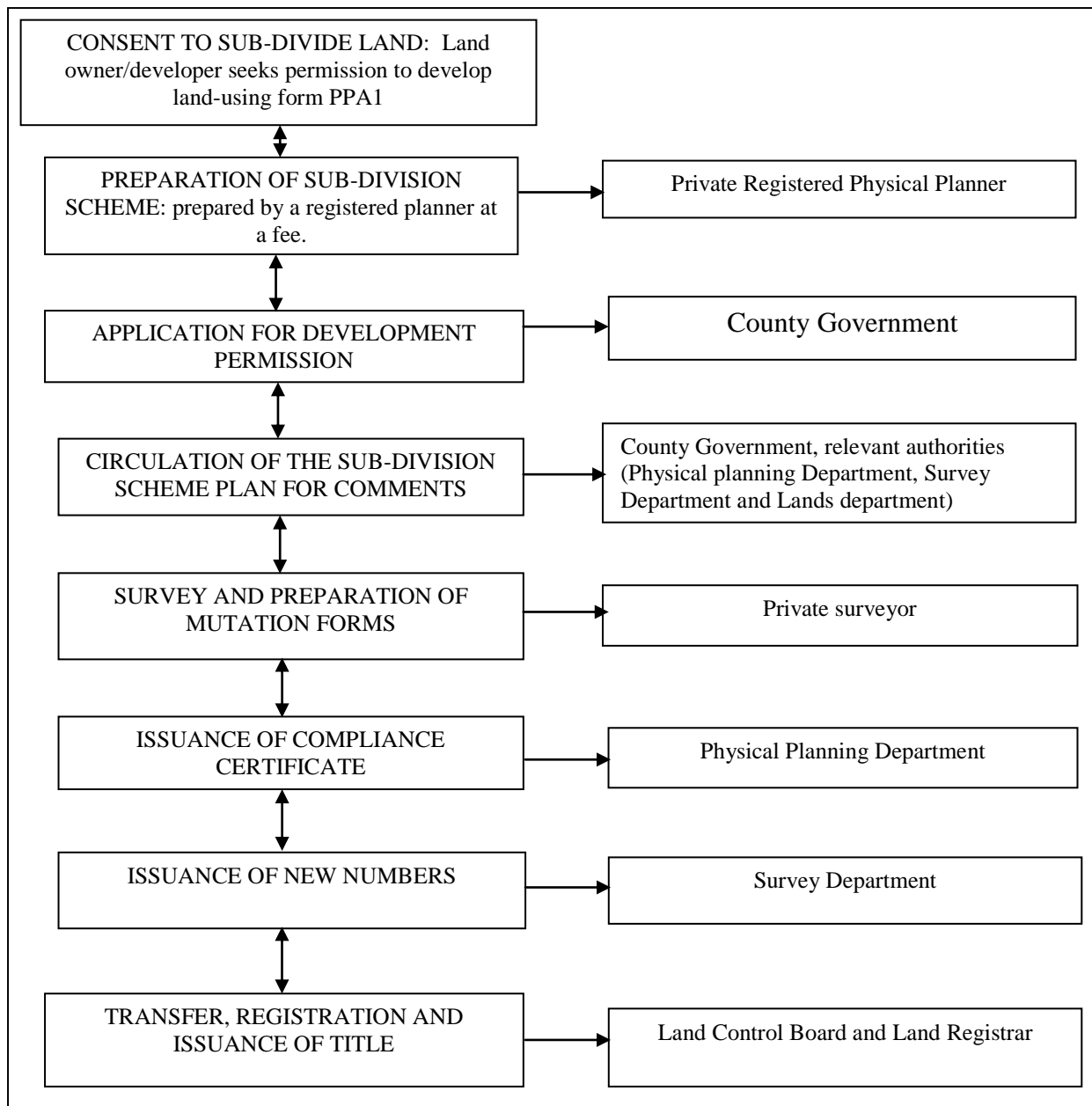


Figure 4.9: Formal process of development application

(Source: Physical Planning Department)

As stipulated in the Urban Areas and Cities Act 2011 and the new Physical and Land Use Planning Act 2019. It is the responsibility of the County governments to prohibit or control the use and development of land and buildings in the interests of proper and orderly development of its area (Kenya, Republic of, 2010).

The study found out that land transactions in peri-urban Kisumu are under the jurisdiction of the County Land Control Board (LCB). The LCBs are established under the Land Control

Act CAP 302, with the purpose of regulating land subdivisions and sales of agricultural land, controlling fragmentation of agricultural land and ensuring families are not left destitute because of land transfers. However, the Key informants reported that this is not the case as sales and subdivisions proceed to a point where some families remain landless and squatters after selling all their land and even homes. This is a pointer to an Institutional gap that needs to be addressed and supporting the assertion by Roy (2005), That informality to an extent is more of a state production rather than result of state regulations.

In the study area however, the procedure as shown in Fig: 4.9 is not strictly followed in the process of land assembly and development since more often, land sales are undertaken outside the formal processes as indicated below in Figure 4.10 below:

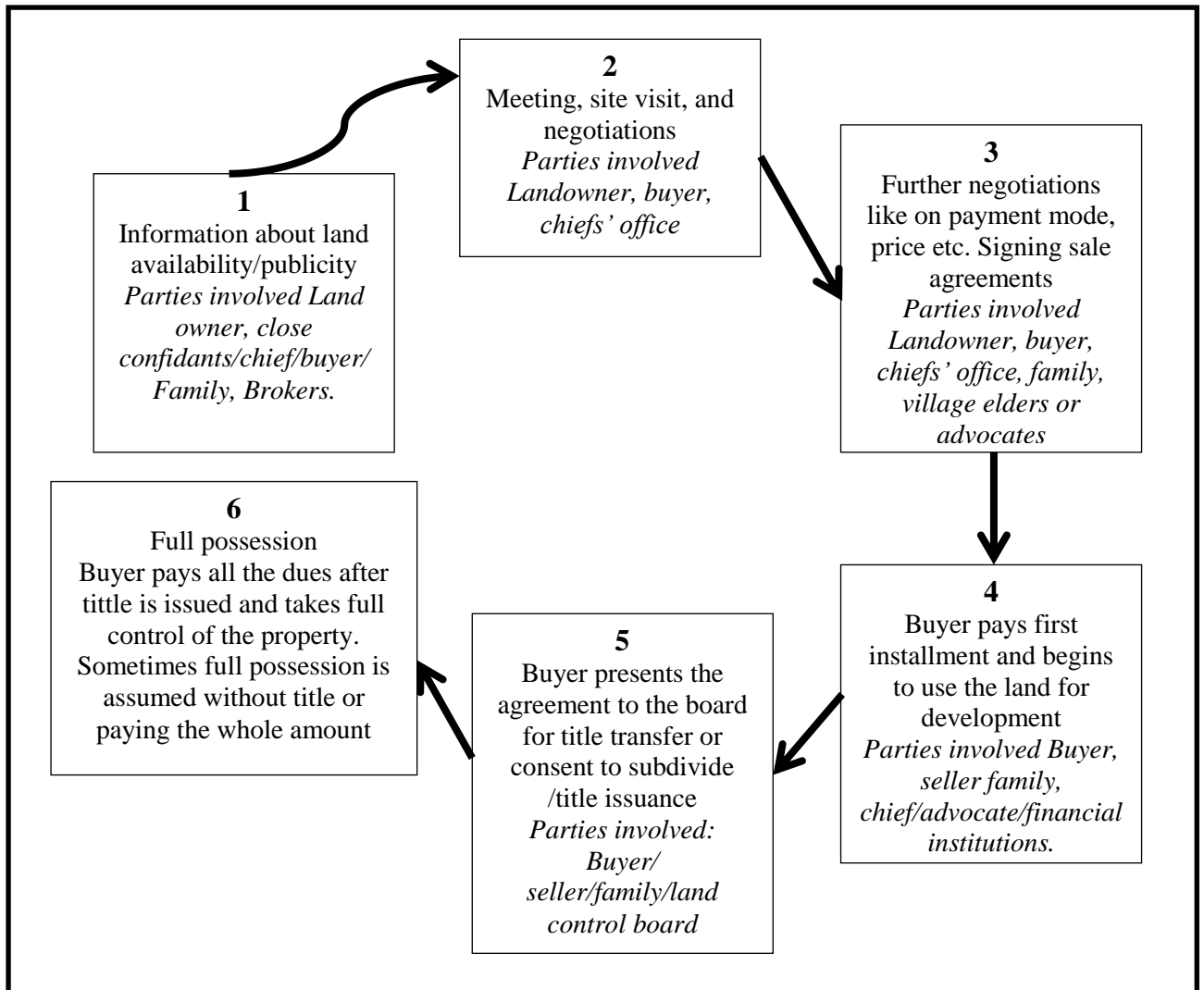


Figure 4.10: Process of land assembly

(Source: Field data)

The normal process of development of land which is Planning, Servicing, Building and finally Occupation (P-S-B-O) is not followed and most informal process involves Occupation, Building, Servicing and Planning, in that once one occupies a given portion, they construct their house and later, depending on availability of resources they may install services, with planning coming last, if at all. The process is more of a reversal as shown in the figure 4.10 above. Once the buyer has paid a deposit fee, or first installment, he is free to begin development on the land as the other processes of acquiring title proceeds. Informal land assembly and development thus takes place in phases as outlined below:

4.2.4 The phases in the informal land assembly and development

4.2.4.1 Information phase

From the discussions with the community representatives, it was revealed that the process of land sales in the informal system starts at individual household level. as reiterated by one village elder put it that

“In many cases the decision to sell land is primarily made by the man/ household head”.

This was confirmed in the FGDs with the youths, and women, in the two sub-locations that the land owner may inform friends, family members, brokers or agents of his intention to sell land. These actors then spread the word and help him get a buyer. Availability of land for sale is sometimes advertised through various means such as posters or boards or shared by close friends to help look for buyers. In several occasions, those who have bought land in the area are the first to be consulted if they may need another land or if they have someone who is willing to buy.

The area Chief reiterated that in several occasions, immigrants, “Jodak”, have bought multiple plots due to their financial capabilities and the good relations they have developed with the community over time. Hence, in some instances *jodak* have larger pieces of land than the indigenous populations. The study established that the already settled immigrant-buyers act as a link to new buyers from outside the area. Thus, the initial immigrants are the entry point for their friends and relatives and through them, new buyers can acquire land cheaply. From the perspective of new buyers, land access is by liaising with the people (villagers or relatives or friends) who have previously bought land in the area, inform them of their intention to buy land. They use these persons as scouts. Sometimes land agents/brokers are consulted too to speed up the search. As confirmed by the village elders, “scouting for land” has become so common in the area so much so that

“People are walking all over the area with big cars scouting for land to buy. These people with big cars come with huge amounts of money and use some unscrupulous village brokers to convince families to sell their land without planning to do so. Such drman-driven sales in the long run result into suffering by the seller families as they end up misusing the money and remain poor and landless at the end”.

The sentiments above were severally repeated among several respondents, and especially during the focus group discussions. The implication is that the ‘clandestine’ land sales, if not checked may contribute to families losing their livelihoods, thus contributing to urban poverty.

4.2.4.2 Negotiation phase

The study also established that once the buyer and sellers have been identified, a meeting is arranged, the buyer views the land, and it often starts with a mutual agreement between the buyer and the seller in the presence of family members and the local administration. On the other hand, it is common particularly at pricing level for land sales between native and immigrants that negotiations are conducted in the absence of the family members and the Chief or local administration.

When asked the reason behind this, the residents reiterated that it reduces conflicts in the family. For example, the wife and children and even the Chief and agents will demand more payment when they know the agreed price. This stage is where, a sale agreement is usually drafted and signed by both parties before the Chief and witnesses, for non-native buyers. The process continues to signing a sale agreement before an Advocate preceding payment of the initial installment. The process for land sales between natives usually ends after the agreement is signed before the area Chief and payment is made, leading to the buyer taking over the land. It is also noted that the mode of payment and the price is agreed upon at this stage.

4.2.4.3 Payment phase

After both parties have agreed on the price and payment mode, the transaction is sealed once payment of a fee is made to the Chief and to the Advocate, in case a lawyer is involved. The amount paid to the Chief varies depending on the land value and the ‘net worth’ of the buyer and. It is also determined by the number of participant witnesses: where the village elders are involved as witnesses, they are paid between Ksh.500 and 1,000;. On the other hand the Advocate’s payment ranges between Ksh.3,000 to 6,000 and in most cases they demand 10% of the sales price. At this stage, the land seller is given the down payment as per the agreed mode.

Table 4. 3: Preferred payment method

Preferred Payment Method			
		Frequency	Valid Percent
Valid	Cash	75	70.75
	Cheques	20	18.88
	Other	11	10.37
	Total	106	100.0

(Source: Field data)

As shown in the table 4.3 above, 70% of local land sellers prefer cash payments as opposed to cheques and electronic transfers. These payments are mostly done in installments, being the preference of many buyers to cushion them till they get ownership documents. This also enables them start putting up structures on the land, ensuring security as the seller may not change his/her mind easily.

In certain cases buyers do land swaps. A good example reported from the field was in terms of the Luo customs whereby a son cannot establish his own home in the same compound that his parents had their home after the death of the later. Accordingly, where the son is the only remaining heir and with only the parent’s homestead as the piece of land available to his

name, the son would resort to swap that piece of land with another person. Five such cases were reported in Kanyuto and Karombo areas of Korando A Sub-Location.

The study also established that Land can also be exchanged by other material goods. For example, there are exchanges that happen during distress sales and they are characterised by non formal agreements this was found to form about 10% of land transactions in the study area as shown in the table above.. Nevertheless, they involve exchanges of land with surety of being given cattle when one is sick, bereaved, or to sort out medical bills or funeral expenses.

4.2.4.4 Transfer phase

The study further established that after the payment, other legal procedures such as processing of title deeds often follow later without involving the area chiefs. This is usually undertaken by the buyers at their own cost, and is common with non-native buyers. Native buyers bank on the social ties with buyers as security hence are never in a hurry to process title. It was established that at this stage, the buyers and sellers involve professionals like planners and surveyors to do mutations, subdivision plans and arrange to appear before the County Land Control Board for consenting. This usually is at the cost of the buyer and is common with non-native buyers who do not believe in social ties as constituting enough security. They instead prefer to have the property fully transferred to them through statutory ownership documents.

4.2.4.5 Development and occupation phase

This is the final phase of the process. It follows payment of the last installment for the land. However, majority of land buyers preferred development after second payment and it is usually captured in the agreement letters. On further interrogations, the respondents reported that they prefer such an arrangement since it acts as a cushion to buyers from sellers who may change their mind before the transactions is completed. On the other hand, sellers also are assured of the seriousness of the buyer. At this phase, the plot has been fenced off, temporary

structure put up, and toilets dug with some trees being planted as a mechanism to secure the plot. Others also prefer growing crops with banana being the most loved crop. The buyers/developers start to put up the structures and thereafter move in. In most cases, people move into the temporary structures as the main house is being built or caretakers stay in the temporary structures guarding the land parcel. The phases of informal land delivery are summarized in the table 4 .3 below.

Table 4. 4: Informal land delivery process in Kisumu City

PHASE	STAGE	ACTIVITY	PLAYERS
Informational phase	Land identification	<ul style="list-style-type: none"> • Individual land seller/family/ Household decides to sell a piece of land. • The seller informs agents, friends on the availability of land • Buyers contacted, meeting with the seller/family and viewing is organized. 	Property agents, brokers, friends, relatives, households, buyers.
Negotiation phase	Price negotiation	<ul style="list-style-type: none"> • Negotiations between sellers and buyers, or agent(s) on the price. • The area Chief is consulted. • Sale agreements drafted and signed before the area chief. • Copy of title deed is issued to the buyer to carry out a search at the Lands Registry. • Mode of payment is agreed on plus date of payments /down payment. • Signing of the sale agreements • Buyer, seller and the witnesses contact an advocate before whom they sign the sale agreement. 	Witnesses, buyers, sellers, family members, brokers, local administration, friends/ relatives and surveyors/planners.
Transactional Phase	Payment of agreed price	<ul style="list-style-type: none"> • Payment is effected as per the agreed mode. • Payment of land price and signing for such payments • Witnessing. 	Family members, village elders, area Chief, brokers, advocates/lawyers.
Transfer Phase	Subdivision and transfer of property rights.	Searches conducted, seeking consent to subdivide, consulting a registered Physical Planner, application for development permission from the City Planning Department, circulation of the proposal, survey and preparation of mutation forms, generation of new numbers and issuance of title.	Surveyors, registered Physical Planners, County Government, Ministry of Lands , Land Control Board, Chiefs Office, Family members., Land seller
Development and occupation phase	Change of ownership.	Final payments are made. The buyer starts developing the property, e.g. building a house.	Buyer, Contractors, NEMA, National Construction Authority, City Planning Department.

(Source: Field data)

The informal methods of land delivery do not follow the due process of Planning, Survey, Building and Occupation model as suggested by Baross (1990), but was found to present various models that are influenced by the type of actors involved in the process. Some of the models found to be applicable in the study areas are outlined below:

4.2.5. Models of land assembly and development in the study area

4.2.5.1 Model I: Native-to-Native sale

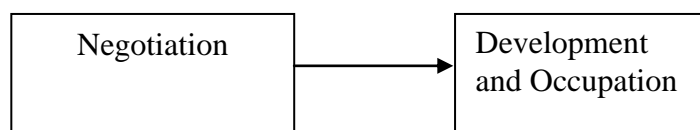


Figure 4.11: native-to-native sales

(Source: Field data)

This model was found to be common where land transactions involve natives or relative. It relies on the common trust between natives, which acts as a security to the buyers. Once negotiations are undertaken, then the other party can acquire the land and occupy it without any fear of eviction; more often, inheritance arrangements fall within this model.

4.2.5.2 Model II: Native-to-immigrant sale

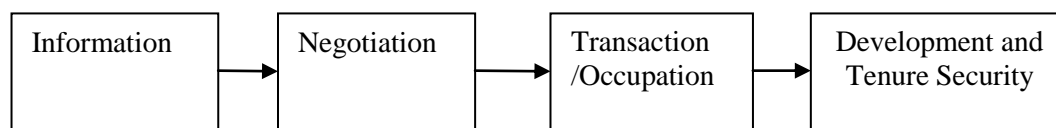


Figure 4.12: native to immigrant sale

(Source: Field data)

In this typology the purchaser/buyer of the land is a “stranger” to the seller and hence the term immigrant because he is not originally residing/staying in the locality. The immigrant has to have information of availability of land to be purchased and thereafter proceed to negotiations, transactions and later development and occupation. During the transaction phase, the buyer Puts up temporary structure to act as security or sign of occupation and

finally development is preceded or goes together with tenure security i.e. processing of title deed.

iii) Model III: The hybrid typology

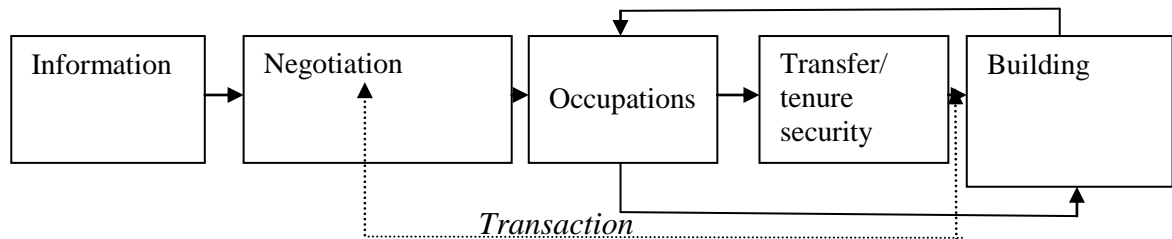


Figure 4.13: Hybrid typology

(Source: Field data)

The hybrid model above combines the stages in model I and model II and was found to be more applicable in the informal land market in the peri-urban area. In this model, the process of land delivery begins by information about availability of land for sale through the brokers, posters and other actors. Upon identification, the potential buyers and sellers negotiate the price and agree on payment mode. The buyer may fence of the parcel, put up a temporary structure or cultivate the land as sign of occupation. Processing of transfer and title preparation is undertaken followed by development or putting up of a house, some of these stages run concurrently e.g. Occupation, Transfer and Building.

Key features to note in this model of land delivery is that, the transaction stage cuts across the stages of Negotiation, Occupation and Tenure Security as shown by the broken lines and arrows in the figure 4-10 above. This is because payments are usually made in three installments cutting across the three stages of Negotiation, Occupation and Tenure Security. Unlike the PSBO model, the hybrid model does not incorporate planning and servicing except for Occupation and Building, which is common in both models. It was however noted that there is total lack of planning in the peri-urban area, although services can be provided later, either through the initiatives of the immigrants or by public entities. In all these

typologies, at times, there is overlap and it is key to note that it does not have to follow the rigid process as outlined. The typologies only present a generalized example of how the transactions and ownership transfer actually occur in the study area.

The above findings show that the informal land market comprises different actors who play different roles in the process of land assembly and development. The actors include the family unit, speculators, individual buyers, public entities, conveyance lawyer, registered real property agencies, Land brokers and office of the chief. This confirms assertion by various researchers like; Rakodi 2002, Musyoka 2004, UN Habitat 2010, Adam 2014 and Akunnaya et al 2018,) that, the informal land delivery is facilitated by the action of individual household, professionals in the built environment, lawyers among others, and that the role of each varies from availing the land, information to facilitative in the process of land assembly and development.

Unique to the actors is the role of public institutions like planning departments, who despite their mandate of ensuring planned and orderly development in the city as prescribed in the Physical and Land Use Planning act NO.13 of 2019, they participate in the process through approval of development applications albeit in the absence and disregard to provisions of the City' structure plan of 1984. This affirms the concept of exception as reiterated by Roy (2005) that the planning and legal apparatus of the state has the power to determine when to enact this suspension, to determine what is informal and what is not, and to determine which forms of informality will thrive and which will disappear. Another key observation is a major role played by the administrative office of the chief in the informal land market despite their key function being maintaining law and order.

The informal land assembly and development process has got five phase namely: Informational, Negotiation, Transactional, Development and occupation, Transfer Phases,

some of which is not distinct but take place simultaneously depending on the type and agreement between buyers and sellers, from the informal process of land assembly and development, the established three typologies namely, the native to native model, native to immigrant and the hybrid model. Unlike the formal land assembly and development model by Barros 1990, which follows a distinctive order of where planning precedes any development followed by Servicing, building and Occupation (PSBO), The informal land assembly and development do not have a standardized model since each model is influence by the actors involved in the process. The Hybrid model in figure 4.10 was found to be more common and thus can be adopted in guiding analyzing the informal land delivery processes in the peri urban area.

4.3 Impact of informal mechanisms of land delivery on housing development in peri-urban Kisumu

To understand how informal mechanisms of land delivery impact housing development, both the process of housing development and the house as a product were analysed by looking into the housing typologies, and Quality aspects of housing. In the study area, land assembly and development was found to be predominantly informal as reiterated by the Physical planner and director of Housing, this is borne of the fact that the formal processes do not favour the majority the city authorities lack adequate land banks to allocate to people for housing development, despite high demand for housing being witnessed in the city. It was also revealed that the formal housing market does not meet the demand for housing hence forcing majority of the population to seek alternative means of housing themselves in the city's periphery this is a phenomena is in line with Rakodi, 2002 and Musyoka, 2004 who reiterated that informal land delivery mechanisms have become common in availing land for residential development in the peri urban area.

4.3.1 Informal housing development process in peri-urban Kisumu

Formally, housing development process follows the laid down procedures guided by the established laws. Ordinarily, the process should be guided by approved physical and land use plans, in line with relevant National and County policies as stipulated in the Physical and Land Use Planning Act of 2019. All new development should have regard to the health, safety, amenity, efficiency, aesthetics and convenience of the community and to the proper planning and density of development and land use in the area. Where subdivision is needed, consent from the Land Control Board is required. For housing development, the developer is required to apply for development application to the County Government by submitting the development plan and drawings, architectural drawings and specifications, civil and structural engineer's drawings and specifications, mechanical and plumbing drawings and specification, and an environmental impact assessment report. They are also required to pay a statutory approval fee depending on the plinth area, location of development, the user, as well as land rate.

As reiterated by the County Planner, the formal process of housing development starts with submission of development plan/proposal for review and approval in the County Department of Physical Planning. The accounts office checks for the relevant fees to be paid as per the Kisumu County Finance Act 2018. The fees are determined based on the plinth area to be built and the building's location.

The County authorities require a developer to furnish them with several key documents for them to be ready to commence the approvals process. A developer submits application documents, which include certificates of registration from the registered professionals who are going to be charged with supervising the construction of the building project. This includes the registration certificates for the architect and structural engineer, who ultimately

are charged with enforcing quality control and ensuring structural stability of the building as it is being constructed. These professionals also complete an indemnity declaration that indemnifies the County authorities of any claims in the case of faulty construction or mishap that may occur in the process of building. The indemnity declaration makes the professionals take upon themselves the full responsibility for ensuring that buildings are constructed according to the building codes and relevant design standards. The developer also furnishes the authority with copies of ownership documents for the property, latest annual land rates receipts, and the completed application for building permit. The developer then pays the various fees ranging from fees for inspection of building plans, occupation certificate, infrastructure development levy and charges for construction signage and associated fees.

Once these all the requirements are met by the developer, the County Physical Planner, the Engineer, the Public Health Officer, the Environmental Officer and the Surveyor reviews the submitted plans and give their comments .The development plan is then circulated to relevant departments for comments. If all the requirements are met, then approval is granted. The developer is then required to seek approval from the National Construction Authority for compliance. The process involves actors ranging from registered Architects, Engineers, Quantity Surveyors, and registered contractors.

Unlike the formal housing development process, the FGD and Key informant interviews revealed that housing development in the study area does not follow the above process but proceed by firstly, the developer consulting a designer who draws house plans at a nominal fee but will not seek approval from the formally designated offices. This design will then be given to a local ‘fundi’ or a contractor who will come to the site and negotiate with the developer. In several instances, local fundi’s have duplicate plans which they have built for others which they can offer to the client with little modifications to suit the client’s needs and

site layout. This also forms part of the bargaining to win the ‘tender’ by the contractor. In several occasions, the contractors/fund is are locally based and employ local labor to save on costs. There is no approval needed once the agreement is reached and the work begins. It was however noted that a few residents particularly those who are have the financial capability and informed, seek building approval from the County Government and National Environmental Management Authority. Advertisement boards on construction sites listing approval details by NEMA, County Government and the National Construction Authority (Figure 4.14) evidenced this.



Figure 4. 1: Site Notice Board
(Source: Field data)

The formal housing development process requires a registered Contractor, Architect, and Engineer to oversee the construction process. A compliance certificate or occupancy certificate is issued before occupation. The whole process follows the PSBO model of development whereby land is first planned, services provided; the actual building takes place,

followed by occupation by the owner. However, the study established that the peri-urban housing development process predominantly preceded by occupation of the plot, usually through construction of toilets, a temporary structure (*mabati suites*) or planting of trees or food crops, followed later by development of the actual house. Generally, the mabati structures are often occupied by the land buyers themselves, rented out or sometimes given out to a relative or worker to ensure tenure security. The buyer or their agent resides in the mabati structure as they continue with development of the permanent house. Once completed, the developer moves in and the mabati structure remains as a store, kitchen or is rented out to generate some income.

4.3.2 Informal mechanisms of land delivery and the quality of built housing

It was revealed that not all buyers put up residential housing. As shown in in Figure 4.15 below, pure residential use accounted for 28% of uses of land, with 16% for agriculture and 7% for commercial use. Some 49% of respondents cited mixed-use development. From those who cited mixed use of land, there were both buyers and sellers who try to maximize the use of their property for example by rearing animals, planting crops and hops within their homesteads as well as rental housing. Mixed-use development was also observed within the study area at the market centres where households had shops at the front and living rooms behind the shop.

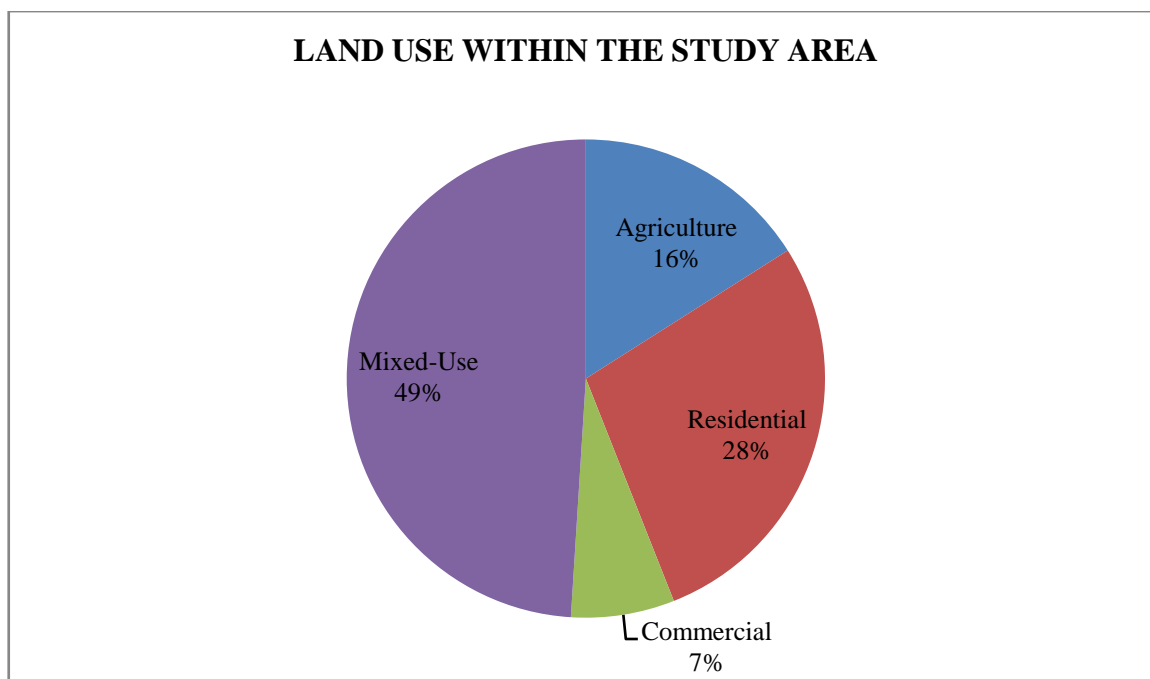


Figure 4.2: Land use within the study area

(Source: Field data)

Despite the desire to put up a housing unit, the informal land delivery mechanisms have been observed to jeopardize access to adequate housing in the peri-urban area. As defined by (UN-Habitat, 2010), adequate housing is more than a roof over one's head, it also means adequate privacy, adequate space, physical accessibility, adequate security, security of tenure. It further entails structural stability, adequate lighting, heating and ventilation, adequate infrastructure (water supply, sanitation and waste management facilities suitable environmental quality and health related factors) in accessible locations with regard to work and basic facilities, all which should be available at an affordable cost. (Kenya, Republic of, 2010).

Interviews with the key informants and observations in the study area further confirmed the above components of quality of housing, which is usually compromised in the informal processes of land assembly and housing development. In the discussions and observations, it emerged that that quality of peri-urban housing varies depending on the level of owner income as shown in figure 4.18 below and subject to and the existence (or lack of) development control as shown in figure 4.16 and 4.17 below. It was also observed that the

quality of housing in terms of sizes, type, building materials used, and environmental conditions vary among different households in the area.

4.3.3 Informal housing development, housing typology and structural quality

It was observed that buyers particularly immigrants put up permanent houses using approved materials and suitable technology as shown in figure 4.16.



Figure 4.36 : Permanent houses put up by land buyers

(Source: Field data)

The above houses depict that most of the land buyers in the area have the financial capability to put up modern houses that are adequate for their needs in size and design. They usually build using durable materials. On the other hand, native households or land sellers put up semi-permanent houses or permanent houses whose sizes and design is not always up to standard. The focus group discussions revealed that this is done to enable native households save some money for other needs or to build semi-permanent houses for rental as another source of income. It was also observed that local rentals target low-income earners, with rents ranging from Ksh. 500 to Ksh.1,500 per month. The structural quality of these houses is very

low and they often do not last as opposed to the durable ones put up by the buyers as shown in figure 4.17 below.



Figure 4.4: A semi-permanent houses put up by land sellers in front of the buyers home
 (Source: Field data)

Household interviews further confirmed the clear disparity on quality of housing between the land buyers and sellers as shown in figure: 4.18 below:

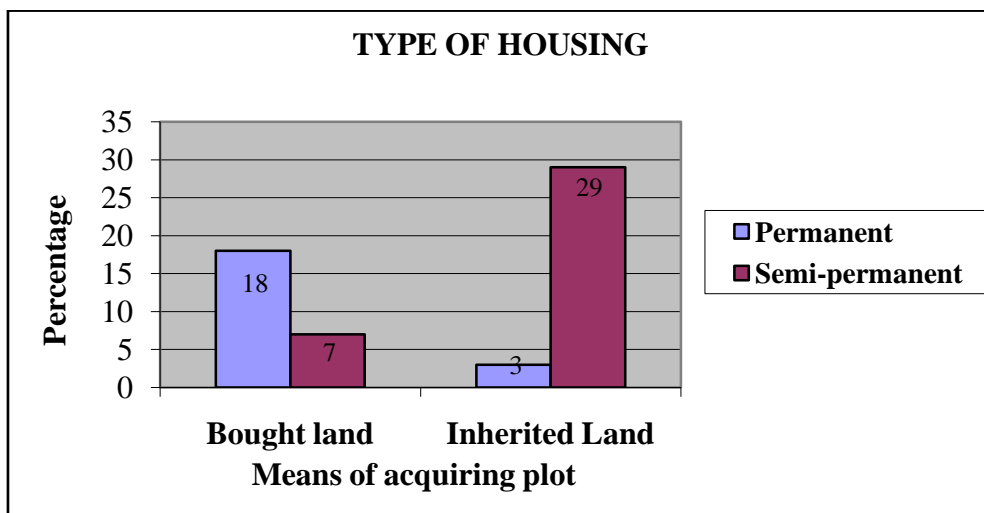


Figure 4. 5: Comparing-housing types between sellers and buyers

(Source: Field data)

Majority of land sellers still live in semi-permanent housing despite citing housing development as their major purpose for selling land. A few buyers live in semi-permanent houses, however, majority of these are native buyers, and those who are in the process of developing permanent houses.

This also indicates that despite the land sales and the money they get through such sales, native sellers do not primarily invest in housing but the money is diverted to other needs. This is in line with the findings by Hoppe *et al.*, (2020), that investments in informal land and self-built housing are inextricably linked with household wealth accumulation processes and go beyond household shelter needs. However, there is need for better strategies for the proceeds of land sales to curb poverty, and the glaring possibility of informal settlements development in peri-urban Kisumu, as the city develops space.

4.3.4 Informal housing development and environmental quality

In putting up a house, it is recommended that an Environmental Impact Assessment (EIA) be undertaken according to National Environmental Management and Coordination Act (EMCA, 1999) that way; any possible adverse effect of any project may be identified and mitigated. It was however observed and confirmed by the Key informant that residential housing projects did not undergo this process. The study also found out that, individuals had put up homes along the lakefront as shown in the figure 4-19 below. This evidences of neglect of environmental law and housing construction is taking place right into riparian reserves. This goes against the requirement that lake riparian area reservation should not be less than 30 meters in width from the high water mark (Kenya, Republic of, 2005) and further jeopardise the quality of aquatic environment through erosion and effect on the breeding grounds, and natural habitat for birds, animals and aquatic life. Figures 4.19 below show some of the developments encroaching into the lake.



Figure 4.19: Wall fence encroaching unto the lake (*left*) and a newly fenced plot encroaching the lake (*right*)

(Source: Field data)

The study also found out that housing development is predominantly linear along the Kisumu-Busia Highway, Lakefront and the Riat Hills. These areas act as point of dispersal and thus key determining factors in the development pattern of the study area. Housing development was observed to be rapid in areas near the highway, which is not only common with upcoming homes, but also with rental development, areas around the hills are also occupied by natives, some of whom have sold land around the lake and along the highway. Along the lake, the key informant interviews, FGDs and documentary searches and observation confirmed that the plots are all sold out though only a few people have developed homes, this may suggest speculative buying as earlier found to be a purpose for buying land in the study area in addition to that, it was observed that the plots abutting the lake have since been submerged during the long rains, thus need to be checked to protect the riparian reserves before the water recedes and development starts.

4.3.5 Informal housing development and access to public amenities and utilities

Through the focused group discussion, Observation and Key informant interviews, it was established that there exist public institutions like schools, health centers and markets in the study area. However, it was reported that quality of service offered particularly health and education is poor during the FGDs, the respondents reported that these facilities are usually relied on by the natives unlike the buyers who prefer better facilities located in town due to their ability to pay for such services.

As observed, the study area is relatively accessible, with road network being improved. However, majority of the, residents were not satisfied with the state of the roads with 74% stating that its poor while around 26% stating it was good as shown in figure 4.20 below.

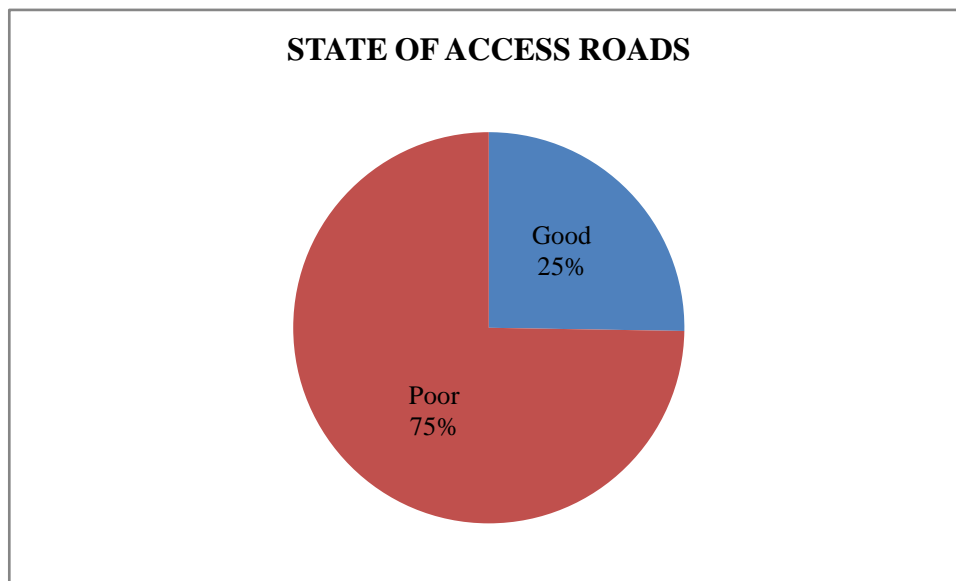


Figure 4.20: State of access roads

(Source: Field data)

Responded stated that most of the roads are rendered impassible in all seasons due to impact of the heavy Lorries transporting sand from the lake that destroys the roads and lack of frequent maintenance. This is both advantageous and problematic for instance, poor accessibility is used as a bargaining tool by some buyers and after buying the land they go

ahead to open up roads. On the other hand, areas with better accessibility, especially along the tarmac road fetch high values on land. There is a water mains running along the Kisumu-Busia Highway to Kisian, however, connectivity and access to piped water is still poor, with 76% respondents confirming so, while around 23% saying it is good as shown in the figure 4.21 below.

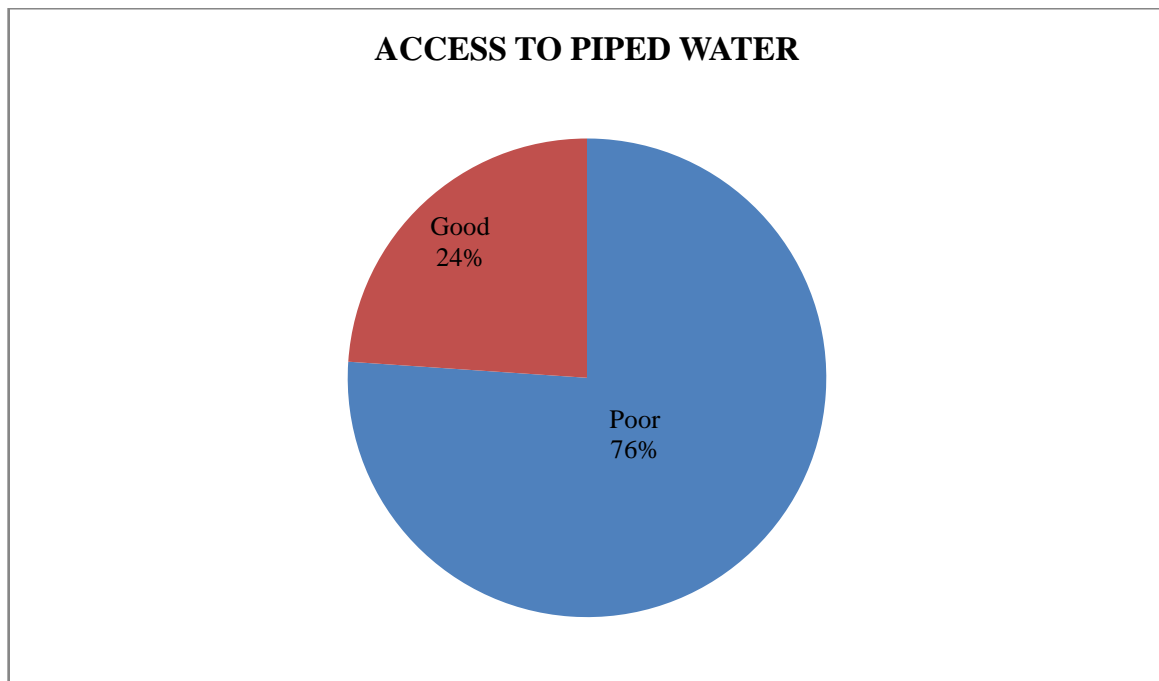


Figure 4.21: Access to piped water

Source: Field data)

Those who said it is good, reported that they have access within their compounds, or are closer to water kiosks and that the water is available for longer hours and days within a month. While for those, who said access to piped water is poor reiterated that they are far from the water points hence not connected or could not afford to pay for the water.

Through the focused group discussion, key informant interviews and observation, it was realized that the residents still rely on boreholes or wells some of which dry up during dry season when the water table goes down. Others were said to rely on the Lake or streams. The fact that residents still rely on streams and lake for water imply that their exposure to water

borne disease is still high thus requires remedial measure to enhance connectivity to safe and clean water.

It is mainly land buyers who have access to piped water and in some cases; local households get water from migrant neighbors, depending on their relations. There exist water kiosks where residents buy water at Ksh. 2/= per 20litres, however this does not apply in the whole location. Electricity connection in the area is good as confirmed by over 85% of respondents and this was attributed to various electrification initiatives like the last mile and rural electrification as shown in Figure 4.22 However, 14% said it is poor citing that cost of electricity is still high for them to be connected. Amongst those who confirmed connection to be good, were found to have electricity connections in their houses.

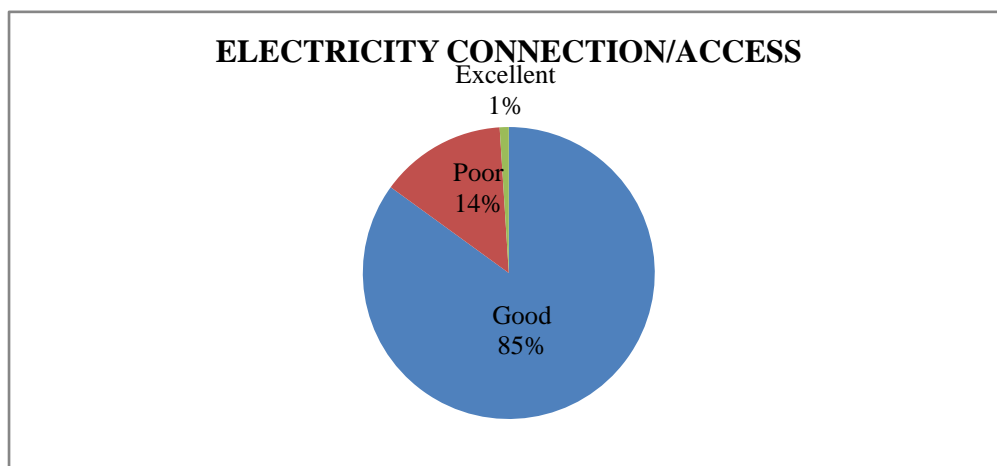


Figure 4.22: Electricity connection/access

(Source: Field data)

Key informants raised concern that with rapid transformation taking place and rise in population, appropriate measures need to be put in place to curb the problem of waste management in the area. Currently, there are no waste collection services in the area and waste management is left to individual households. Field interviews revealed that solid and liquid waste management is becoming a challenge in the study area due to increasing number

of developments marked with no clear structures for waste management. In the household interviews, 73% of the respondents cited waste management as a major challenge, whereas 25% said they were satisfied with the status as indicated in table 4.5 below.

Table 4. 5: Waste Management

	Frequency	Valid Percent	Cumulative Percent
Poor	124	73.7	73.7
Good	44	25.8	99.5
Excellent	1	.5	100.0
Total	169	100.0	

(Source: Field data)

It is worth noting that this is mainly waste management at household level not communal. It was reported that household collect their waste and usually burn them within their compounds this was also observed around market centers as shown in the Figure 4-23 below.



Figure 4.6: Household waste management

(Source: Field data)

On liquid waste management, the field interviews indicated that it is generally poor with 80% of the respondents confirming so while 20% stating that it is good as shown in Figure 4.24

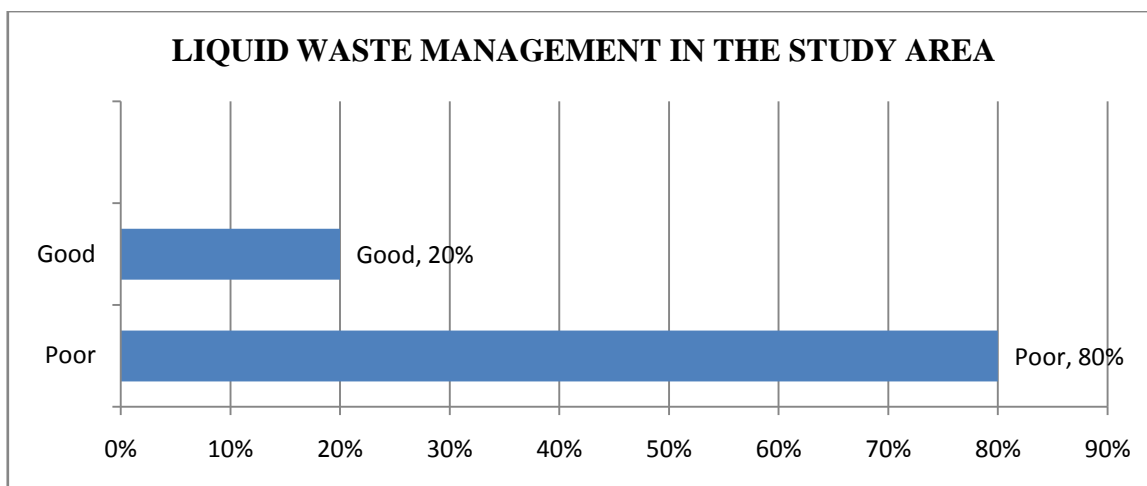


Figure 4. 7: Liquid waste management in the study area

(Source: Field data)

Through FGDs and observations, the study confirmed that there is no sewer connection in the study area; residents rely on pit latrines, some of which are in poor state while others have septic tanks installed in their premises.

4.3.6 Informal housing development and tenure security

The household surveys established that 58% of the respondents interviewed did not have title deeds, particularly the natives while 42%, majority of who were land buyers, had title deeds as indicated in table 4.6 below.

Table 4. 6: Ownership documents

	Frequency	Valid Percent	Cumulative Percent
Titlle deed	71	42	42
Allotment letters	2	1	43
Others	96	57	100.0
Total	169	100.0	

(Source: Field data)

The records from Ministry of Lands and Physical Planning indicate that the study area had undergone adjudication in the early 1970s and title deeds issued. However, most of these title deeds are in the names of grandparents some of whom have since died and succession had never been undertaken. Interviews with the Land Registrar and the County Surveyor

confirmed that more often, it is the buyers who usually help native families in processing title deeds when purchases occur.

The area administrators bemoaned these arrangements and natives as depressing land values as the buyers will not be willing to pay market price for land, which is under succession. One Unique case was found in Korando 'A' where a buyer, paid several families so that he could amalgamate their land for a major housing development. The land in question was in the name of the grandfather who had informally subdivided to his sons and succession had not been done for each son to get his title deed. After payment, some of the land owners went to court and disowned the sale, the buyer thus is at risk of losing his money.

According to the District Physical Planner, informal land delivery systems are cheap but may turn out to be very expensive particularly where cases of double sale arise after initial payments have been made. He also explained that the formal process, though long and expensive, assures the buyer maximum security of tenure and allocates space for public utilities. Even though secure tenure is important in instilling confidence among developers, Kombe (2005) and Payne (2004) separately explain that, it is not a sufficient condition for creating sustainable urban livelihoods despite lack of title deeds, land transactions and development is still going on in the study area, This implies that both buyers and sellers are secure with either signed or verbal agreements done before the chiefs or advocates as reported in the focus group discussions this is in line with Rakodi,(2007) which asserts that informal mechanisms of land delivery are most effective following their user friendliness and social legitimacy.

4.3.7 Informal housing development and resultant conflicts

Due to tenure (in) security as discussed above, there are often conflicts, as some buyers would not develop their land until they get title deeds. This sometimes forces such buyers to

use short cuts to get the ownership documents as soon as possible to avoid court battles. In other circumstances, the study realized that majority of the native households, as compared to the buyers, access land through inheritance and do not have title deeds to their plots despite being recognised as the rightful owners by the community. Such natives have been engaged in uncontrolled sales of their lands and some have ended up landless. The land market has not done them any favour and this is best captured by one respondent who is an elderly man at Korando 'A' who confessed that he had sold all his land and home and the sale involved all his family members though it did not end well. He said that,

“I sold land with the aim of educating my eldest son; however, he dropped out of school in second term in form one, the rest of the money was used to purchase small piece of land ¼ of an acre where I am currently residing with my family of four sons. The buyer had been paying in instalments for the last six years and about 30% of the payment has not been made however she gives financial assistance when whenever there is a crisis and this forms part of the payment”

The old man when interviewed is looking for a buyer to sell the land he is currently living in so that he can go and buy land in Homabay County where he anticipates he can get adequate space for himself and sons.

The above case portrays what the locals sometimes undergo after selling their land and confirm the assertion by the village elders that poverty is increasing due to uncontrolled land sales. Majority of buyers exploit the ignorance of the locals during land sales. The area Chief said that since the locals are naïve and ignorant, they engage into land deals, which result into them loosing land that they own. In the upshot, displacements ensue, with increase in poverty in the end. The Chief further reiterated that some of the locals sell land and then disappear with the money and only to re-emerge later once they have consumed everything. They come back and plead with the close relatives to accommodate them. Some are brought back when dead and because they had sold all their land, they are buried on the property of close relatives. In one particular case in the study area, a corpse of one of the land sellers was

exhumed after the family buried him in the land, which he had sold to someone else, resulting into a conflict, which is still under litigation. In such cases, both the buyers often are stopped from carrying on development and even if the cases are resolved in their favour, their relationship with the natives is negatively affected.

Land related conflicts were observed to be common among residents in the study area. Interviews revealed that land conflicts emanate from different quarters. Primarily, disputes often arise when a member of the family decides to sub-divide land for sale without consulting other family members. Sometimes the land is sold but the proceeds are not shared with other family members. These conflicts, according to some land buyers, have led to losses on their part as buyers, when family members repossess the piece of land in question. Secondly, some buyers have experienced cases of double sale because of involvement in informal transactions. This was common where a sale involved native themselves, as the sale is purely based on trust and no title deed is issued. Another case of double sales was confirmed to be common where the property buyer does not establish his presence on the ground. For example, where the buyer has taken a long time before developing the plot after purchase, to the seller may clandestinely sell the land a second time and sometimes refund the initial buyer. More increasingly, some buyers acquire land without carrying out official search at the Lands Registry to verify ownership details. Other buyers often emerge immediately the subsequent buyer starts to develop the land.

Thirdly, boundary disputes are common and are characterized by either encroaching into other people's land or public spaces. The second and third causes of disputes are as result of failure to engage the formal channel such as carrying out search from the Lands Registry to verify ownership or to conduct surveys to ascertain the size of the land. In addition, corruption at the Lands Registry at times returns fake search results that may mislead the

prospective buyer. Another point of conflict identified was on land uses. Whereas the locals still keep livestock, the land sub-divisions and development in the area have deprived them of grazing space. Sometimes, native households, despite having sold their land, still feel they can graze freely on the sold land. In the focus group discussions, the residents said that many conflicts arise when the land sale does not involve the area Chief and village elders, as some buyers take the seller to the advocates who do not know the dynamics of the area nor the land issues. Where the Chief's office is involved in sales, conflicts arising are usually resolved at the local level and the cases are usually not complex as when an advocate is involved. This explains why majority of land sales involve the office of the area Chief and village elders.

4.4 Impact of informal mechanisms of land delivery on the spatial character of the peri-urban built environment

To understand how informal mechanisms of land delivery impact on the built environment in the study area. The study analysed the pattern of development, Livelihood and environmental changes in the study area, changes in land uses over times, housing densities, environmental quality in the study area. This was analysed against the existing Kisumu city's structure plan of 1983-2013 No 17 in figure 4.22 below.

4.4.1 Land use in the study area

Documentary evidences and key informants reiterated that according to Kisumu city's structure plan of the No 17 of 1983, the study area falls within the proposed high density residential area with a section proposed for industrial use along Kisumu -Busia highway from Otonglo market towards Kisian junction as shown in figure 4.25 below.



Figure 4. 8: Kisumu Municipality Structure Plan 1984 –2013 depicting proposed land use in the study location

(Source: County government records)

Despite the existence of a structure plan which ought to guide development in the study area, the key informants and focus groups confirmed that the development in the study area as well as the current land users do not conform to the proposal. The county planner reiterated that despite its existence, the structure plan was never implemented, and the county government is in the process of developing a new structure plan to guide development for the whole city, this implies that current development control in the study area is in jeopardy. It was however noted that the county government is still participating in approving subdivisions, and development applications despite the absence of a development plan.

Through observations and interviews, it was evident that not all land delivered informally were for residential purpose alone. There exists a myriad of other land uses ranging from industrial, agricultural and educational though in small scale. In Korando ‘A’, Kanyuto Village for instance, there is one buyer who had established a pigsty and rabbit rearing facility for commercial purposes, while another one had ventured into crop farming mostly of vegetables consisting of kales and onions, fish processing was also observed in the study area around Otonglo market as well as the established matchbox and the mattress manufacturing factories.



Figure 4.9: Agricultural land use within the study area

(Source: Field data)

From the household surveys too, it was revealed that not all buyers put up residential housing. Those Housing only accounted for 28%, with 16% being purely agriculture and 7% being commercial land uses, while 49% cited mixed-use development as shown in figure 4.27 below. It was observed that those who cited mixed use of land are both buyers and sellers who basically try to maximize the use of their property by, for example, rearing animals, planting crops, fish farming and erecting shops within their homesteads as well as rental housing or light industries

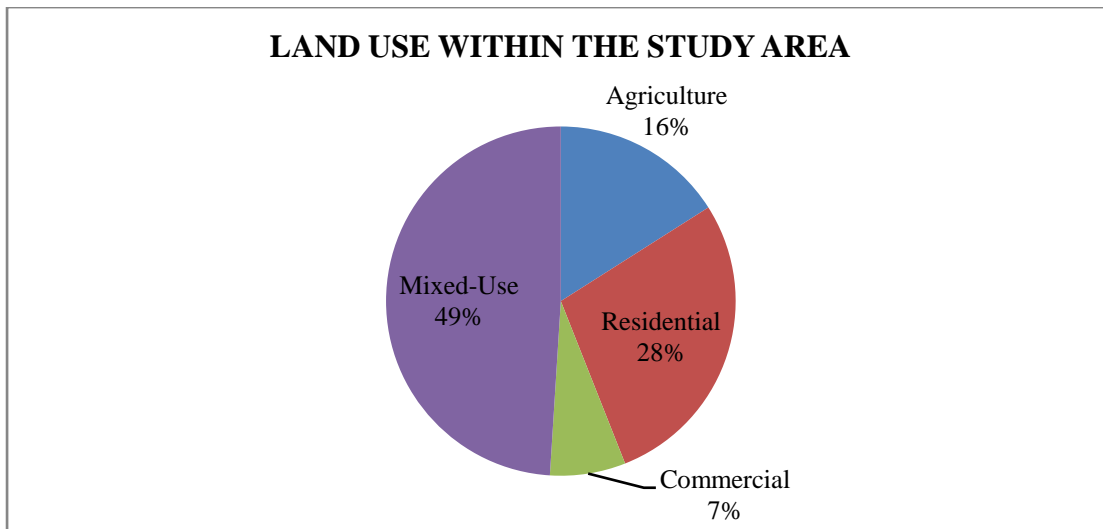


Figure 4.10: Land use within the study area

(Source: Field data)

From the interviews, Households in the study area predominantly practice agriculture as the main economic activity, and source of food. The traditional crops like maize, millet, potatoes, cassava, vegetables are grown as well rearing livestock. It was also observed that most of agriculture practiced was for subsistence purposes. Livestock farming was also observed and some of the animals included sheep, chicken, cows, pigs, and rabbit



Figure 4. 11: Agriculture practices in the study area

(Source: Field data)

The field interviews revealed that herd sizes and farms for crop growing have decreased tremendously due to reducing land sizes because of uncontrolled subdivision. A few who still keep animals do tethering or restricted grazing within their plots, along public paths, Lake

shores and school compounds. During the FGDs, the village elders reiterated that immigrants (buyers) usually fence off their plots such that not even a neighbor's chicken can get into their compounds even if they have not put up any development. Unlike previously when people could graze freely, currently one cannot graze in another person's plot unless he/she pays. The area Chief also bemoaned the individualistic mentality, which has become prevalent with the influx of immigrant land buyers. He narrated that previously one could be given a plot freely to farm or even build a home, but today such courtesy never applies anymore as everything is about money and immigrants who have bought land in the area have interfered with such arrangements among the natives. These challenges confirm reduction in herd sizes, and being source of milk, meat, hides and draught power, the locals, even those with sizeable farms, cannot cultivate adequately. With reduced farm sizes against growing population, food security is jeopardized. When asked about the food situation in the area, one respondent said;

'We no longer get enough produce from this area because of the small sizes of our farms and the reducing soil infertility as we don't have alternative land to cultivate or do crop rotation. We cannot also afford fertilizers to help improve fertility and even if we use the produce will not be enough for all family until the next harvest.'

Because of the declining performance of the agriculture sector, the study found that the households in the study area are venturing into other income generating activities to supplement their income. Though agriculture is still dominant at 40%, 28% of those interviewed are in business while 17% are in informal employment as shown in figure 4.9 below.

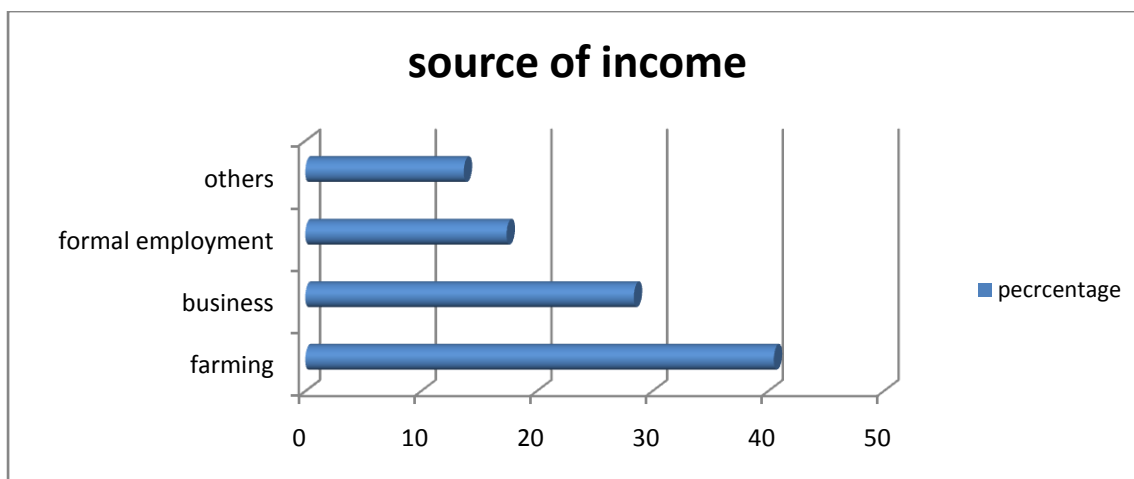


Figure 4.12: Source of income

(Source: Field data)

The locals no longer rely on farming alone as source of livelihood, but have devised other means to sustain themselves. Through interviews and focus group discussions with the youths and women it was confirmed that young people due to ‘No hope of inheritance’ have resorted to *boda*, fishing and sand harvesting in the lakeshores along the streams and even on the roads and footpaths. Sand harvesting has become too intensive such that what used to be footpaths and roads are turning into streams due to scooping of sand particularly during rainy seasons. This was observed and further confirmed in the FGDs as posing serious environmental threats particularly in the areas near and around the lake by rechanneling rain water to people’s homes and enhancing soil erosion.

Further interviews with the village elders revealed that fishing as a source of livelihood has declined sharply in the area. The youths have turned to sand harvesting which, according to them generates more income due to the thriving construction industry. The youths reiterated that in sand harvesting or loading, they make at least Ksh.500 for loaders and at least Ksh 1,500 for scoopers per day. Figure 4.30 on the right below shows the effects of intensive unauthorized sand harvesting in the study area.

Uncontrolled sand harvesting has interfered with rivers and the lakeshore ecosystems due to over scooping of sand, which also takes place along the roads and footpaths hence changing the course of storm water flow. Sand harvesting has also contributed to degradation of soil through soil erosion and creating habitat for disease causing vectors like mosquitoes.



Figure 4. 30: Fishing and sand harvesting sites along the lake

(Source: Field data)

With uncontrolled subdivisions and development, drainage channels have been interrupted, what used to be waterways have been diverted and the flooding has increase particularly the lower blocks near the lake, this makes these areas not suitable for human habitation during rainy seasons, it was reported that due to these activities some paths become impassible and often water is channeled into residents homes, thus forcing some to seek alternative accommodation as well as facing loss of property. the discussions further revealed that Sand harvesting has also contributed to increased underground seepage that weakens the soil structure leading to houses sinking, depletion of soil fertility and increased inaccessibility of some areas within the study area. With poor drainage, and accessibility, the value of land is likely to reduced and demand for such places reduced.

4.4.2 Land subdivision, sizes and shapes

It was observed during the study that the peri-urban land market is being shaped by rapid fragmentation of land parcels due to native households' cultural practises and coupled with influence from the migrant households purchasing land in the area as evidenced by the Google Earth images shown in figures 4.31 below.

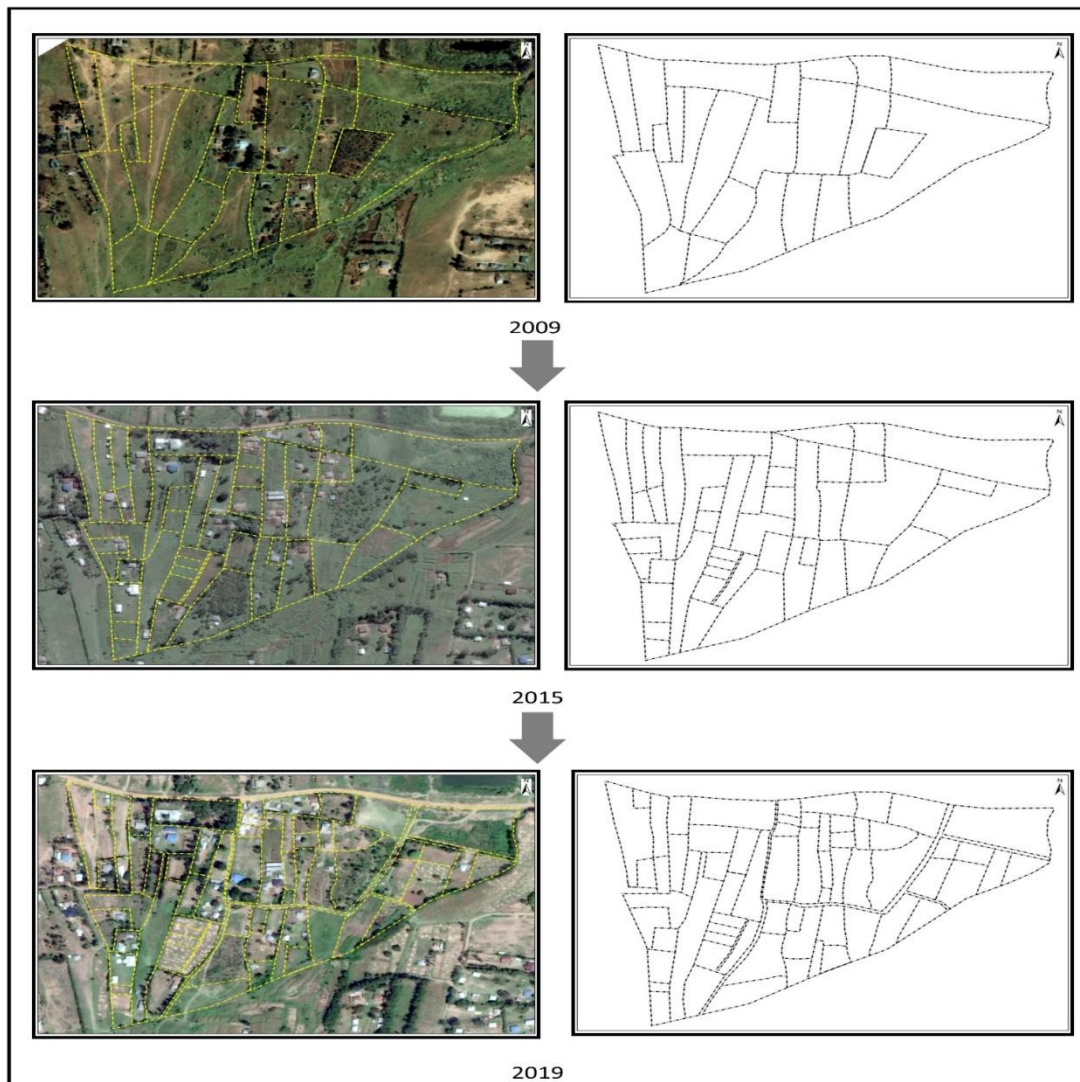


Figure 4. 31: Changes in development pattern and land sizes

(Source: Google Earth images redrawn by author)

The Google Earth images of the study area analysing the changes in development pattern and land sizes clearly shows that by 2009, the study area had big plot sizes which could favour adequate agricultural production as reiterated by the village elders and confirmed in the focus groups discussions, plot sizes were averagely 5 to 10 acres in the study area and respondents

said this allowed adequate food production for the families. By the year 2019, the image paints a total shift with the area having relatively high number of subdivisions as shown by the number of small plots digitized in the figure 4:28 above, this was further confirmed by the household interviews where by more than 87% of residents confirmed that their plot sizes is less than 2 acres whereas less than 2% said to have more than 5 acres of land as shown in figure 4.32 below.

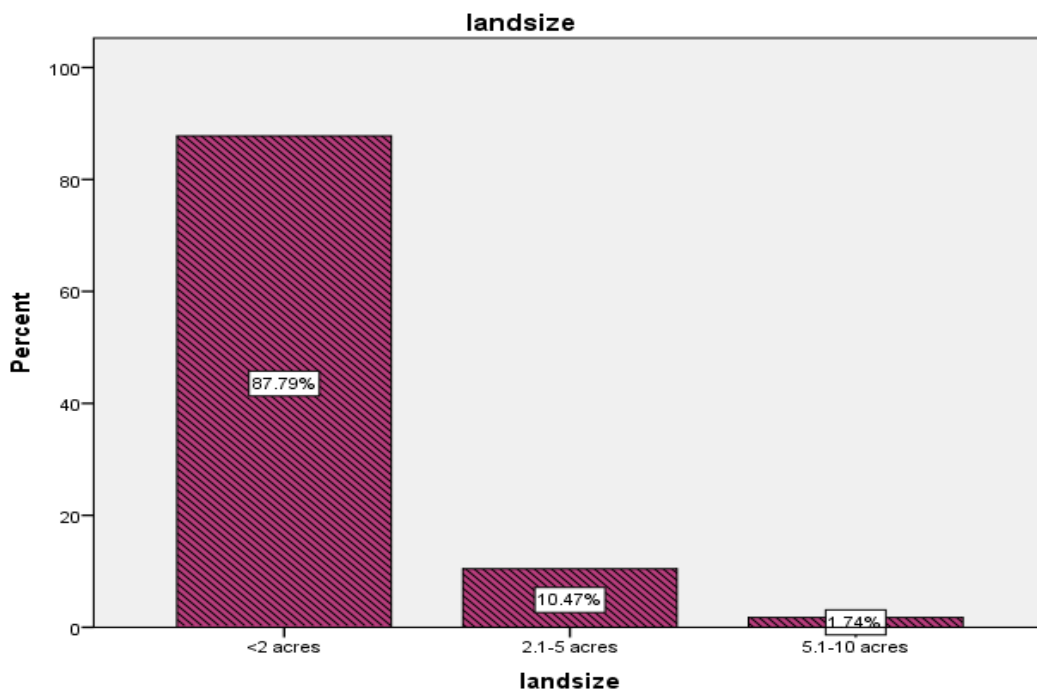


Figure 4. 32: Land sizes in the study area

(Source: Field data)

The above findings confirms assertions by the village elders, and key informants that the current plot sizes are small and cannot accommodate adequate agriculture production for household' sustenance. Patrick and Amoako, (2014) that, a major relationship between peri-urban development and informal land use development is the loss of the traditional livelihood in agriculture of peri-urban dwellers resulting from competition for peri-urban land due to the rapid expansion of the city, confirm this.

The uncontrolled subdivision has thus impacted negatively on the livelihoods of the natives who have all along relied on subsistence agriculture for survival, resulting into their engagement in urbanized less profitable economic activities such as petty trading, commercial and other related livelihood activities, a fact that the Key informants said that is not adequate for their sustenance and needs.

As confirmed by the Physical planner, there is rapid subdivision is going on against lack of land use plans. Plot sizes are thus not standardised, hence irregular plot shapes, which are uneconomical in service provision and challenging during development due to lack of easements or adequate way leaves. It was observed that some buyers purchase very small parcels that cannot accommodate adequate house thus goes against provisions of the Survey act cap (299) that stipulates that a minimum lot size should be 0.02 acres others buy without consideration of access roads forcing them to buy strips of land to later establish access to their plots. The above factors were further established by analysing the Registry Index Map (RIM No 13) of the study area from where it was ascertained that the shapes of plots are not standardised and that informal subdivision is evident whereby on the ground there are subdivision whereas in the RIM the same is not reflected example was Plot No. 1715, 1600,1704, 5348 among others as depicted in Figure: 4.33below. For example Parcel Number 1715, has further nine informal subdivisions which have not been reflected in the RIM



Figure 4. 13: Part of Registry Index Map for the study area showing the irregular plot shapes and sizes

(Source: Kisumu County Lands Registry)

4.4.3 Displacements of native population

The focus groups and key informants confirmed that increased informal land sales is causing displacement of the natives who relied on subsistence agriculture for survival, since most of the land is sold or subdivided and the sizes remaining cannot sustain them, they are forced to sell the remaining small plots they own and later migrate to other areas where they are not known despite keeping in touch with extended families. The idea of living close to land buyer call for adjustments in the way of life which majority cannot cope with. The rapid influx of people into the location is causing serious threat to the local's existence. According to one village elder,

“Immigrants come with town lifestyle...they have money, they live in gated homes and we feel challenged to adopt to their lifestyle but due to financial constraints we cannot. They are also informed and powerful. At times they become more influential than ourselves”

This statement was agreed to by key informants and in the focus group discussion and it shows a sense of helplessness among the natives. Resulting development in the peri-urban area is difficult to define since it comprises traditional Luo homesteads, maisonettes and bungalows as well as flats. With the rapid rate of development taking place in the study area without any development plan, there will be total lack of order in the near future.

In the discussions, household interviews, it was established that land buyers have also contributed to improvement of infrastructure and service, like access roads, electricity, and water. This was also echoed by the area Chief, who said that,

“Many buyers in the area are very influential professionals, and politicians with the right information, network and money, they can easily lobby and influence the government agencies to provide such services as water, electricity and access roads.”

Many native households have been able to drop electricity from the land buyer’s poles hence saving on costs that they would have acquired if they did the electricity connection on their own; the same applies to water connection.

Due to lack of control on where one buys land and develop, people build by preference thus, other areas remain undeveloped thus creating leap-frog or patchwork urbanism pattern of development that poses a challenge in provision of infrastructure and services due to large distance between housing or residential units or areas with concentrated developments being sparsely placed as shown in Figure 4.34 below.

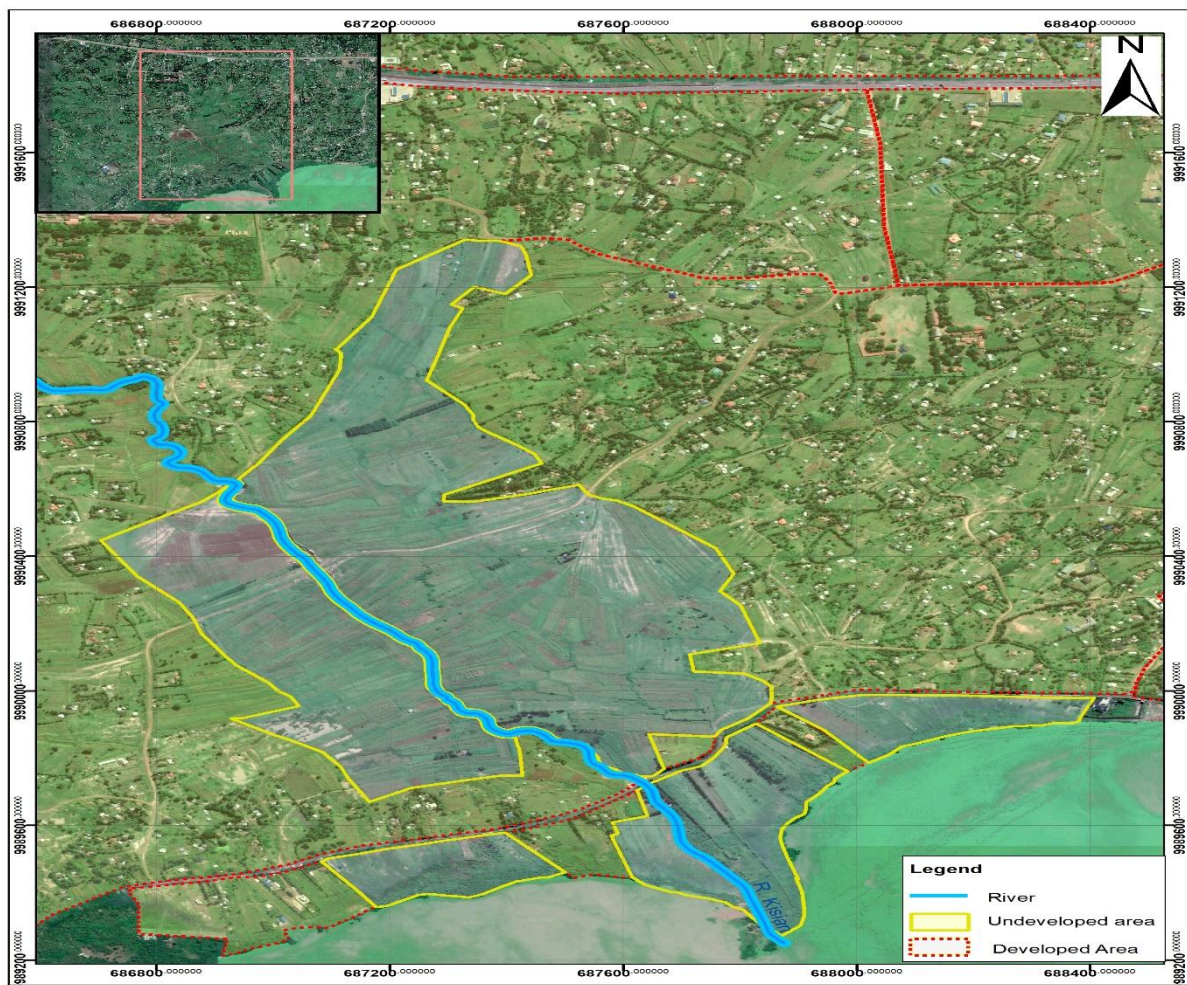


Figure 4.14: Patchwork developments in the study area

(Source: Google Earth images redrawn by author)

According to, Patrick and Amoako, (2014) patchwork urbanism results into land use patterns that are unfavorable to the development of sustainable transport modes, increase the use of private cars that results in increased trip lengths, congestion, increased fuel consumption and air pollution. As homes and businesses spread farther, apart, local governments are forced to provide for widely spaced services and infrastructure to higher costs and an increased tax burden on the population. Patchwork Urbanism increases cost per capita in provision of infrastructure due to low connections /expected users of such infrastructure per hectares, for instance water, sewerage roads and electricity connections that are capital intensive.

Due to lack of zoning plans and enforcement of development control, developers are free to build structures of their choice depending on their ability and preference thus a mixed housing typology with unclear recommended density in the study area. This also results to the incompatible land uses, which further compromise aesthetics like the developments done by the immigrants and the natives as shown in the figure 4-35below



Figure 4. 15: Contrasting housing typology in the study area

(Source: Field data)

For such developments as shown in figure 4:36 above the Informants reiterated that privacy is compromised for instance the person leaving in the apartments' upper floor is able to see any activity going on in the neighbours home. There is thus need for preparation and implementation of zoning plans to control development in the area.

4.4.4 Informal mechanisms of Land delivery and development densities

Through observations and spatial analysis of the study area, a change in densities of development was observed by comparing the status in 2009 and that of the year 2019 as shown in figure: 4.36 below.



Figure 4. 16: The density of development in 2009 in a section in the study area
(Source: Google Earth images redrawn by author)

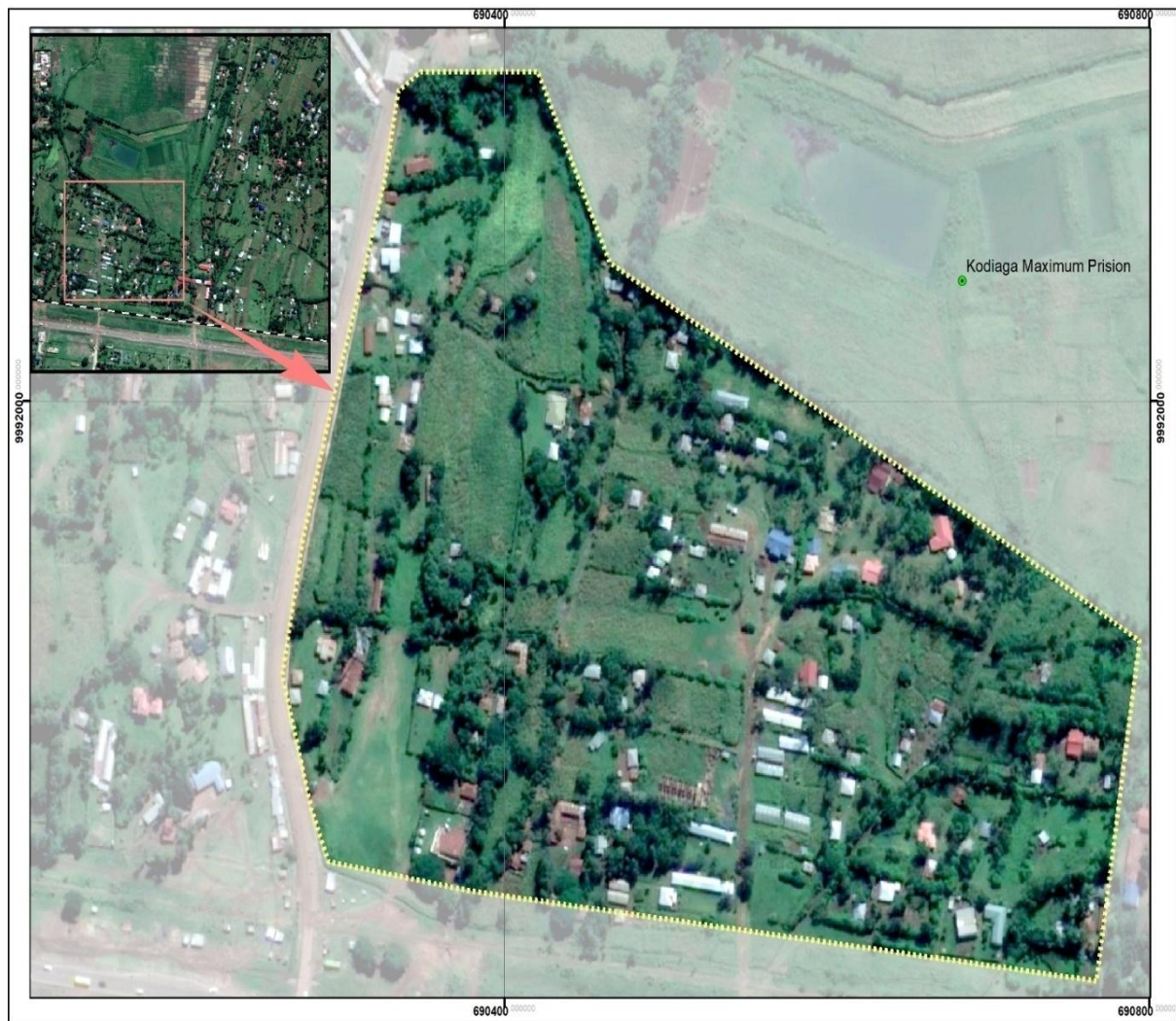


Figure 4. 17: Density of development in the study area by 2019

(Source: Google Earth images redrawn by author)

The images in figure 4.36 and 4.37 above depict the change in development densities in a span of ten years, the number of structures have tremendously increased as compared to 2009 when the number of structures was fewer. This is also an indicator of population increase in the study area, it was however noted that the high density is emerging without proper planning thus may pose a challenge in the near future particularly to development control and provision of basic services.

In most instances, infrastructure usually defines the spatial pattern of development and this is also the case for the study areas abutting Kisumu - Busia Highway, but in the interior parts of

the study areas, it is different as people just build to satisfy their needs for housing without considering the infrastructure.

The study has established that informal mechanisms land delivery has is taking place in the absence of any land use planning in the study area. The resultant shapes of land are not to standard hence service provision will be a challenge, most of these plots are inaccessible. Displacement of natives was also observed due to lack of coping mechanisms for the new changes in livelihood sources and high demand for land the above findings are in line with Amaoteng et al, 2013, that the physical development that emerge has many negative effects on the residents of the peri urban areas, ranging from loss of agricultural land due to reduced plot sizes and lack of access to utility services by the majority of residents. Kombe 1990, and Kaitilla 1993, further reiterated that the resultant development pattern does not proceed in an orderly manner making planning objectives of convenience and efficiency obsolete.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study focused on the informal land delivery mechanisms in the provision of land for housing development in peri-urban Kisumu. This concluding chapter summarizes the foregoing findings of the study with respect to informal land assembly and development and the resultant spatial impacts in the study area. It also draws the recommendations from the findings in order to provide a platform for informing policies and decision-making. The chapter further outlines key areas for further research.

5.2 Summary of findings

5.2.1 The institutional operations of the informal land market in peri-urban areas

The study established that the informal land delivery channel is the most predominant means through which people access land in Kisumu Central Location. It is a factor of high demand for land, failure of the formal market to meet the demand for land, improved accessibility, socio-cultural practices, low cost of transactions and dominant freehold tenure system. The process of land delivery encompasses both formal and informal process at different phases of land delivery hence the two are therefore inseparable.

The study also established that in the informal land market both formal and informal actors have a role to play to avail land for housing development within the study area, the actors include the family unit, real estate agents, registered built environment professionals, Buyers, individual landowner, village elders, Freelancer land brokers, Office of the Chief and Advocates as some of the most important actors in the informal land market from informational stage up to transactional phase. Institutionally, the office of the Chief is important in conflict resolutions and overseeing the signing of agreements. On the other hand, public formal institutions are also key in the informal land market at different stages

e.g. government department of Lands, Survey, Physical Planning, land control Board and registered real property agencies.

Informal land assembly and development does not have a standard model or typology but the most predominant typology was that which entails, (Informational, Negotiation, Occupation, Tenure Security, Building/Development Phases;) in this typology, the Transactional Phase was found to be overlapping particularly from Negotiation to transfer stage and this was attributed to the installment payments at the three stages and at times continuous payments to the land sellers wherever they have pressing needs.

5.2.2 Impact of informal mechanisms of land delivery on residential development in peri-urban areas

The Impact of informal land delivery on housing development was found to vary between buyers and sellers in terms of adequacy, access to basic amenities and infrastructure and housing typologies. The native land sellers, despite making money out of land sales can only afford to develop modest semi-permanent dwellings while the buyers proceed to put up more imposing permanent houses. The result is mixed housing typologies whereas the semi-permanent structures belonging to the native households are interspersed with the modern bungalows and apartments put up by settler buyers.

Housing development has been influenced in the study area by three major features namely the serenity of the lakefront, the rocky Riat Hills and the traversing Kisumu-Busia Highway. In general, rental-housing developers prefer parcels located along the highway. Whereas home developers of all kinds scatter all over depending on other factors such as price of land, size and the social relations with the seller, the Lakefront, Riat Hills and the Kisumu-Busia Highway are the three main features shaping development pattern in the study area.

The study established that many of the new housing developments violate the existing regulation and environmental protection safeguards as observed where some have built on the riparian reserves or on areas deemed environmentally fragile like the natural drainage channels.

The study also established that the housing development do not go through the formal approval processes and in most cases the building plans are drawn by an architect but they are not taken through the approval process. More often, the local “fundi” or contractors adopts or modify building plan used in a previous site at a fee.

The study further established that majority, housing development is taking place in the absence of adequate infrastructure and Social amenities like schools, and hospitals, most of the roads are impassible all seasons, whereas some parcels are totally inaccessible. Available schools were found to be crowded and quality of service offered is low, Therefore, residents particularly immigrants seek social services like health, and schools from the already established institutions in the town.

5.2.3 Impact of informal mechanisms of land delivery on the spatial character of the peri-urban built environment

The findings show that informal land delivery institutions in the peri-urban areas operate under limited legal restrictions due to weak institutional controls by state agencies. The failure of concerned authorities to implement development control in the study area is resulting into rapid informal spatial transformation. The developments occur in total disregard of the law.

The study established the emerging patchwork urbanism together with lack of an approved zoning or physical and land use development plan to guide development in the study areas makes it legally challenging to enforce development control in the peri-urban areas, thus

haphazard organization of plots and general land use. Secondly, the peri-urban area is still managed as agricultural land and falls under the jurisdiction of the Land Control Board despite being within the boundaries of Kisumu City. Despite the cited lack of development control in the study area, the study confirmed continued approval of subdivisions, building plans by the statutory offices not necessarily for development control purposes but for revenue collection, this is a paradox, which need to be addressed.

Majority of the residents confirmed that they did not seek development approval, citing high cost of the process itself considering the number of professionals involved and the length of time it takes to get permits to start construction. Local residents also cited the fact that they cannot pay rates to the county government because they are not benefitting from any services rendered.

Reduction of plot sizes is a contributing factor to poverty particularly on the natives since they can no longer produce enough to sustain them, Agriculture which used to be their main livelihood source is therefore interfered with. Intensive subdivision and active housing market has increased demand on sand thus contributing to environmental degradation of the lake, streams and even the access roads that have been turned into sand harvesting sites the later contributing to flash floods experienced in the area.

The study established conflicts arising from the informal land assembly, development whereby cases of double sales, Displacements and conflicting land uses were reported for instance both industrial and residential land uses are put together, agricultural (livestock keeping), and residential use is posing a challenge since there is not adequate space for grazing.

The mixture of housing typologies observed will pose a challenge in urban management, natives stick to semi-permanent housing while new immigrants construct imposing flats, and bungalows. The density of the area is changing and with influx of immigrants, displacement and distortion of social ties of the natives is taking place.

Failure to implement the structure plan or preparation of Local Physical and land use development plans for the study area is posing a challenge as development is rapidly taking place in the absence of a plan, thus service provision, general aesthetics and order is jeopardized.

5.3 Conclusions and Recommendations

5.3.1 Conclusions

The study has shown that informal land market has a number of actors both formal and informal with varied roles in the process of land assembly and development in the study area. Consequently both Informal and formal process of land assembly and development overlap at various stages,

The study established that land assembly and development in the peri-urban areas do not follow the laid down procedure of approval, whereas development should proceed by planning, servicing, building and occupation in the formal system, this is not the case in the study area as varied models were found to apply depending on the people involved in the process. Due to informal land delivery, housing development is taking place against lack of planning and infrastructure and service deficit. This jeopardizes quality of housing in the peri-urban area and may later lead to emergent of slums in the peri-urban areas. Informal land delivery has diverse effects on housing development on the study area, particularly on indigenous households, since they are not able to improve their housing as compared to the settler migrants.

Land related conflicts and environment are emerging due to rapid informal sales and development, as established, land sizes have reduced and sources of livelihoods is in jeopardy for the natives, this is contributing to urban poverty. Due to lack of development control people have erected buildings on natural drainage paths and the riparian reserves interfering with the ecosystem.

Informal land delivery mechanism is rapidly transforming the landscape of the peri-urban area, new modern buildings are coming up, and natives are getting employment in the thriving construction sites and homes. However, all this development is not controlled hence urban sprawl and spread of informal settlements is emerging. All these developments are taking place in the absence of a guiding development plan, no allocation of space for social services, and basic infrastructure, this has seen a slum like development coming up in the study area.

5.3.2 Recommendations

This study established that the role of informal systems of land delivery is vital in availing land for residential development. However, it has also shown that it has weaknesses and challenges that should be addressed. The following recommendations have been suggested to ensure well-coordinated and controlled land delivery through the informal institutions.

Land Laws should be amended to recognize and harmonize the role of various actors particularly the office of the Chief in land management matters, this will reduce conflicts as well as control unnecessary land sales, which eventually lead to impoverishment of the locals. Alternatively, there is need for a ward land control boards that approve and consent on development to enhance compliance, this can be anchored in the County by laws.

The County Government and the department of Lands and Physical planning should sensitize the community on the formal process of land acquisition and the impacts it has on the orderly development of peri-urban areas especially on housing and related infrastructure services. This can be achieved through planning clinics to the residents to enlighten them on the suitable options for land consolidation that can benefit both sellers and buyers in the end. Community sensitization is needed and this can be undertaken by the NGOs operating in Kisumu sensitizing communities in the peri-urban area on land rights, tenure regularization and environmental safeguards. This should adopt a multi-stakeholders approach to empower the community with knowledge and alternatives to land sales, which can be of benefit to them, by adopting approved best practices like land pooling, Housing financing models, as well as affordable housing options.

The county Governments of Kisumu , City planning department should prioritize Planning of the peri-urban areas and ensure the plans are implemented, The plans will help in development control on which approvals can be based as well as give the peri urban areas a sound platform for development.

Law enforcement is wanting and it was observed that despite the existing laws, such as the Building Code, EMCA and planning laws, majority do not follow their provisions and people put up developments in total disregard of the law. The Kisumu County Government, city management unit should enforce these laws to enhance quality of housing in the peri urban areas.

There is need for infrastructure investment by the County Governments and relevant agencies like the Kenya Rural or Urban Roads Authority as a means to open up, shape the pattern of development and improve livelihoods in per-urban areas, infrastructure provision should precede development a measure of cutting on cost of putting up infrastructure.

Kisumu's general peri urban development is adopting leapfrog development pattern, majority of new developments are taking place in the peri-urban development while ideally the land between the CBD and the peri-urban has not been fully utilized. This calls for proper land administration by enforcement of the existing legislations to ensure maximum use of space and provision of infrastructure to attract land buyers and increase land values for the benefit of native sellers.

The informal land delivery and the associated actor, operations and processes should be documented and the good aspects adopted to enhance acceptance, improved urban land supply, and reduce poverty. As established, the key strengths of the informal land delivery process are the flexibility at the stages of information, transaction, but do not incorporate planning and servicing thus need to streamline both the formal and informal to enhance sound urban development.

5.4 Areas for further research

After investigating the impacts of informal mechanisms of land delivery on residential development and resultant built environment in the peri-urban Kisumu, the study established areas that need to be investigated further to ensure a sustainable peri urban development within Kisumu City, this include:

1. Innovative approaches to land assembly and adequate housing delivery in the peri-urban Kisumu City.
2. The impacts of informal land delivery mechanisms on the livelihoods the natives in the peri-urban in Kisumu city

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APPENDICES

Appendix 1: Household questionnaires:

Declaration: *The information and data collected will be confidential and is intended purely for the study purposes.*

A. HOUSEHOLD CHARACTERISTICS

Age(yrs.)	<18	19-30	31-40	41-50	> 51
Gender	Male	Female			
HH size	<3	4-8	Above 9 people		
Education level completed	none	Primary	secondary	Mid-level college	university
Source of income	farming	Livestock	Business/trade	Formal employment	others
Employment status	Casual laborer	Permanent	Small scale business	unemployed	Other specify
Average income/month	<10000	10100-20000	20100-40000	40100-60000	>60000

B. Land acquisition, tenure institutions and actors involved:

- 1, Does the household own the land you live in? [1] Yes [2] No
2. What is the size of your land in Hectares?
3. How did you acquire this plot of land?
[1] Purchased (bought); [2] Inherited; [3] Unlawful occupancy (forceful); [4] other (specify)
4. (a) If bought,
 - (i) What was the value (KShs.) at the time of buying?
 - (ii) What is the approximate value as at now in (Kshs)?
 - (iii) Who were (the actors) involved in the transactions, what was their role in the process?
 - (iv) What was the source of your funding for buying the land? (a) Loan, b) Savings c) Other (specify)
 - (v) Which legal document do you have for the purchase above?
 - (vi) What was the use of the plot when you bought it? agricultural residential mixed use other
 - (vii) What was the reason for buying plot here?
 - (viii) How did you know of the existence of this plot on sale?
 from family member, agent friend public advert others specify)
4. (b) (i) have you sold/bought any piece of your land in the last 10 years? yes no
(ii) If Yes, what is the size of land sold/bought in Hectares?

(iii) What is the reason for selling/buying?

Funeral expenses school fees to build a house influence from friend/ broker to buy another land other specify.....

(iv) Are you related to the buyer/Seller? yes no

5. (i) Do you own any other piece of land within the locality? yes no

(ii) If yes, what is the size of your plot? [a] 0.1-5 acres [b] 5.1-6 acres [c] 6.1-7 acres [d] > 7 acres.

(iii) What is the current user? Agricultural, Residential Commercial Mixed use Other (specify)

6. Explain the procedures for:

i) Sale/buying of land.....

7. What tenure do you hold on this property?

[1] Squatter on private land [2] Squatter on public/state land [3] Private Leasehold
[4] Public/state leasehold [5] Free-hold [6] Customary [7] Tenancy-at-will; [8]
Temporary occupation license.

8. Do you remit land rates to the County? yes no

If yes, how much do you remit per annum?

9. (a) Are there hindrances experienced during occupation/ acquisition/development of land in this area? yes no, If yes, which ones? Explain

Cultural political..... legal procedures other, specify.

9. (b) What do you think should be done to improve access to land in the area?

C. Informal land delivery and their influence on housing development

1. Have you developed your plot? yes no

2. If yes, did you apply for development permission? yes no. If yes,

3. Who were the parties (Actors) involved in the process of development approval and what their roles were.

4. What was the total cost of development permission?

5. If No, why did you not apply for development permission?

6. Who were involved in the process of development of your house, and how long did it take to get approvals?

7. At what point did you occupy this land?

8. What is the state of the following services in your area? (Access roads, Water, Electricity, Sewerage, Security, Public spaces, Waste management, Public Services (Schools, Health facility))
9. Briefly explain the process of Housing development in the area.
10. What are the socio economic effects of land and housing development in the area?

D. Informal land delivery and the spatial impacts in the peri-urban

Area

11. Comment on the impact of land subdivisions on space use in the area?
12. What are the Average land sizes currently in the area?
13. Are there changes in land Use in the area?
14. Are there standards on Housing types and sizes applicable in the area? If yes, did you apply them?
15. What is the predominant pattern of development in the area?
16. What influence the above?

****Thank you very much for answering my questions****

Appendix 2: Key Informant Interview Guide

- What are the channels of acquiring land for urban development within Kisumu? Do these channels deliver land commensurate with demand? and which parties are involved in the process of land acquisition, Development and occupation?
- What is the common method of land acquisition in the peri-urban Kisumu?
- Comment on the effect of informal development on urban development and management? How does the County plan to deal with the problem of informal urban development in the peri-urban areas of the city?
- Comment on the Development control and resultant impacts of informal land development in the peri-urban area. What are some of the Social economic and spatial effects of such development? How is the situation with respect to services, public amenities and community facilities (electricity, water supply, roads, schools, hospitals, etc.)?
- How is the housing situation in the peri-urban fringe? How is this situation impacted by the informal mechanisms of land delivery? How are the indigene/locals' housing situation? How are the buyers/in-migrants' housing situation?
- What is the average annual demand of housing in Kisumu? What is the average annual supply of housing units in the city? Could you give a breakdown of housing supply figures by sector (e.g., central government, NHC, County government of Kisumu, private rentals, owners-supplied units, etc.)?
- Which institutions are involved in the process of Land acquisition, development and occupation and what are their roles, and responsibilities.
- What are the institutional gaps/ challenges in land delivery within the city and what are possible solutions?

Appendix 3: FGD Guide

- Many land sales are taking place within your location. When did these sales begin and what has been the trend over the last decade or so? What are the factors fueling the process of land sales within your location?
- What is your role in the land transactions that take place within the location? At what point do you get involved
- What is the procedure one needs to follow when buying land within your location?
- Are there any specific documents required for land of land sales taking place within the location? Are these compulsory documents? Are they considered legal government documents that can be produced in court, for example?
- Do you experience any disputes with regard to land sales within your location? If so, what kind of disputes and how do they get resolved?
- What actors/institutions do you work with in facilitating the land conveyance process?
- What is the impact of land sales on the livelihoods of the indigenous sellers? Have land sales made households better or worse off?
- Which traditional institutions among your community govern the process of land sale? Are these institutions still effective given the onslaught of land markets here today?
- How about the impact of land sales on indigenous modes of subsistence, culture, etc.?
- Would you as an individual encourage locals to sell land to outsiders?
- Are there any particular changes that have occurred in your location because of the influx of immigrants buying land from the locals? What changes, and how have these changes affected the local mode of life?
- What is the relationship between you hosts and buyers who have settled within your community? Do you feel they have become part of the community, or do you still consider them outsiders?
- Do you experience any conflicts with the immigrants who have settled here? If so, what conflicts in particular? How do you resolve these conflicts?
- What particular measures would you like to see put in place as your neighborhood develops and becomes part of the city?
- Do you experience any conflicts with buyers who have settled in? If so, what conflicts in particular? How do you resolve these conflicts?

- Your neighborhood has, in all practical purposes, become a suburb of Kisumu. How do you view this development, is it good or bad? What are the (dis)advantages that have come with this transformation?
- What are the various types of land transactions you are involved in, i.e. formal and informal? What constitutes formal and informal land transactions? What kinds of buyers call for (in) formal transactions? What are your experiences with the various types of land transactions?

Appendix 4: Observation checklist

- Housing typology
- Housing sizes vs. family size
- Materials used
- Location
- Services availability
- Key environmental issues
- Plot/ land use changes and plot adequacy
- Neighbourhood spatial characteristics

1. Appendix 5: RIMs



Appendix 6: structure plan, Kisumu municipality. 1984

