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Land-use and Land-ownership changes in Usoma Village, Kenya

Ernest Tan
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Land-use and Land-ownership changes in Usoma Village, Kenya



an Independent Study Project conducted with the

School for International Training
Kenya: Urbanization, Health and Human Rights
Spring 2018 Program

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Project Advisor: **Prof. Leah Onyango**
Academic Director: **Dr. Steve Wandiga**

ABSTRACT

This study attempted to find out how land-use activities and land-ownership patterns have changed since land adjudication in Usoma Village, a peri-urban community on the fringe of Kisumu City. The methods used were photo-observation and geo-tagging based on walkabouts onsite, documentary analysis of maps obtained from the Ministry of Lands, interviews with key authority figures, independent experts and community leaders, and interviews as well as focus-group discussions with community members. In terms of land ownership, it was found that subdivisions of land, both formal and informal, had been common over the period. Land transfers based on compulsory acquisition and investment demand were also common. These transfers occurred both within and outside the formal system. In terms of land use, it was found that subsistence-generating activities like fishing and farming have decreased, while cash-generating activities like sand mining and construction of rental housing have increased. The reasons for these land-use and land-ownership changes were discussed, along with their connections to urbanization processes. It was shown that urbanization in Usoma manifests as a shift from subsistence-sustaining to cash-generating activity, along with trends of population densification, state-led development, and the rise of land as commodity and sand as resource. In summary, it can be said that market forces have promoted speculative urban aspirations without providing sustainable urban livelihoods in Usoma.

ACKNOWLEDGEMENTS

Usoma Village was first brought to my attention when **Prof. Leah Onyango** brought my class of SIT students to conduct action research in this community. Thank you for initiating this learning experience that turned into one of my greatest personal journeys, and for your wise guidance and generous assistance as my project advisor. A note of thanks must also go to **Prof. Nick Smith**, for supporting me with necessarily tough feedback via prompt, sometimes long emails from back home at Yale-NUS.

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INTRODUCTION

Land in Kenya

Land matters are highly contentious in Kenyan history, politics, and social life. Besides the historical injustice of colonial land appropriation and the nepotistic allocation of land in the post-independence period, administrative transitions from communally administered land to individually-titled property have also been fraught with trouble and prone to land-grabbing. These unfair patterns of land distribution have been cited as a root of the election-linked tribal violence, mass internal displacement of persons, and near-anarchy that rocked the country in 2008. On a smaller scale, land has also been a source of interpersonal conflict between individuals or extended families.

In the past ten years, Kenya has embarked on many reforms, as expressed in the National Land Policy of 2009 and the Constitution of 2010. These documents provide important theoretical foundations for tenure security and sustainable development – The 2010 Constitution declares that “Land in Kenya shall be held, used and managed in a manner that is equitable, efficient, productive and sustainable”, in accordance with principles like “security of land rights”, and “sustainable and productive management of land resources” (Constitution of Kenya 2010, 41-42). The process of devolution, aimed at strengthening the powers of county governments, also holds promise for better allocation of resources and more responsible government.

Despite these bold declarations, much progress remains to be made before these statements become reality. Political wrangling and bureaucratic inefficiency may yet persist for some time to come, hampering the effectiveness of the government. If so, then market forces and power-holders will continue to dictate processes of urbanization and drive land-use and ownership changes.

Urbanization in Kenya

The World Bank estimates that 27% of Kenyans lived in urban areas in 2016, and that this figure will reach 50% around 2050; the annual urban growth rate is estimated to be 4.3% (World Bank, 2016). This means that close to a quarter of Kenya will experience a rural-urban transition within the next three decades. Clearly, there remains much room for urbanization in Kenya, and so it is important to address urbanization in its initial stages, in order to maximize the benefits accrued to Kenyans.

Even as urbanization proceeds, agriculture continues to occupy the largest sector of the economy, and in comparison with other developing countries in Africa and Asia, Kenya is said to be ‘under-urbanized’ (World Bank, 2016), with the level of urbanization being lower than expected, given current levels of GDP growth. This makes it important to pay attention to rural and agricultural development even as emphasis is placed on urbanization. Both urban and rural systems offer opportunities and challenges for those who live in the areas facing rural-urban change. This makes the study of peri-urban areas, places at the forefront of urban expansion, a particularly important field.

SITE INFORMATION & PROBLEM STATEMENT

Usoma Village lies on the outskirts of the municipal area of Kisumu City, which lies within Kisumu County. The village has a resident population of between 1500-2000, spread over an area of 2km². Administratively, Usoma lies within Kogony Sub-Location, East Kisumu Location, Kisumu West Sub-County. The village is bordered by Kisumu International Airport to the Northwest, industrial developments to the Northeast, and Lake Victoria on all other sides.

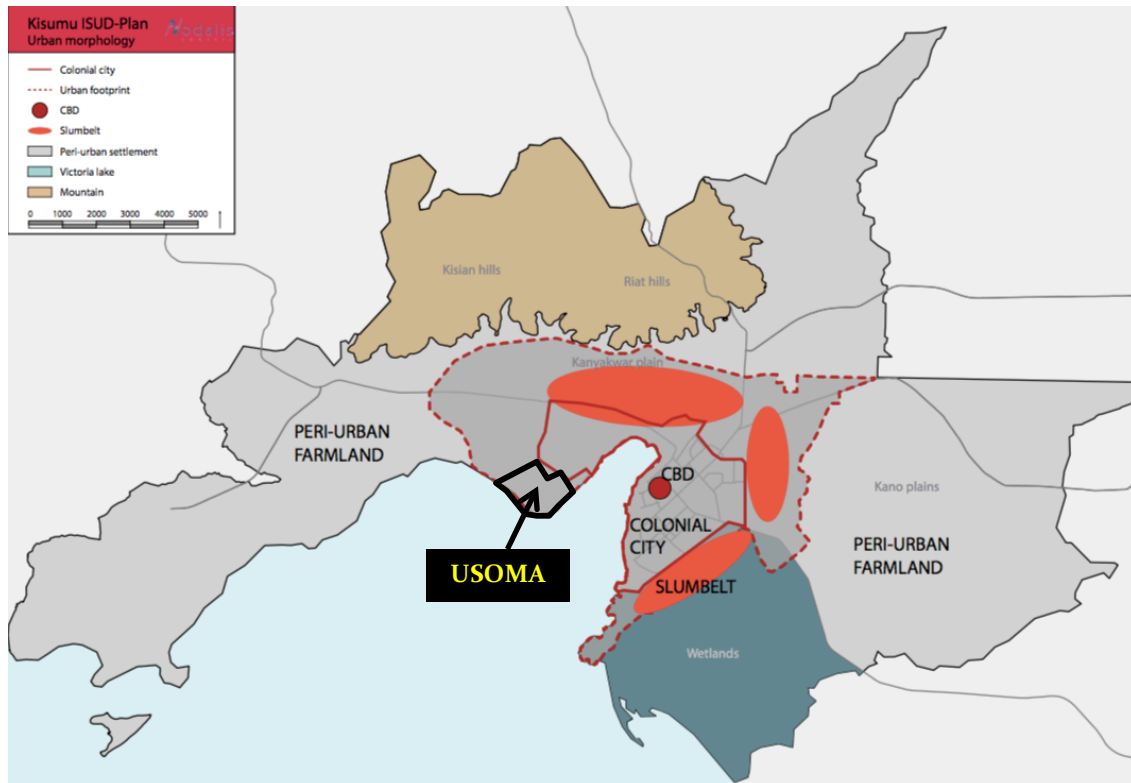


Figure 1: Usoma Village within Kisumu's urban area
(Source: Nodalis Conseil, Kisumu ISUD Plan Report 1 2013, p.32)

In Figure 1 above, extracted from the Kisumu Integrated Strategic Urban Development Plan 2013 (ISUD), Usoma is shown to officially lie within the 'urban footprint' of Kisumu City. However, it lies outside the extent of the colonial-era city and does not exhibit the same settlement characteristics or population density seen in the areas defined as 'slumbelt'. Population density, access to services and land-use activities render Usoma more similar in nature to the places termed as 'peri-urban farmland' on this map. However, Usoma is not all farmland, and has seen significant land-use and land-ownership changes over the past 50 years. A brief history of the village is outlined below.

The Luo people in Usoma

Most of the indigenous people in Usoma identify as Luos. The Luo people are a Nilotic-speaking group who have occupied the area towards the East of Lake Victoria for many generations – the first Luo settlers are thought to have arrived in the Nyanza region by the year 1600. Their traditional subsistence strategies have been a mix of fishing, farming and herding, with the proportion of each shifting between the seasons.

Local oral history has it that the people in the Usoma area had all originally descended from two Luo brothers named Osir and Onyango. Each married several wives and had many children, and the entire community became a powerful clan. However, outsiders from other clans soon migrated into the area and began to compete with these families for land. Academic accounts of traditional Luo land governance report that in this period land had been legitimated and allocated by clan elders (Shipton 2009, Okonyo 2012). However, local respondents reported that in the Usoma area, people also laid claim to land by force (Interviewee 9, Interviewee 11). Fights and violent clashes for land-ownership were not uncommon in this period preceding the colonial era.

The founding of Kisumu City

Colonial administration began in 1895 when Kenya was declared a British Protectorate. Before long, this led to the passing of the Crown Lands Ordinance in 1902, which declared all land in the British East African Protectorate (modern-day Uganda and Kenya) to be property of the British crown. This declaration supposedly gave the British the legal right to annex any piece of land for direct administration, or allocation to white settlers. In the Usoma area, as in most of the rural areas in the country, the land was never directly annexed, and remained as “native reserve land”. This meant that traditional land allocation and governance remained in the hands of the local chiefs and elders. The legal status of this designation was fixed with the Trust Land Act in 1939.

However, despite these provisions, Usoma would not remain undisturbed for long. Just 2 km away and across the bay – where Kisumu CBD lies today – the British had founded the settlement of Port Florence in 1901. Port Florence was chosen to be the site of a terminus for the railway beginning at the coast in Mombasa, as well as a steamship port connecting the area to the whole of the Lake Victoria coast. Port Florence, later renamed Kisumu, was to be an important colonial trading centre connecting the African interior to the coast. Thus, the Township of Kisumu was gazette in 1903 and planned in 1908 (Onyango 2011).

Even though the Usoma area was not annexed as part of the urban settlement, it would inevitably be affected by these developments. By 1927, there were about 5500 Africans, 5400 Indians and 400 Europeans in Kisumu (Onyango 2011), and it is likely that at least some of the Luo people in the Usoma area had become part of this labour force. More concretely, in 1943 some people were evicted from the Usoma area to make way for the construction of a WWII airstrip.

Independence and Land Adjudication

Kenya entered the post-colonial era at independence in 1963. Ten years later, land adjudication was carried out in Usoma in 1972. This was a process aimed at formally registering all claims to land as a means of providing tenure security and resolving boundary disputes. The adjudication process involved demarcating and surveying land, validating claims, issuing title deeds and thereby according absolute ownership rights to land-holders. Through these processes, traditionally-managed access rights to land became recorded under a formal system of legally-secured land tenure.

Significantly, land in Usoma is owned under freehold tenure, on the assumption that it is non-urban, agricultural farmland (See Figure 2). This means that ownership rights are absolute the municipal government does not impose land-use guidelines or other planning restrictions on the area, unlike in the urban areas which are governed as leasehold land. Other peri-urban areas like Manyatta and Nyalenda have achieved high population densities and the tenure on those areas was converted from freehold to leasehold, but this process has not been carried out in Usoma.

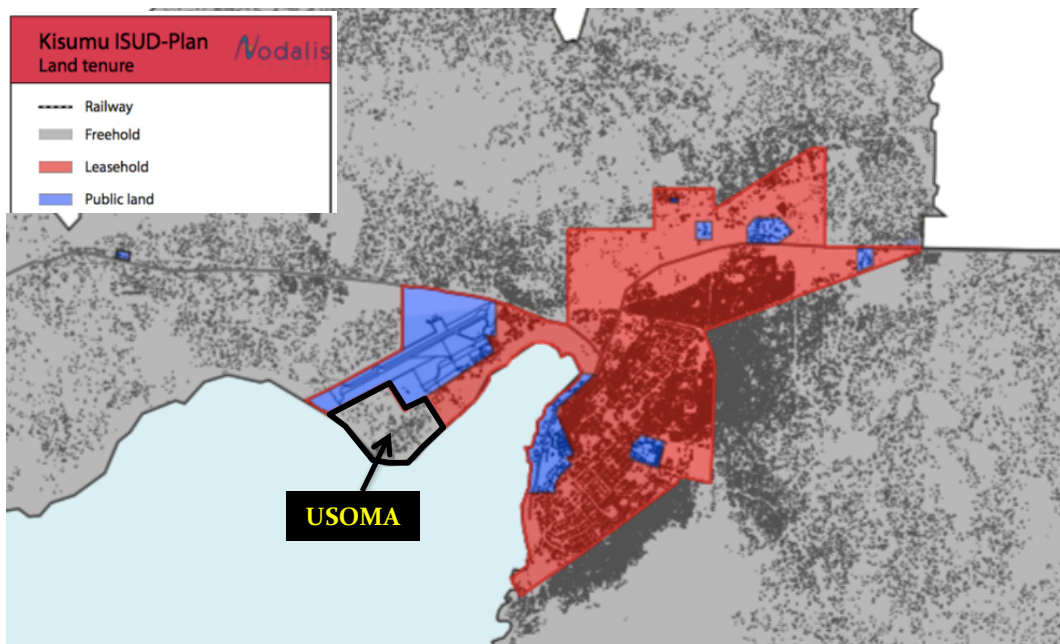


Figure 2: Land Tenure in Usoma and Kisumu

(Source: Nodalis Conseil, Kisumu ISUD Plan Report 1 2013, p.40)

Since land adjudication in 1972, Usoma has witnessed many changes in land ownership. Compulsory land acquisition has taken over a third of village land, and in the remaining areas many villagers have sold lands to non-native developers from outside the village. Families who have not sold lands have also needed to subdivide their parcels for the purpose of inheritance. In terms of land-use, the village has also experienced dramatic changes; a large swathe of land that used to be farmland has become a pit due to on-farm sand harvesting, and many rental houses have started to emerge.

This study takes land adjudication as the starting point and analyses land-use and ownership-related changes from then to the present. This choice of time parameter is based on the understanding that the observed land-use and land-ownership changes are supported by the legal framework that formalized tenure has provided. This makes land adjudication a meaningful starting point from which to assess changes in land use and ownership.

Justification

The land acquisitions, extensive land sale, sand harvesting and rental-construction activities observed in Usoma are commonly seen in peri-urban areas and are not unique to this peri-urban community. However, the extent to which Usoma seems to be on the brink of imminent development and yet fails to completely urbanise can be considered unique. While other peri-urban areas like Manyatta and Nyalenda have made a full transition to high-density urban settlement, Usoma has stagnated. Land values have skyrocketed, the population has somewhat increased and investment has poured into the surrounding areas, yet severe sand mining continues to degrade the land, many pieces of land acquired for commercial development are lying fallow, and municipal services have not been extended to the village.

More than in other peri-urban communities, the transition from rural to urban land in Usoma has failed to materialize benefits for the community, and has reproduced tenure insecurity and poverty for villagers. This invites a deeper investigation into the land-use and land-ownership changes that have been occurring, in order to examine the nature of urbanization in the area.

RESEARCH OBJECTIVES

The aim of this research was to find out how land use and land ownership have changed in Usoma Village since land adjudication. Based on this central research question, three objectives were developed:

- a) To describe how land-use and land-ownership have changed in the village
- b) To explain the reasons behind observed changes
- c) To examine the relationship between observed changes and processes of urbanization

The next section provides an overview of relevant literature in order to contextualize this work and suggest how it will contribute to the existing literature within the field of urban studies.

LITERATURE REVIEW

For this study, the theoretical framework deemed to be most appropriate was the body of literature surrounding the effects of land titling in peri-urban areas. These works provide good reference points for the discussion on the common land-use and land-ownership changes faced by communities undergoing rural-urban transitions. The underlying premise here is that the urbanization process for a peri-urban community commonly begins with its co-optation into the formal system of land titling.

Land titling, tenure security, and agricultural land-use

Existing scholarship has engaged in a thick debate about the land-use and redistributive effects of land titling. According to various review papers (Durand-Lasserve et al 2007, Peters 2008, Place 2009), there is a large body of economics-based literature that recommends registering and issuing private land rights to farmers in Africa. The most famous of these writings is de Soto's *The Mystery of Capital* (2000), which contends that formalizing property rights leads to intensified land use, following which farmers become more willing and able to procure loans for investment by mortgaging land. Theoretically, the individualization and privatization of land should lead to increases in agricultural productivity, for a number of reasons (Kabubo-Mariara 2007). Firstly, formalization of tenure generates tenure security and assurance that long-term benefits can be reaped, which provides greater incentive for farmers to make long-term investments in their land. Secondly, land titling is also supposed to facilitate access to credit by mobilizing land as collateral for loans, making it easier for farmers to invest. Thirdly, from a purely economic standpoint, land title formalization is supposed to be allocatively efficient as it facilitates land transactions. The ability to transact land can facilitate transfers of land ownership from farmers who are less productive to those who are more productive.

Based on these ideas, economists have conventionally equated land titling with positive land-use and redistributive outcomes, and pushed for land titling as a development strategy. However, despite the purported benefits, empirical results have been mixed, suggesting that there is no clear link between land titling and the propensity to invest, and that the agricultural productivity benefits of land titling are highly context-specific (Place 2009, Holden & Otsuka 2014). Thus, the degree to which land titling in Usoma has supported agricultural land-uses or promote secure land-ownership should be examined.

Previous literature suggests that peri-urban Kisumu is experiencing conversion from agricultural to residential land-uses. Using a remote-sensing method, Rakama et al (2017) analysed land-cover changes from 1985 to 2015 and found significant decreases in bush, crop and bare land accompanied by increases in built-up area. Their study area was however in the Kajulu-Riat hills area, and the extent to which the lakefront region where Usoma is situated faces the same type of land-use change deserves comparison.

Land titling and land markets

Besides agricultural productivity, a more significant impact of land titling is the emergence of a land market, facilitating land transfer to anyone, based on market logic rather than communal agreement. These effects are especially pronounced in peri-urban and urban areas, more so than in rural areas.

Specifically in Kisumu, recent findings regarding peri-urban landholding reveal that a clear shift has occurred in land tenure over time. In a study of three peri-urban communities in the Kisumu area, Okonyo (2008) showed that land rights, previously held communally (pre-1963), began to shift towards familial landholding (1963-1979), and finally towards individual landholding (1979-present). Accompanying this shift was an increase in the rights accorded to people who were not indigenous members of the community. Under communal landholding, non-members did not have any access to land, but under individual landholding, non-members could begin to purchase and own land, with full rights of exclusivity, transferability, inheritability, and security. Empirically, Okonyo also found that, across the three communities, the majority of landholding before 1963 had been inherited, but since 1979, the majority of landholding has been purchased. Thus, it is clear that an urban land market in Kisumu is emerging, and this paper will examine how the land market situation in Usoma converges or diverges from trends seen in other peri-urban communities.

Besides causing land sale, the wider implications of a land market are the facilitation of significant land-use changes. Onyango et al (2013) found that significant residential, commercial and industrial land-use changes had taken place in the unplanned estates of Mamboleo, Otonglo and Nyamasaria. These changes were due to factors such as “migration, adopted land use planning approach, zoning regulations and bylaws, land title system, actors in land use, and legal and administrative constraints.” (Onyango 2013: 1). Of particular importance was the fact that, like in Usoma, the land in these suburbs is freehold land. This suggests that similar unplanned land-use changes, based on similar urbanization factors could be at work in Usoma and these three suburbs.

Land Titling and Land Grabbing

Land marketization is commonly thought to lead to inequitable patterns of transfer by facilitating land-grabbing. Reviewing the literature on land tenure issues across Sub-Saharan Africa, Holden & Otsuka (2014) noted that land reform tends to become subject to ‘elite capture’ as more powerful actors can take advantage of informational asymmetries to acquire land at unfair prices, dispossessing and alienating original land-users. The empirical evidence from various parts of Africa reflects the dangers and realities of elite capture. Sitko et al (2014) noted that in Zambia, the promotion of individual land title has not improved smallholder agricultural productivity, and suggested that this was because the land titling system favours wealthy individuals from outside the community making speculative land acquisitions, as opposed to farmers from within the community laying claim to land for productive agricultural purposes. This shows how the poor can be systemically disadvantaged when participating in land markets. It is not only bureaucratic elites who can exploit land

titling systems for their benefit – traditional elites may do so as well. Ubink (2007), in his study of peri-urban Kumasi in Ghana, found that local chiefs were taking advantage of demand for land to lease communal land to outsiders. This was attributed to a lack of checks and balances, the government's policy of non-interference towards chiefs, and the high status of chiefs in customary law.

These findings suggest that land titling is not theoretically a problem, but that poor governance often lends itself to abuse of land markets by elites. Correspondingly, it has been suggested that the solution is to enhance and strengthen governance mechanisms. Deininger et al (2014), reviewing the state of land governance in 10 African countries, warned that land titling could lead to speculative land acquisition by elites, leading to “distress sales or myopic transactions” with negative impacts on vulnerable communities. Thus, they argue for the need to comprehensively evaluate and strengthen land governance institutions in order to ensure security of tenure. For van Leeuwen (2017), tenure insecurity is also escalated by ‘institutional multiplicity’, whereby simultaneous claims to land are filed under different institutions (i.e. customary and formal). This leads to increased room for negotiability and ‘forum-shopping’, as better-connected, more well-informed and more powerful people are able to navigate parallel systems to their advantage, often to the disadvantage of the poor and otherwise marginalized.

Elite capture has also been studied specifically in Kenya. In a study conducted in the Narok District in Kenya, Amman & Duraipah (2004) highlighted issues of land alienation for a local community. Indigenous people had sold land to wealthier newcomers, but claimed that they had done so in a disadvantageous position because they had had little knowledge of the new land tenure system. Later, violent conflict broke out as the indigenous inhabitants sought redress for the apparent dispossession from their ancestral lands.

Overall, this set of literature cautions that land titling has the tendency to catalyse socially-inequitable land transfer from households with less resources to actors with more resources. This highlights the fact that land-use and land-ownership changes in Usoma cannot be studied without reference to the political and economic elites and forces that drive such changes.

CONCEPTUAL FRAMEWORK

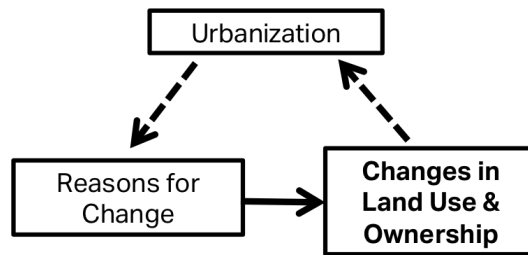


Figure 3: Conceptual Framework (Source: Author)

This study is set up based on the conceptual framework above. Changes in land-use and land-ownership are the central subject of examination. Various reasons are behind the observed changes in land use and ownership. These reasons may or may not be a result of urbanization. Changes in land use and land ownership may in turn intensify processes of urbanization. The use of dashed arrows shows that the link between urbanization and land-use and land-ownership changes is open for discussion.

METHODS & ETHICS

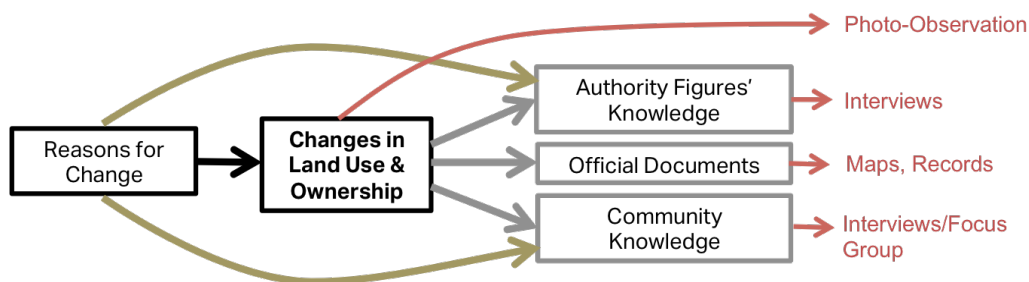


Figure 4: Methodological Framework (Source: Author)

The above diagram outlines the methodological framework and justification for the mixed-methods used in this study. Changes in land-use and land-ownership are multitudinous, and must be gathered based on different sources: direct photo-observation, analysis of official documents, interviews with authority figures (government officers, independent experts as well as local leaders), as well as interviews with community members. Photo-observation and maps/records are unable to show the reasons for the observed changes, but authority figures and community members are able to explain the reasons for change.

Land-use and land-ownership changes are commonly measured via quantitative methods. Studies of land-use change often employ the use of remote sensing to highlight changes in cropland, tree cover, and/or built-up areas over time. One such example is the study conducted by Rakama et al. (2017) evaluating the changes in bush land, crop land, built-up area and bare land in the Kajulu-Riat hills area on the outskirts of Kisumu. Studies of land-ownership changes may use household-level panel

data, such as the study conducted by Burke and Jayne (2014) which aimed at understanding changes in the distribution of landholdings between and within households across Kenya, over time.

This study diverges from the above types of studies in seeking to take a qualitative, case-study led approach to understanding land-use and land-ownership changes. While this approach is less comprehensive and less all-encompassing than quantitative studies, it has the benefit of facilitating the understanding of land-use and land-ownership at the conceptual level, from the point of view of the villager, rather than at the abstract level, from the point of view of the urban planner or administrator.

Photo-observation

The researcher conducted walkabouts in the village to tag the locations of important plots as well as rental housing projects. Where necessary, photographs were taken to illustrate a point. iGIS, a Geographic Information Systems software for the iPhone platform, was used to mark the relevant locations while in the field. During these walks, the researcher was accompanied by either the village elder or a community health volunteer. Both of these fieldwork partners contributed contextual information about the locations visited.

Maps and Documents

Registry Index maps showing parcel boundaries and plot numbers were purchased from the Survey Department of the Ministry of Lands in Kisumu. These maps also contained mutation records, which noted the date of every subdivision, amalgamation or amendment made to the land parcels. The current as well as the archived versions of map sheets 7, 11, and 12 of Kogony location were scanned and joined digitally. Additionally, parcel searches were carried out on a subset of plots within the Usoma 'C' area. These searches revealed the dates of succession or transfer activities that had taken place.

Focus-Group Discussion

A focus group session was conducted in the village, on a voluntary participation basis, and 8 out of the 10 targeted participants were present. Participants were invited to participate through the village elder, and care was taken to ensure variation in the participants' age and sex. The focus group had two aims – firstly to allow villagers to verify, comment on, and add to the information expressed in the official land-use maps via a collective mapping exercise, and secondly to obtain shared accounts about land-use and ownership changes that had taken place in the village.

Interviews

In total, 35 interviews were conducted over a four-week period. Interviewees fell into four main categories – government officials from the Ministry of Lands, independent experts like land surveyors, land agents and citizen activists, community leaders like the village elder and the chairman of the beach management unit, and village members. The aim of diversification was to obtain a variety of viewpoints for cross-

verification of the primary information provided by villagers. Interviews were either conducted in English, or in a mix of the local languages Kiswahili and Luo with the help of an interpreter. Interviews with community members were arranged through two community gatekeepers, the village elder and a community health volunteer. The schedule of interviewees is provided in the appendix.

Mixed-Methods Benefits

Besides triangulating information to get a more complete picture of land-use and land-ownership changes, the use of mixed-methods also helped instrument development and enhanced existing information. For example, information obtained from the focus-group discussion helped the researcher to shape interview questions for villagers. The focus-group discussion and interviews used the registry index map as a reference point, and the personal accounts of individuals regarding household land-changes enhanced the existing information when they were added to the registry index map.

Additionally, the use of maps in the interviews allowed interviewees to become active participants instead of mere respondents in the research – besides providing information to the researcher, they also gained information about the location of their parcels in relation to its surroundings, as expressed in the official documents. Many participants had not had the opportunity to view the registry index maps before and were curious to identify their plots. During the course of this research, one participant came to remember about a piece of land that she had owned but forgotten about, and made a trip down to the Ministry of Lands to check on the status of her parcel. In this way, the research was able to promote access to information for residents.

Ethical Considerations

Throughout the research process, care was taken to protect participants' confidentiality, anonymity and privacy. To this end, the research was approved and conducted in accordance with Local Review Board (LRB) guidelines administered by SIT. Participants were briefed about their role in the research and reminded that their participation was entirely voluntary, without benefit, and that they could withdraw or decline to answer at any point. Signed informed consent was obtained and information was made available either in written or verbal form, in English, Kiswahili and Dholuo. Appropriate data security measures were taken to protect the information in recording and transcript form. Besides these standard-practice measures, a few more specific ethical considerations are discussed in this section.

Due to the sensitivity of land matters, their potential to ignite conflict and the prevalence of fraud and land-grabbing, care has been taken to minimize the possibility of participants or their plots being identified from the data. Where participants' plots have been shown for case-study purposes, the plot numbers have been erased and the shape of the parcels rotated or reflected in order to minimize the possibility of identifying the owner. To minimize exposure and respect landowners' privacy, the identities of parcel owners were not recorded while the parcel search was taking place.

FINDINGS

The findings from this research have been organized into four themes, as follows:

- 1) Land ownership: Subdivision of parcels
- 2) Land ownership: Transfers of land
- 3) Land use: Growth of rental housing developments
- 4) Land use: Growth of sand mining activity

Subdivisions and transfers are two types of ownership-change activities facilitated by the formal system of land ownership, although these activities can also be conducted outside of the system. While subdivisions are often carried out for the purpose of subsequent transfer, the two are distinct actions, and they will be discussed separately in this section. These are by no means the only types of changes in land-ownership, but they represent the most significant types of change.

Rental housing and sand mining are two types of land-use activities that have proliferated over time. Again, these are not the only two types of land-use change that have been observed in the village since land adjudication, but they have been selected for analysis as particularly important types of change.

This section provides descriptive accounts of the land-ownership and land-use changes that have been observed. The links between these changes, the reasons for these changes and their connection to urbanization will be discussed in the following chapter.

1. Subdivision of parcels

Formal Subdivisions

When a landowner wishes to formally divide a land parcel, the person has to apply for a subdivision at the Physical Planning department within the Ministry of Lands. This process involves hiring a surveyor to prepare a mutation form and a physical planner to prepare a subdivision scheme. Overall, a subdivision costs between 30 000 to 40 000 shillings (\$30-\$40 USD) (Interviewee 4). Mutation maps obtained from the Ministry of Lands show that there were 64 subdivisions carried out in the study area from 1992-2017, and only three amalgamations of parcels were made within the same period. Data from before 1992 was not available as the registry had not been prepared before then. Thus, any changes made between 1972 and 1992 were not traceable.

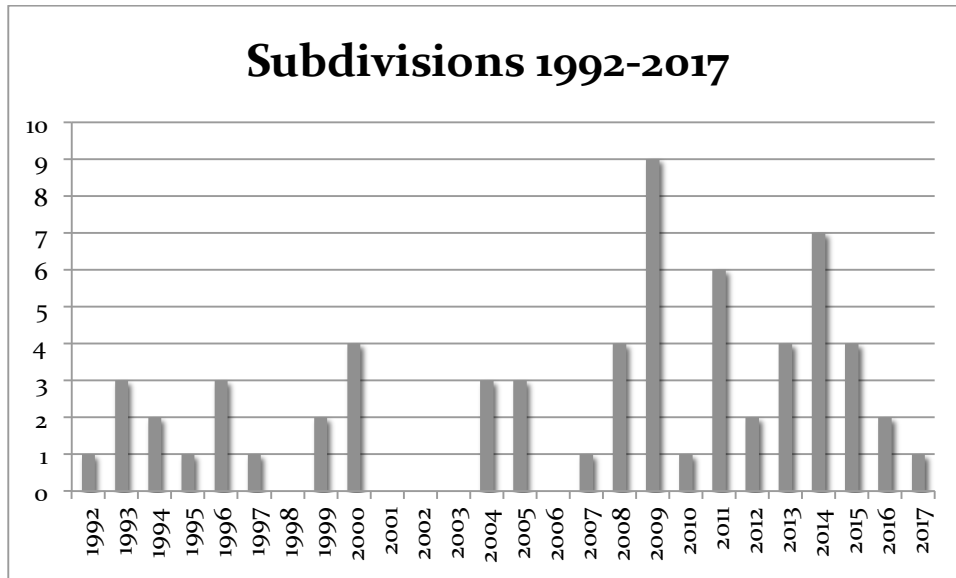


Figure 5: Subdivisions 1992-2017 (Chart: Author. Data: Ministry of Lands)

The temporal distribution of subdivisions indicates a rate of around 1-4 subdivisions in most years, although no subdivisions took place in some years and more than 4 took place in 2009, 2011, 2014. It is not known why there has been such variation on a year-on-year basis, but the data does suggest that subdivisions have become more common in the period from 2008-2017 (40 in 10 years) than in the period before (24 in 16 years). This may imply a correlation with the second expansion of the airport in 2008 – the airport expansion might have increased the value of land, encouraging subdivision to engage in land sale, or it might have led to internal migration with residents evicted from the airport purchasing pieces of land from other residents in the village.

The spatial distribution of subdivisions (see Figure 6) indicates that most of the earlier subdivisions (pre-2000) were near the beach and/or along the major roads in the East of the village, near the Kenya pipeline company. This suggests a correlation between subdivided plots and high potential economic value, implying that subdivision was usually accompanied by sale. Interviewee 4, a Physical Planner in the Ministry of Lands, also noted that subdivision often suggests “imminent transfer”.

Case Studies: Informal Subdivisions

Besides the formally-registered subdivisions, it was found that people in the village continued to divide and land informally. Land sale between related villagers is often carried out based on mutual agreement and trust. Part of the reason is that the administrative cost of officially subdividing land and issuing separate title deeds is relatively high - between 30 000 to 40 000 shillings, or \$30-\$40 USD (Interviewee 4). When informal subdivisions happen, boundary demarcation is carried out physically, even if not recorded in official maps. Among the Luo people, boundaries were traditionally demarcated using hedges, trees, or other markers.

3 case studies have been identified as examples of the types of informal subdivisions that can take place:

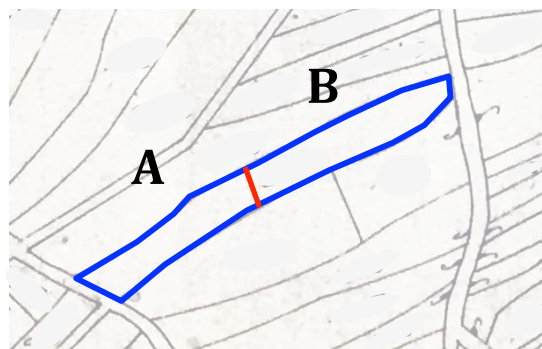


Figure 7.1 - Informal Subdivision
(Diagram: Author. Original Data: Ministry of Lands)

In these case study diagrams, blue is used to demarcate the official plot boundary, and red indicates the informal subdivision line. The letters have only been added for ease of discussion in this paper. In the first example, informal subdivision has occurred for the purpose of inheritance within a family. The grandfather is living in his house on part A, while the grandson is growing trees to produce wood for sale on part B. The land has been informally divided between them with a hedge, but the process of subdivision has not been carried out.

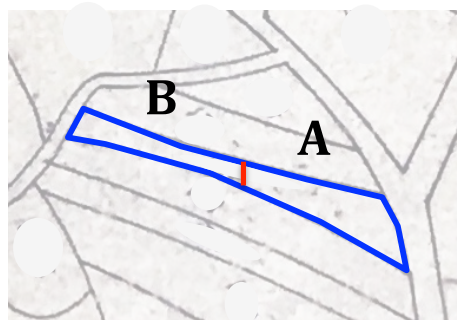


Figure 7.2 - Informal Subdivision
(Diagram: Author. Original Data: Ministry of Lands)

In the second example, informal subdivision has occurred for the purpose of sale between villagers in the same village. A resident who was evicted during the airport expansion 'pleaded' with her neighbor to sell a plot of land for her to build a house.

The neighbor divided part A of the land using a hedge and sold it to her. Formal subdivision was not carried out due to lack of funds on the part of both the buyer and the seller. The resident is not afraid that the original owner will sell the whole parcel, including the land that she bought, since he is still in possession of the title deed for the entirety of the original plot.

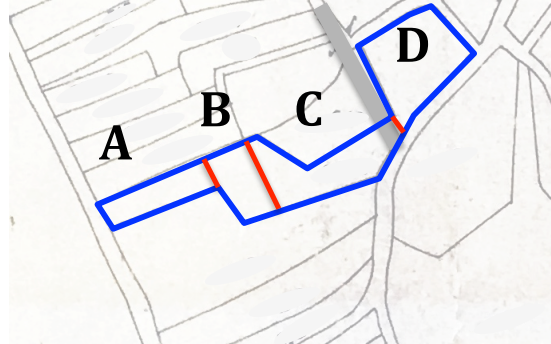


Figure 7.3 - Informal Subdivision
(Diagram: Author. Original Data: Ministry of Lands)

In the third example, the road has been re-routed and now passes through the original plot. Part A of the land has been sold and fenced off, Part B has been sold and a buyer, moving in from another part of the village, has built a house there. The grandmother of the family lives in Part C, and the children live on Part D. In this case, the land has been split into different pieces for different purposes of sale and inheritance, but formal subdivision has not been carried out, and the transaction holds based on mutual understanding and trust (Interviewee 14).

2. Land Transfers

In this section, land transfer is used to refer to ownership of land changing from one party to another, for any purpose other than direct succession within a nuclear family (i.e. for anything other than traditional father-to-son inheritance by succession). The various types of land transfer are discussed here.

It is a widely-held perception that a large percentage of the land in Usoma have transferred at least some of their landholdings. A land agent who lives in Usoma and has been selling land in the area for 10 years estimated that between 30-40% of the total land in the village has been sold, discounting land taken for compulsory acquisition (Interviewee 7). During a focus-group discussion with 8 respondents, participants felt that between 50-85% of village members have sold their land (Focus-Group Session 1). The same respondents felt that about a quarter of these people had been compelled to sell their land because of compulsory acquisition, while the remaining three-quarters had done so voluntarily.

Compulsory acquisition

The most common type of land transfer has been compulsory land acquisition. Compulsory acquisition is the process by which the state is allowed by law to forcibly

purchase land from residents in order to build a public-interest-project, albeit with fair market-value compensation for the land and other developments on the land.

Acquisition was carried out in the village on 3 occasions – when Kisumu Airport was expanded in the 1970s, when the Kenya Pipeline Company was built in 1992, and when the Kisumu Airport was expanded to become Kisumu International Airport in 2008. The airport expansion in 2008 also absorbed the site upon which Usoma Primary School had stood, so 4 parcels of village land were acquired from villagers to build the school.

Information regarding compulsory acquisition in the 1970s was not available from either official or local sources, due to the length of time elapsed and lack of documentation. However, information about the Kenya Pipeline Acquisition was available – villagers estimated that around 35 households were evicted when the oil pipeline was constructed in 1992 (Focus Group Session). Registry Index maps obtained from the Ministry of Lands indicated that 69 parcels of land had been amalgamated to form the one parcel that the Kenya Pipeline Company now occupies. Regarding the airport expansion in 2009, residents were not able to give a numerical estimate for the number of households affected by the airport expansion in the 2009, but stated that there had been ‘very many’, more than had been affected by the oil pipeline (Focus Group Session). Villagers who had been evicted because of these acquisitions either moved elsewhere or bought new pieces of land within Usoma.

Case Study: Acquisition and its consequences

The case study of one resident who was evicted from the airport in 2008, Interviewee 8, provides some insight into the direct and indirect consequences of land acquisition. This lady claimed that her family had owned 12 acres of land within the area now occupied by the airport, and had been paid 1.6 million KSH for all the land.

The interviewee felt that this sum was not fair and said that the matter was now in court as a result. Focus-group discussants also felt that the compensation amount was too low, and believed that this was because the pipeline company had in fact paid the correct amount, except that the because intermediaries (Kogony Elders, Assistant Chief, Chief, and advocate in charge of the transaction) had pocketed some of the proceeds before transferring it to the rightful owners (Focus Group Session).

Practically, the 1.6 million shillings given in compensation was not enough for her to purchase close to an equivalent amount of land. The interviewee was able to buy only ¼ acre of land at 400 000 shillings. The rest of the money was used to construct a new house and for subsistence. If the experience of other evicted villagers was similar, this would mean that land acquisition has significantly decreased the ability of villagers to own land.

Significantly, it was not only the displaced group of residents that was affected. As the displaced residents looked for new land to settle in, those who wished to remain in

Usoma had to buy land from their neighbours. The interviewee in this particular case mentioned that she had to 'plead' with her neighbor to sell the land. This shows that even Usoma villagers not directly in the path of the airport expansion were affected, when they had to sell land to their neighbours and relatives, not completely based on individual choice but under the influence of social and economic pressure.

Land Sale by Choice

Besides compulsory acquisition, transfers also happened when Usoma villagers chose to sell land for cash. When villagers had large parcels of land, they were able to subdivide a portion for sale, but when the parcels were small, it was not viable to conduct a subdivision and they had to sell off a whole piece.

In some cases, land sale was carried out to fulfill financial obligations. Education was cited as a common reason for land sale - according to an Interviewee 7, a land agent, people 'normally' say things like, "because of poverty, I have children, I want to take them to school, some have finished school, and I have no money to take them to the college, so that's why I'm selling my parcel of land". This was corroborated by the experience of Interviewee 31, who sold a parcel of beach land to pay secondary school fees for his younger sister, and who had no regrets doing so. Other big-ticket expenses in times of distress, like funerals, also induced land sale. Interviewee 30 had sold a parcel of land to pay for his wife's funeral and a portion of the dowry he had not yet paid.

There were also those who chose to sell land to get capital for starting businesses - Interviewee 30's elder brother had sold land to buy three vehicles, which he then hired out. But not everyone re-invested their money in profit-making enterprises, and villagers felt that many people had just squandered the proceeds. Focus-group discussants expressed the judgement that some people "just sell their lands for the love of money until even they lack places to live in". Interviewee 18 gave a personal example to illustrate the point:

"I have a brother in law who sold a beach land and just decided to use the money for fun to drink alcohol, travel to Mombasa then also bought clothes. When the money was over he came back and now he has just a small piece of land."

Land sale without subsequent re-investment of the proceeds into purchasing new parcels led to loss of landholdings for villagers like the Interviewee 18's brother-in-law.

Land purchase for investment

On the demand side of the equation, land sale has been driven by investor interest. Land in Usoma is thought to be prime land because of both natural and man-made factors - the beach is a natural asset favoured for residential or tourist developments, while the developments like the airport and pipeline are expected to bring commercial potential to the village. As a result, wealthy individuals have purchased land parcels in

the village for the purpose of re-selling them after the value of land appreciates. Interviewees provided multiple accounts of people engaged in this type of activity:

“This size of land, back then it was taking... Ksh. 200 000. So now, for you to get such a land, you must put around Ksh. 4 million to get this land. You see.” (Interviewee 10)

“There was a certain Asian guy who stayed now in Kisumu here, for almost 20 years now. He used to buy some land at Ksh. 20 000, 30 000, and then as we are talking now, he’s selling them at Ksh. 3.5 million, 4.5 million.” (Interviewee 7)

“There was a land that was bought next to my home 15 years ago at Ksh. 75,000 by an Indian and now he wants to sell it at Ksh.20 million.” (Focus-Group Discussant)

Based on the last two accounts, villagers estimated that the value of land had appreciated about 200 times within the past 15-20 years. They were also certain that these people had acquired these lands with the specific intent of making a profit:

“Somebody just decides, I want to buy land at Usoma beach. So, after he buys, he fences it, then he keeps quiet, waiting for the rising of the value of land, then after he resells it to somebody else. You see? So that’s the business.” (Interviewee 10)

“Recently a certain white man came to me with a black Luo lady from Mombasa, and the white was saying that the black lady is the one who must negotiate with us, since if does so with us directly we will overcharge him since he is a white... So after negotiations he just removes the money and pay. Then when they have bought that land at a lower price they leave it to appreciate in value.” (Focus-Group Discussant)

Based on information gathered from community members, Figure 8 was created, highlighting some land transfers which resulted in high-profile individuals owning parcels of land in Usoma Village. These include a national-level politician and his brother, various Kisumu civil servants, and prominent businessmen. This information was gathered based on participants’ reports, and may not be fully accurate, although the utmost effort was made to cross-reference between multiple sources so as not to make false claims. The intention behind providing these profiles is not to shame or publicly expose any individual, but to provide an indicative profile of the social standing of people who have purchased land in Usoma.

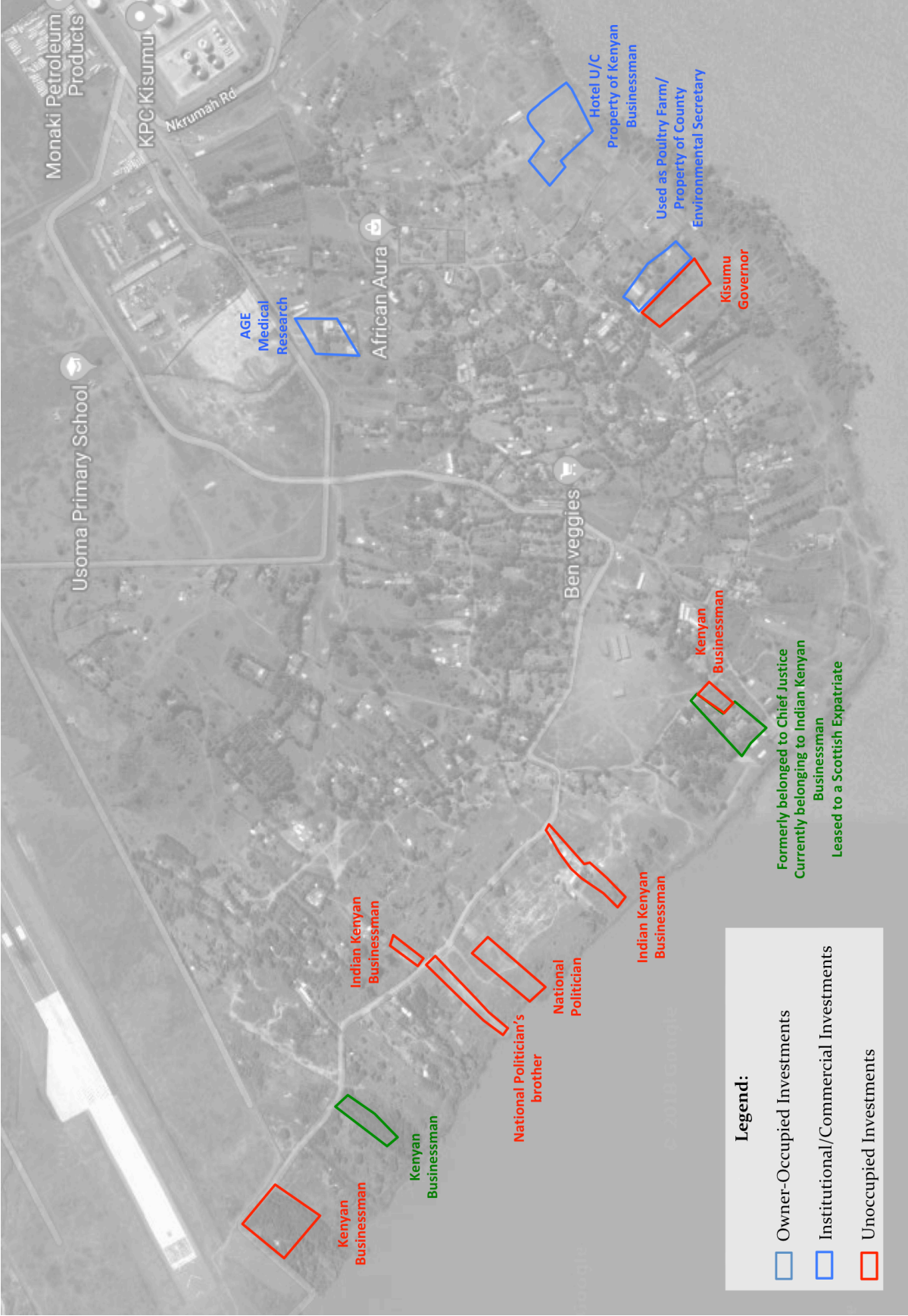


Figure 8: High-Profile Transactions and Types of Investments (Map: Author. Data: Community Sources)

Purely speculative vs semi-commercial and personal residential investments

Finally, despite the clear money-making intent of all these investments, a distinction must be made between pure land-banking investments and investments that have some intended commercial or residential purpose in the interim. On the residential front, two plots were identified as having been purchased for owner-occupation, one belonging to a Kenyan businessman and the other to the former Chief Justice. However, the chief justice's house has been sold to a businessman and is being leased out, so it can be considered a semi-commercial property.

In the eastern section of the village, closer to the main road leading to town, some commercial/institutional developments are in the works (Figure 8). AGE Medical Research has set up its headquarters within a gated cluster of villas. A poultry farm has also been built nearby, and a hotel is also under construction at the eastern tip of the village.

When land is owned purely for speculative purposes, it is usually fenced and left unattended and undeveloped. On the other hand, land used for commercial purposes, while also fenced, usually signals its commercial use and business name, and buildings are usually erected on the plot.



Figure 9.1: Actively-used commercial investments (Pictures: Author)



Figure 9.2: Unoccupied land investments (Pictures: Author)

In-depth case study area

A detailed land-ownership study was carried out in a subsection of the village at the northwest end. Land searches of 101 contiguous parcels were conducted at the Ministry of Lands Office. The case-study area was chosen because it contained a mix of beach and inland plots. It was also the region most affected by on-farm sand harvesting and had experienced a high rate of land sale as compared to the rest of the village. Thus, while the findings from this case-study area are not representative of conditions in the entire village, it produces insightful information regarding patterns of land-ownership change in the village.

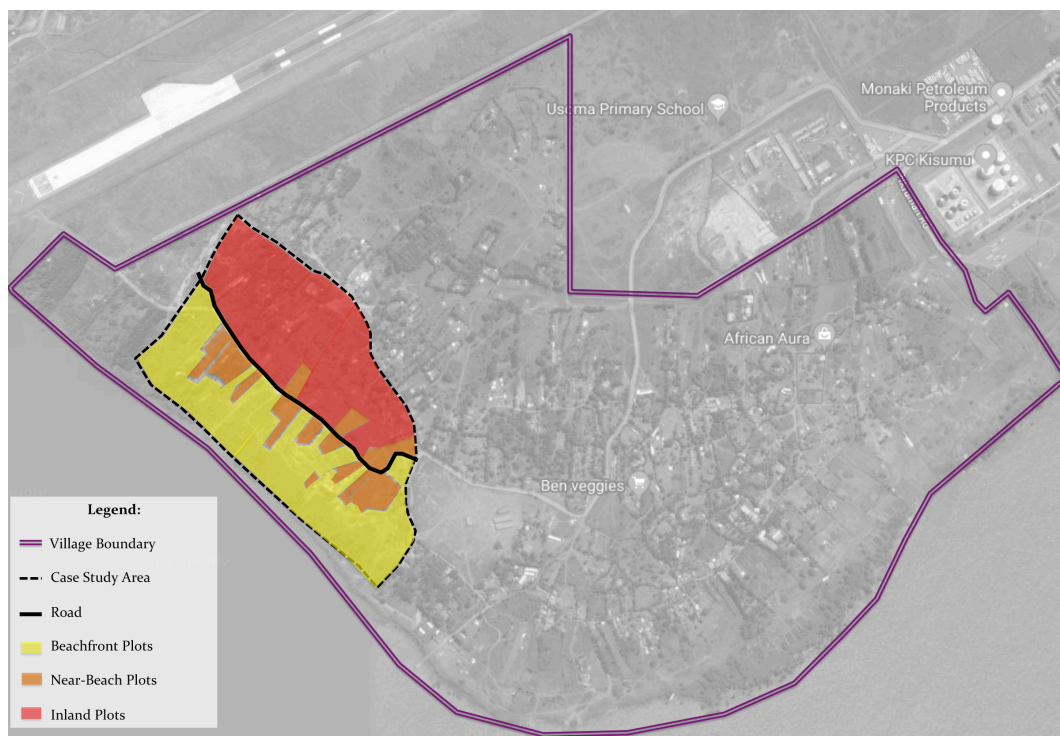


Figure 10: In-depth case study area (Source: Author)

At present, the area comprises 101 plots, but at the time of land registration, in 1992, the land had actually consisted of 94 plots. The discrepancy is due to 8 additional plots having been created via subdivision in the intervening years. Among the 94 plots, parcel information for 8 plots was not available within the main registry, because the records had been locked away in a private safe. This additional security measure is taken when serious disputes or fraud accusations take place on the land, such that access to the information has to be highly restricted even among staff at the Ministry of Lands. In addition to these 8 parcels, Cautions and Restriction orders had been placed on 15 other parcels at some point in time. A caution or restriction order is placed on a piece of land by the land registrar when a parcel is locked in dispute, freezing all activity related to that parcel. These orders enter into the parcel record and are withdrawn upon dispute resolution. Only after that can further activity take place on the parcel. The fact that 23 out of the 94 parcels had been disputed demonstrates the highly contentious nature of land in the study area.

Discounting the 8 parcels with hidden records, records of succession and transfer were available for a total of 86 out of the 94 plots demarcated at the time of registration in 1992. It was found that 36 out of the 86 parcels have either been sold in their entirety or been subdivided with a portion subsequently being sold. The total number of sale transactions was 67 – many plots had been sold more than once, with some having been sold as many as 4 times over the period.

Analysing the spatial distribution of transaction activity, it was found that the plots adjacent to the waterfront experienced a sale tendency than the plots close to the beach but not adjacent, and that this tendency was in turn higher than the plots separated from the beach by an additional road. The plots were classified as Beachfront, Near-Beach and Inland respectively (Figure 10). The table below shows the breakdown of plots sold among the 101 plots in the study area at present:

	Already Sold	Unsold	Record Hidden	Total
Beachfront	23 (62%)	10 (27%)	4 (11%)	37
Near-Beach	12 (52%)	10 (43%)	1 (4%)	23
Inland	9 (22%)	29 (70%)	3 (7%)	41
Overall	44 (44%)	49 (49%)	8 (8%)	101

Figure 11 shows the temporal distribution of sale transactions over the period. While no clear trend can be observed from the data, the 1993-1996 period saw a large number of transactions, and there was a large spike in transactions in 2009. This suggests a correlation between large-scale land acquisitions (specifically, the Kenya Pipeline construction in 1992 and the Kisumu Airport Expansion in 2008), and subsequent land sale activity.

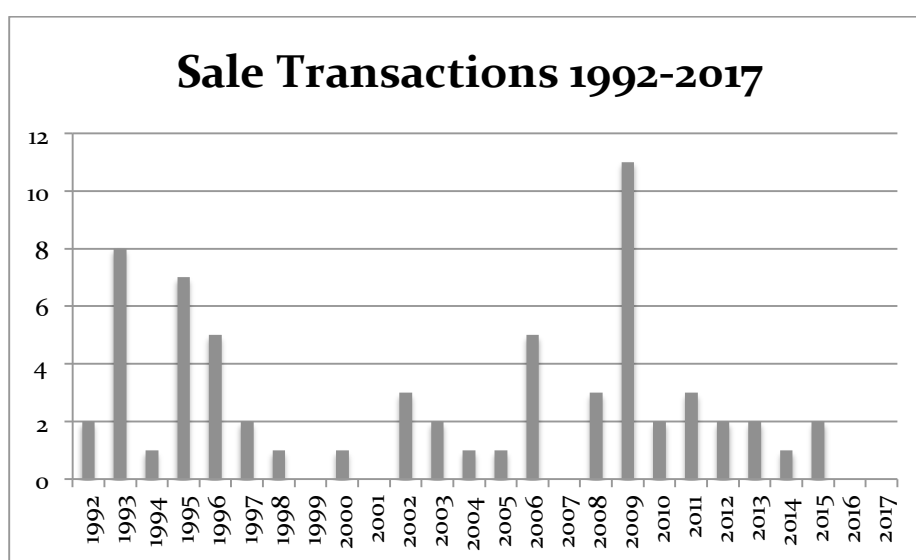


Figure 11: Sale transactions within case study area, over time
(Chart: Author. Source: Ministry of Lands)

The data obtained from this area also strongly suggests that subdivision is usually accompanied by imminent land sale. Of the 8 original parcels subdivided, 2 records were hidden, but the remaining 6 parcels were all subsequently resold.

Overall, the transaction data obtained from this subset of Usoma largely corresponds with the subdivision data obtained for the whole of Usoma. Both sets of data suggest that land-ownership changes were more common near high-value areas, like the beach or major roads. Both sets of data suggests that land-ownership change activity was influenced by large-scale acquisitions like the Kisumu Airport expansion in 2009, and the construction of the Kenya Pipeline Company in 1992.

Informal Transfers

When a transfer takes place from one party to another, the formal procedure is supposed to involve hiring a private survey to verify the exact acreage and contracting a lawyer to handle the transfer documents. The seller will surrender the title deed and the buyer will receive the title deed. The entire family of the original land-owner is also supposed to appear before a committee known as the 'Land Control Board' to affirm that they approve of the land sale, before the transfer can take place. However, in practice, the formal procedure is not always carried out properly (Interviewee 4, Interviewee 7).

Sometimes, land gifted to another person will remain registered in the name of the original owner. Interviewee 30 mentioned that his father had given a piece of land to the latter's brother out of goodwill. The father's brother has since passed on, but his widow and children are still living on that piece of land, while the land remains registered in the name original owner – Interviewee 30's father. Land sold to another person can also remain registered in the name of the original owner, as seen earlier in the examples of Figures 7.1-7.3.

Besides seller-to-buyer transfers, even formal land acquisition processes can be susceptible to informal activities. Allegations of improper handling of land transfers have been reported. Recent news reports from March 2018 have indicated that the title deed for Kisumu airport is missing, not currently in possession of the Kenya Airports Authority (Njagih 2018). Private developers had reportedly obtained access to 13 parcels of land which are supposed to be in possession of Kisumu Airport. Also, a private land surveyor has claimed that the land by the airport acquired to build the new Usoma Primary School is still titled in the names of the original owners and has not been changed accordingly (Interviewee 10).

An interview with a lands officer in the Ministry of Lands indicated past problems with title deeds after compulsory acquisition for road-building:

“But the problem with what we normally do – we forget to take possession of the pieces of land that we acquired. So we just acquire, the road passes, and most of

the time we just leave those people with the titles. So one or two crooked fellows come and resell it to somebody else... It is our mistake that we are now correcting.” (Interviewee 5)

It is not certain if the missing title deeds for Kisumu Airport are caused by the same fault of not properly taking over original title deeds. However, if the original title deeds are indeed in the hands of other individuals, this leaves airport land susceptible to dual-ownership claims, land-grabbing, and fraudulent sale.

3. Increase in rental housing developments

Most villagers whose families have lived in Usoma for at least two generations, and even some villagers who have moved into the village for permanent residence, own parcels of land and have constructed houses for personal ownership on that land. However, there are also many houses that have been constructed by land-owners, to be rented out to other families. Rental houses can usually be differentiated from owner-occupied houses based on their typology; rental houses tend to be constructed as row houses as opposed to standalone houses.



Figure 12: Typical Rental Housing Typology (Pictures: Author)

Technically, the land in Usoma is freehold land, and is supposed to be used for agricultural purposes by default. Land-owners are supposed to apply for a change of use if they wish to construct rental housing on their land, since this would be a non-agricultural land use. Interviewee 11, who had constructed rental houses on his land, claimed that he had paid 200 000 KSH (\$2000 USD) for a change of use, but not everybody who had constructed rental houses in the village had gone through this process.

Most of the residents in rental houses are workers who have migrated to Usoma to work in the neighbouring industrial developments, like the Kenya Pipeline Company and Equator Bottlers limited. In fact, according to an elderly source in the village, the first rental houses were constructed in 1992 after the construction of the Pipeline Company (Interviewee 9). An estimated 500 people are now resident-tenants in Usoma, consisting of workers and their families. However, some people whose families

are originally from Usoma have also moved into rental houses after selling their land – one example is Interviewee 30.

The spatial distribution of rental housing developments (Figure 13) shows that most of the blocks have been constructed in the Eastern section of the village, which enjoys greater accessibility to the main road leading to town, and simple proximity to the Kenya Pipeline and neighbouring developments. Rental rates range from 3000-5000 shillings per month, with price varying based not only on size but on location.

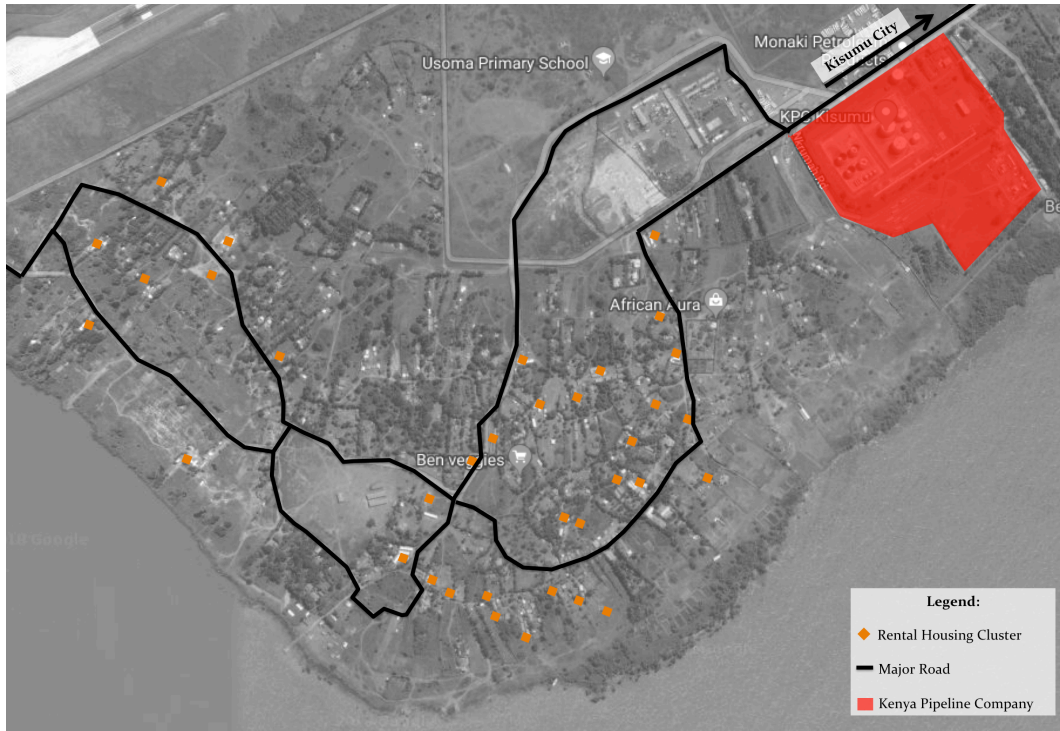


Figure 13: Distribution of Rental Housing Developments in Usoma Village
(Source: Author)

4. Increase in sand harvesting activity

Sand harvesting is the act of collecting sand from water bodies, coastlines, rivers, and land for the purpose of sale as a construction material. Being on the shores of Lake Victoria, there are plentiful sand deposits, both on land and in the water, in Usoma and this has spawned an entire industry which involves many stakeholders. Villagers dig the sand and then sell it to agents, who call for lorries to come and ferry the sand to building sites where the sand is used in construction. This section describes the different types of sand harvesting in Usoma, and the times and places in which each type of activity has taken place.

Harvesting from the Land

Sand harvesting is said to have begun in Usoma as early as the 1970s, when a man called Ogonda Nyonje came to Usoma from the Kano-Nyamasaria area. Nyonje paid land-owning villagers a one-time fee of 100 shillings for the right to mine sand. He paid people 2 shillings a day to dig sand, and 5 shillings a day to load lorries. Each lorry sold earned him 25 shillings. The sand was sold to Goba Construction Company. There came a point when Nyonje was chased away from Usoma for failing to pay a land-owner the rightful sum. However, despite his departure the villagers of Usoma continued to harvest sand and sell it to the same construction company.

The soil was only suitable for sand harvesting in the northwestern part of the village, known administratively as Usoma 'C' (See Figure 14). In other parts of the village, the soil was either rocky or black cotton soil prone to waterlogging. Villagers dug the sand in earnest, and now there is an entire swathe of land far below the level of the surroundings, leaving trees and graves metres above the ground. In the rainy seasons, pools of stagnant water form, posing a community health hazard as these breed mosquitoes. Most of the saleable sand in this area has already been removed, but some villagers are continuing to dig residual sand from their plots, or from edges of the roads. In some areas, the roads have fallen into disrepair, and been reinforced with stones and wire.

Harvesting from the Lake

Sand harvesting from inside the lake began in 1978 when the amount of sand from the land was dwindling and people began to look for other sources of supply (Interview 1). One of the first people to start harvesting sand from the lake was Interviewee 29. This lady began to collect sand that was being naturally washed up onto the lakeshore, and collect it into piles for the lorries to collect. More villagers started to join her and soon people began to take boats into the water to collect sand from the lake. When boats come back from the lake, the sand is prepared in piles on the beach at the landing site, which is connected to the road via which lorries will come.

Harvesting sand from inside lake is technically not illegal, although it is frowned upon to dig in the shallows because these are fish breeding grounds. Digging in the lake also

poses risks to sand harvesters, as they are prone to contracting waterborne diseases like bilharzia, and are also potentially susceptible to hippo or crocodile attacks.

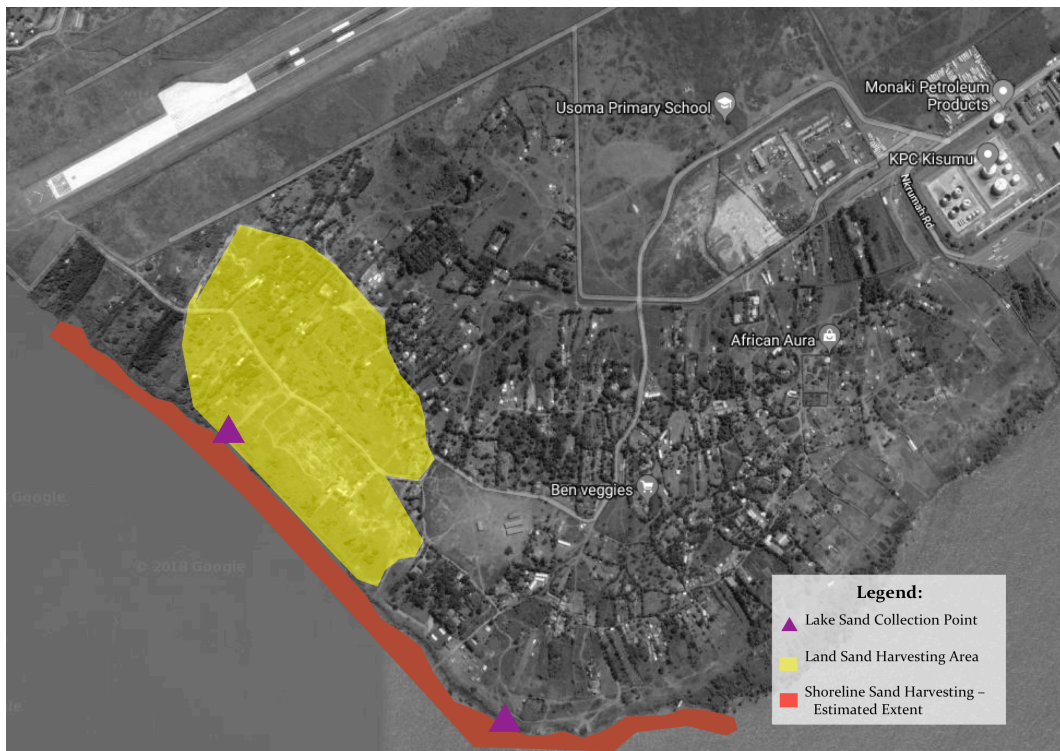


Figure 14: Areas affected by sand harvesting in Usoma (Source: Author)

Harvesting from the Lake Reserve

People in Usoma have also harvested sand along the coastline of the lakeshore. This is an illegal practice because it results in coastal erosion – when sand is removed from the shoreline, the land becomes exposed to the continuous onslaught of the waves coming in from the lake.

None of the 10 interviewed sand harvesters admitted to having dug sand from the lakeshore, although they might have withheld information since this is an illegal activity. On the other hand, visual evidence also shows that the shoreline has been steadily receding because of the loss of beach land. A local source reported that the shoreline had receded as much as five metres within the span of six months (Interviewee 29 – see Figure 15.1).

On multiple occasions, residents owning beach land have complained of people digging sand from the lakeshore (Interviewee 28). This has led to some arrests of lorry drivers fetching sand dug from the lakeshore (Interviewees 12, 21, 29 – see Figure 15.2). However, the culprits are often able to bribe their way out custody and sand harvesting continues (Interview 12, 28). Citizen activists also reported that people have been harvesting sand from the lakeshore by night, armed and under cover of darkness (Interviewee 21, Interviewee 29).



Figure 15.1: Degradation of the shoreline (Source: Charles Rakwaro)



Figure 15.2: Lorry arrest made after citizen report (Source: Charles Rakwaro)

DISCUSSION

Based on the four themes outlined in the previous section, this section discusses the findings, analyzing the reasons for the observed land-use and land-ownership changes, and linking these to processes of urbanization in the peri-urban areas. In this section, the findings have been drawn together in order to demonstrate that four trends of urbanization have been taking place in Usoma Village.

1. Subsistence-sustaining to cash-generating land uses

Sand harvesting and the construction of rental housing should be understood as being two distinct types cash-generating activities that have replaced food production as subsistence strategies in the eyes of villagers. Based on this analysis, it can be said that urbanization entails a shift away from subsistence-sustaining activity towards cash-generating activity. Conventional ways of understanding urbanization see it as the process of land-uses changing from agricultural to non-agricultural (residential/commercial/industrial) activities. These broad categories, often employed in urban planning, usefully describe land-use change at the macro-level. However, at the household level, it is perhaps more instructive to understand the shift as being a shift from subsistence-sustaining to cash-generating activity instead.

Sand Harvesting

The fundamental fact of sand harvesting in Usoma is that people harvest sand to earn money. In many cases, it was the need to fulfill specific financial obligations that compelled people to engage in sand harvesting. Interviewee 2's experience best illustrates this point:

“Yes my brother in law started to dig sand to get money to organize his mother’s funeral. After that he just continued digging it then also my husband dug it shortly then fell ill. So I looked for some people to dig it so that I could get money to pay the hospital bills. Unfortunately my husband passed on and I was now left with the kids. I continued digging sand so that I could build a house, get food for my family and also to be able to pay school fees for my children.”

In this example, big-ticket expenses like funerals, hospital bills, house-building and school fees were cited as some of reasons why the interviewee and her family had turned to sand harvesting.

However, this example also reveals that sand harvesters use the cash proceeds not only to pay for major expenses but also for daily sustenance, as evidenced by the fact that Interviewee 2 uses the money to get food for her family. Villagers traditionally survived by engaging in farming, fishing, and animal husbandry for food and barter-trading the excess for other items, but the rise of a cash economy has made it possible for people to buy rather than produce food. In other words, the way that people make a living in

the village has shifted, as people now wish to make money to buy food (and other goods and services) rather than directly produce food.

Interviewee 13's experience illustrates this point. Her family has been engaged in sand harvesting from their own land in the Usoma 'C' area for 10 years. Prior to sand harvesting, her family and even her neighbours were growing cassava, maize, and sorghum, and the crops were doing well, by her own assessment. However, there came a point where her family and the families around them "just decided to leave and start sand harvesting". When questioned about whether she felt better-off engaging in cropping or in sand harvesting, her reply was simply that "if you dig sand you can get money to buy food". Her response shows that buying food has become a norm, perhaps more of a norm than producing food.

Deeper analysis reveals that the shift from producing food to earning money was not just a matter of choice, but was at least in some cases a necessity. Even if food-producing activity was enough, on its own, to provide for basic consumption, expenses such as school fees required that even food-producing activity had to become in some way convertible to cash-generating activity. The experience of Interviewee 17 reveals that fishing was not enough, on its own, to meet the needs of his family:

"Money from fishing used to be higher but due to school fees problem I had to also dig sand to top up." (Interviewee 17)

In this case, the interviewee felt that fishing used to be a viable money-making enterprise, but even then the proceeds were not enough to pay for school fees, compelling him to turn to sand harvesting to get additional cash.

Construction of Rental Housing

Like sand harvesting, rental housing was perceived by villagers to be a better way of making a living than agriculture. Interviewee 11 provided a quick estimate of the calculations involved:

"The rentals is high-paying as compared to growing crops. This is just a quarter acre. Just a quarter, tell me, even if you had planted maize, how much would you harvest? And the earliest you can harvest, maybe after 3 months, because of the weather of Kisumu. You will find that maybe, you can get hardly 5 sacks, how much per sack of maize, 1500, and the type of houses you have built, one is 5000, that's 20 [000] in a month."

In the calculations of this interviewee, a quarter-acre of land can yield 7500 shillings per month assuming a harvest of five sacks of maize, compared to 20 000 shillings per month for renting out four rental units.

Replacement of subsistence production by cash generation

Overall, it can be said that the decline of fishing and cropping are in a dialectical relationship with sand harvesting– the former and the latter reinforce each other. This dynamic reflects how urbanization in the peri-urban areas can be seen in one way as a process of land-use change from subsistence-generating activities to cash-generating activities.

Decline in subsistence food production can be understood as being caused by reasons independent of sand harvesting, yet causing sand harvesting. Fishing in Usoma has been affected by declining fish stocks in Lake Victoria and a water hyacinth outbreak in 2015 (Interviewee 1). The decline in agricultural production was commonly attributed to wreckage from wild hippos, unattended cattle, and misbehaving monkeys (Interviewee 12, Interviewee 18). This in turn led villagers to turn to sand harvesting as alternative survival strategies. Interviewee 17, a fisherman, describes how the lack of fish in the lake made him turn to sand harvesting:

“After my schooling I started fishing then after sometimes the number of fish reduced. So when all the money that I was paid the person whom I gave some piece to dig was over, I started digging the sand by myself.” (Interview 17)

Sand harvesting is also caused by reasons independent of food production decline, and yet it in turn affects food production. For example, behavioural and social factors played a big part in encouraging sand harvesting. Interviewee 16 mentioned being influenced by his family:

“Sand digging started long time ago before even my father was born. So we were born and found this sand mining ongoing.”

Interviewee 15 mentioned being influenced by her neighbours:

“Everybody was digging sand in this area so we also decided to dig.”

Yet, after engaging in sand harvesting, people’s ability to return to food production is severely hampered. For crop cultivators who had harvested sand off their farmlands, they were unable to return to cultivation after harvesting sand off their lands, because of the degradation (Interviewee 2, Interviewee 13). For fishermen, Interviewee 17 was able to return to fishing after the fish stocks had increased, even though his land had been degraded because of sand harvesting. But the role of lake sand harvesting in disturbing fish breeding grounds and affecting subsequent fish stocks must also be considered.

2. Population Densification

Another important factor underpinning many land-use and land-ownership changes is the increasing population density in the area. Population densification is thought to

have affected Usoma in three main ways: by making subsistence activity increasingly unviable, by creating a market for rental housing, and by inducing villagers to subdivide land. Urbanization is commonly defined as an increase in population density and in fact this factor lies at the very heart of most land-use and land-ownership changes.

Interviewee 9, who was born in 1935 and witnessed many changes in Usoma as he grew up in the village, has attributed changes in livelihood strategies to increasing population density. Interviewees 18, 33, 34 and 35 all agreed that the population in Usoma had greatly increased since land adjudication in 1972. When asked about why people were not able to sustain themselves on fishing, farming and herding as in the past, he implied that landholdings had become too small for agricultural production to sustain a household.

“Long time when I was growing people were very few in this village, not like nowadays. Now people are very squeezed, you can see there so many homes here. When I was growing, this area used to have 9 homes only.”

The decline in fishing and the boat-building industry in Usoma was also attributed to the lake being unable to support high population density:

“In the past the boats were few and there was plenty of fish but now there are many boats but few fish in the lake.”

This alleged link between population density and the inability of the land and lake to support all of the population to produce food may be tenuous and requires further verification.

What is clear, however, is that rental housing has become a realistic and profitable enterprise as a result of increased population pressure. As mentioned earlier, most of the demand for rental housing was created by the hundreds of people looking for residence in Usoma as they migrated to the area to work at the neighbouring oil pipeline (Focus-Group Session). To extend the argument further while according more agency to villagers, it can be said that construction of rental housing demonstrates an adaptive response by villagers to take advantage of the neighbouring industrial project for their benefit. Interviewee 10 gave these landlords credit as such:

“The people around here are abit enlightened. But the same thing which affected them is the same thing which affected those around here, because many are still not yet developed in a good way, as it should be.” (Interviewee 10)

Speaking about the people in the Usoma ‘B’ area who live closest to the industrial developments and who are the ones who have constructed most of the rental housing projects, Interviewee 10 felt that while all the people in Usoma had been affected by

the surrounding land-use changes, this specific group has responded in the most appropriate way.

A third effect of population densification has been the need to subdivide land, both formally and informally. It is important to note that population densification is the result of not only an absolute increase in population, but also an absolute decrease in village land in Usoma. Both of these vectors are responsible for there being more people per unit area of land. With births of multiple children and the lack of fresh lands for acquisition and settling, families have needed to subdivide land in order to transfer it to the next generation. In some cases, because it was not possible to divide the land among all sons, the entire parcel of land was sold and the proceeds divided among the children (Interviewee 14, Interviewee 37). Also, when villagers affected by land acquisition attempted to purchase land from other villagers, subdivisions were carried out. The overall effect has been one of shrinking landholdings from generation to generation.

3. State-led development projects

Urbanization, especially in government discourse, is often associated with the construction of large infrastructure projects and industrial developments. Both of these are seen in Usoma, which has seen two expansion of Kisumu Airport and the construction of the Kenya Pipeline Company. The findings from this research however suggest that these projects are manifestations of urbanization not merely because they are symbols of development or large-scale conversions from agricultural to industrial land-use. In fact, more importantly, land acquisition by the state drives an imminent increase in land value, encouraging land sale and thereby creating an urban land market.

The sale of land by villagers to outsiders was heavily influenced by land acquisitions. Land sale only became popular in the 1990s, after the construction of the oil pipeline. An interviewed land agent felt that “Immediately the Kenya pipeline came, that’s when people started selling their lands. Because they realised that land has value” (Interviewee 7). The expansion of the airport in the 1970s was deemed to not have had a similar kind of influence in encouraging land sale. When this claim was put to the test in the focus-group discussion, discussants also agreed that land sale began in earnest after the construction of the pipeline. In this vein of thinking, it can be understood that land acquisition was an important precursor to subdivisions, transfers and land sale because it set a precedent for the exchange of cash for land. In fact, the parcel maps from the Ministry of Lands indicate that the first subdivisions of parcels in Usoma only began in 1992.

State-led development further increased villagers’ propensity to sell lands and leave the village because of perceived tenure insecurity. Interviewee 30 claimed that Kisumu County Assembly government had told villagers about the government’s plans to build industrial developments in the whole of the Usoma Area. In his view, this had led to

villagers choosing to sell their land early and move somewhere else rather than wait to be evicted by the government. Overall, this marks villagers' recognition of the government administration's ability to override existing individual rights based on the notion of public interest and need.

Finally, the earlier-discussed increase in population density in Usoma can be attributed in large part to state-led development. The pipeline company also brought with it an influx of migrant workers, facilitating the rise of the rental market in Usoma. The airport expansions also signaled an imminent influx of potential customers and tourists in the area, encouraging commercial and/or speculative investments. Interviewees 7 and 10 both expressed that the high value of land in Usoma is at least in part driven by these large projects.

4. Land as Commodity, Sand as Resource

The findings reflect that land in Usoma has become a commodity – in the Marxist sense, something to be traded without necessarily being consumed – such that it has become profitable for someone with wealth to buy and fence land without using it, merely waiting for its value to appreciate. When the expected payout from land value appreciation is expected to far exceed the profit reaped from continuing to use the land for agricultural purposes, it can be said that the exchange-value of the land has now exceeded its use-value.

Land in Usoma has slowly lost its agricultural use-value. Villagers have been turning away from growing crops for various reasons. Some blame animal intrusions for making farming unviable, citing hippo attacks and destruction by unattended livestock as demotivating factors (Interviewee 12, Interviewee 18). Outsiders think that the younger generation has just become uninterested in and unable to engage in farming – interviewee 10 paints this picture of the average young man in Usoma – “He is not able to use his own land, so he just sells it.” Whatever the reason, it is clear that the exchange of land for money has gained popularity, and that the increasing propensity to exchange land is driven by the decreasing propensity to utilize land for agriculture.

Interestingly, the notion of land as a commodity has also been reinforced by the value of sand as a resource. Sand in the ground in Usoma used to have no use value, only a type of unseen environmental and agricultural value in maintaining the ecosystem and allowing the growth of crops. However, the rise of the urban construction industry based on growing demand for infrastructure and permanent dwellings has made sand a valuable resource. Sand therefore carries a high use value on construction sites, but as far as villagers in Usoma are concerned it appears to have minimal use value in their ground, and high exchange value when they sell it. In this way, sand harvesting can be seen as a type of unsustainable land use that depletes the resource and precludes future uses of the land, making it unusable for agriculture and leaving behind waterlogged pits that must be filled before any further development can take place. The sale of sand therefore encourages eventual land sale because it causes landowners

to arrive at a situation whereby land is no longer usable for any other practical purpose.

Besides the loss of agricultural value, land also loses its social and cultural meanings in these processes of urbanization. While agricultural parcels could be traded freely among Luos, the homestead was an important, sacred site as it contained the graves of one's forebears and ensured that their memories would remain within one's daily routine and sphere. These practices have now been lost as practical and financial concerns trump spiritual ones – Interviewee 37 for example had no qualms about selling his homesteads, replete with his parents' graves.

This study also found that informality has been a pervasive feature in land ownership changes – informal subdivisions and transfers have been common, as have been missing title deeds and incomplete land acquisition processes. This means that claims to land ownership can be nebulous and shifting, overlapping or even fraudulent. In a way, this reflects continuity rather than change from the way people have traditionally owned land. Shipton (2009) described Luo arrangements of land tenure as such:

“...Persons representing different kinds or orders of group hold simultaneous claims, perhaps rights, in the same land. A field a woman claims the sole right to hoe, her husband claims the right to swap, and his father (if he has modern ideas) the sole right to reallocate to his second wife, who has had more children than the first.” (Shipton 2009, 27)

XX. Yet, in another way, the informal uses of land showcase just how formal land-management mechanisms have become in some cases so detached from the on-ground realities of land use. In other words, the ownership of land as a title-deed backed by the Ministry of Lands is becoming increasingly detached from the ownership of land by occupation as proven by physical tenancy. The former type of ownership treats land as a commodity, whereas the latter type of ownership treats land as a reality.

CONCLUSIONS

In this study, two land-use and two land-ownership findings have been discussed. In terms of ownership, both formal and informal subdivisions have been common throughout across the study period, as have been formal and informal land transfers from villagers to the government, to private investors and sometimes to other villagers. Regarding land-use, sand harvesting and renting activity have increased. Based on these findings, it was seen that 4 threads of urbanization have been at work. Firstly, at the household level, a shift from subsistence-sustaining to cash-generating activity has been observed. Secondly, on the demographic level, population density has increased. Thirdly, state-led development projects have not only led to conversion of private to public land, but have also ignited the land market and increased land values. Finally, land and sand have become commodities, encouraging villagers to sell these resources instead of utilizing them as capital.

These findings and analyses reveal that the rural-urban transition in Usoma has not only been about land-uses changing from agricultural to residential and industrial land use. Neither has it been merely about land-ownership changing hands from indigenous villagers to state-backed institutions or private investors. Most critically, urbanization in Usoma has been driven by speculative urban aspirations. Land in Usoma has been touted as 'prime land', and this notion has been produced and reinforced in the way investors and the state have acquired land. This has driven up land values, increased the population, making land a commodity and land sale or land renting tantalizing possibilities.

Urban aspirations are manifested not only in the land market, but also in vision documents. Land-use and development plans have been proposed for Usoma, highlighting the ideals of both the government and the people. The Kisumu ISUD plan 2013 has designated at least half of Usoma to be a 'special planning area' for waterfront development:

"The lake shore is designated as a Special Planning Area where development restrictions will apply. The area has been designated as SPA for two main reasons: protection of Lake Victoria shoreline in its urban part, [and] risk prevention for flood prone areas... specific planning guidelines will apply, all inspired by the following planning principles: establishment of an exclusion area (set back), unhindered access and view corridors to the lake, continuous frontage limitations, height limitations, paving limitations, minimum green coverage, road width and traffic level limitations." (Nodal Conseil, Kisumu ISUD Plan Report 2013, p.87 – see Figure 13.1)

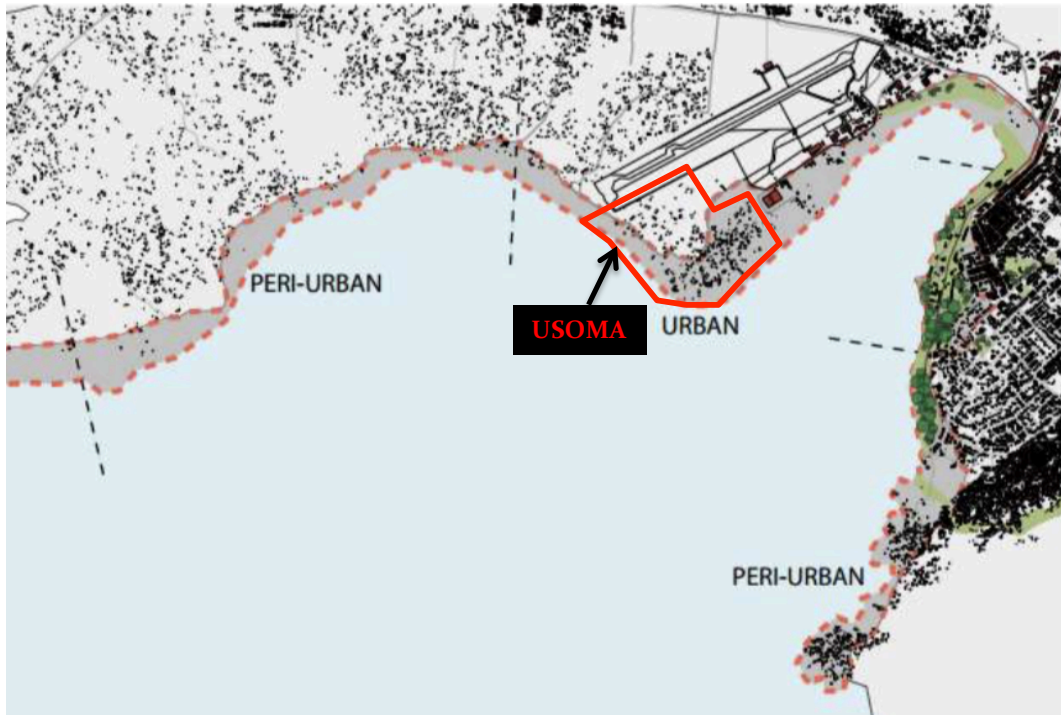


Figure 16.1: Usoma and Kisumu Special Planning Area
 (Source: Nodalis Conseil, Kisumu ISUD Plan Report 2013, p.84)

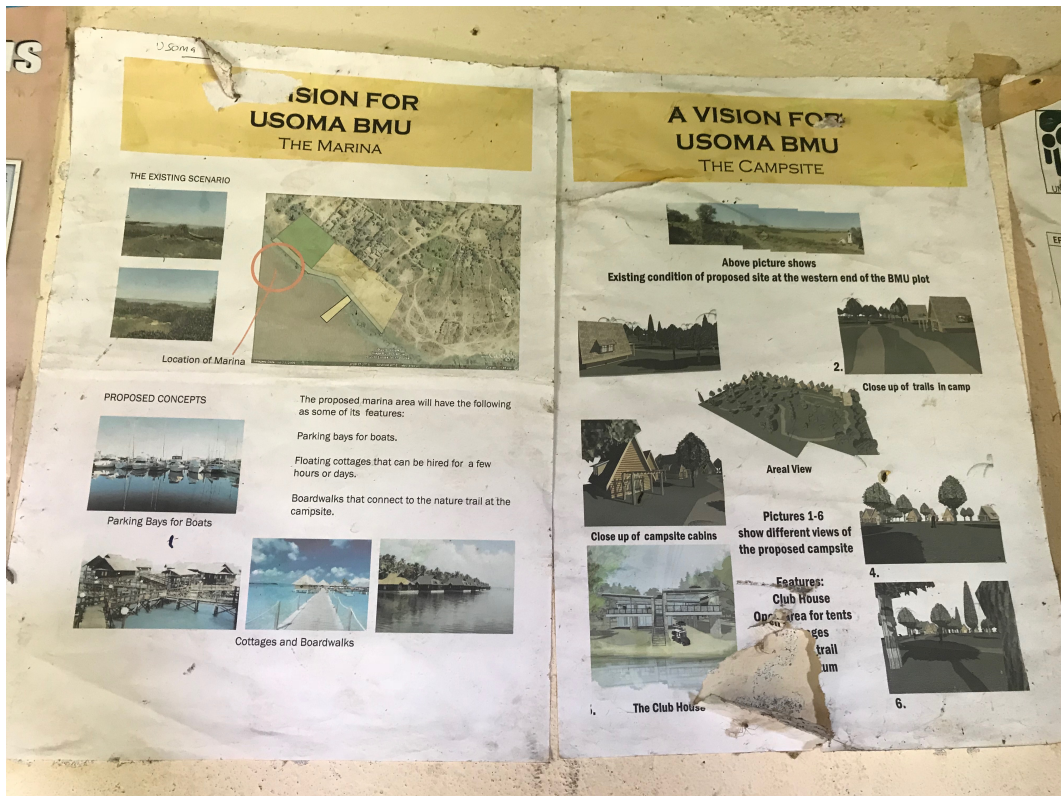


Figure 16.2: Beach Management Unit Vision Document
 (Source: Kisumu Beach Management Unit and Maseno University students)

These guidelines already lay the foundations for urban planning and design to take place in Usoma, but since they have not been implemented, such urban development continues to remain in the realm of fantasy and aspiration. These aspirations are also internalized and reproduced by villagers themselves. On the wall of the Beach Management Unit Office hangs a vision document completed by Beach Management Unit members in conversation with Maseno University students (Figure 13.2). The poster promulgates a vision of a tourist-resort Usoma, replete with a marina and a campsite. But the poster is tattered and worn, reminiscent of a long-lost dream rather than an achievable hope.

In these ways, government, investors, and the Usoma community have all converged in aspiring towards a idyllic tourist destination, prime urban development dream of Usoma. Urban aspirations are nothing new, and the lure of the city lights has captured the imagination in every society. But the urban aspirations in Usoma are unique in that they have failed to materialize even after decades of anticipation. The airport expansion and the pipeline construction have not brought jobs to villagers, and the beach plots purchased by investors lie fenced or fallow.

Thus, the bane of Usoma is the fact that speculative urban aspirations have not delivered sustainable urban livelihoods, even as rural subsistence strategies have become invalidated or irrelevant. Unable or unwilling to pursue farming or fishing, in need of cash in the 21st Century but without access to jobs that urbanization promises to bring, villagers have turned to selling sand and land, undermining or losing their greatest assets, and reproducing their own poverty. Overall, the urbanization of Kisumu City has utterly failed Usoma – the demand for sand and land by the urban construction industry, state corporations, property investors, and even individuals in government office have extracted all of Usoma’s prime resources, reaping its benefits without offering anything in return.

If sustainable urban livelihoods are to be brought to Usoma, a constructive starting point could begin with the county government recognizing that Usoma is fast-becoming urban, and managing it as such. Land tenure in Usoma is currently freehold, which leaves land-use open to market forces and encourages land sale to developers who wish to enjoy absolute ownership rights of prime land close to the city. Converting the land to leasehold would bring the land under the umbrella of the municipality and enable sustainable land-use plans to be implemented. This could pave the way for taxation, investment into community capacity-building, and extension of services into the area, as opposed to leaving the site completely open to market forces and the interests of capital.

Outside of the government, a more socially-responsible investor community could provide the much-needed resources to bring tangible rather than speculative development to the area, utilising the prime land to its fullest extent in order to create jobs for native villagers and uplift the local economy. NGOs with the necessary expertise and resources would be invaluable partners in this process. Yet ultimately,

villagers also have a responsibility to do the best they can through mutual cooperation and self-help. With education and the proper use of community-self-help groups and pooled savings, local people can make the best of the little that they have to engage in sustainable livelihood strategies like fish ponds and climate-smart agriculture. Investment in rental housing is also a promising way forward, provided access to start-up capital is available. Such developments invest in rather than steadily destroy individual and communal resources.

“The story of urbanization in Kenya should be one of cautious optimism”, begins the World Bank report on the state of urbanization in Kenya (2016). It cannot be overemphasized that it is cautious optimism, not speculative aspiration, that can bring tangible development that will lead Usoma into a sustainable urban future. But cautious optimism must also carry with it political will, stakeholder collaboration and, most crucially, community participation if land use and land ownership are to be mobilized sustainability and equitably in Usoma.

RECOMMENDATIONS FOR FURTHER STUDY

As an exploratory mixed-methods study, this study has covered a range of land-related themes relevant to Usoma Village. This has allowed it to achieve breadth and paint a holistic picture of conditions in Usoma. Future studies could build on this research by undertaking a deep analysis on a specific topic, for example the rental housing market or the sand harvesting market in Usoma. A deeper look into the causes of agricultural and fishery stock decline would also yield important insight as to why rural livelihood strategies have not been working. Other pressing concerns in Usoma Village are the receding shoreline caused by sand harvesting, and the algae outbreak along the coast. These topics are also worthy of further study. If research parameters allow, multi-village case studies would also provide a much-needed comparative perspective that this study lacks.

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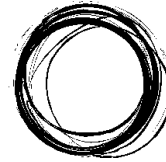
LIST OF APPENDICES

- 1 – Informed Consent Form
- 2 – List of Interviewees
- 3 – Sample Interview Guide for Village Residents
- 4 – Focus-Group Discussion Plan
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INFORMED CONSENT FORM - English

School for International Training

@ World Learning



Hello, my name is Ernest Tan and I am a university student from Singapore, currently studying in Kenya for one semester. I would like to invite you to participate in a project I am conducting as part of my study programme with the School for International Training. This research will also be used in a final paper for the fulfillment of my degree in Singapore.

Title of Study:

Land-use and ownership changes in Usoma Village, Kenya

Purpose of Study:

The purpose of this study is to find out how land use and land ownership have changed over the past 50 years in Usoma Village. For example, it aims to find out about the different types of activities that are carried out on village land, and to find out how and why people have been selling land and sand to other people.

Study Procedures:

If you are being interviewed, I will ask you some questions and listen to your responses. You will also be able to ask me questions and share information that you think is important. This will take about 20-30 minutes. I will audio-record our conversation so that I do not miss out on any information you share. However, if you do not want to be recorded, you can still participate in the interview and I will take handwritten notes, although this might be less accurate.

If you are participating in the focus-group discussion, you will be asked to join other villagers for a meeting that will last for about 30-45 minutes. I will ask the group some questions and listen to what everyone says about the questions. I will also ask the group to look at a map of the village and draw or write down information about who owns which piece of land and how it is being used. This session will be video-recorded so that I do not miss out on any information you share, and if you do not want to be recorded, you will not be able to participate in this part of the study.

Potential Risks and Discomforts

There are no foreseeable risks to participating in this study and no penalties should you choose not to participate; participation is voluntary. During the interview or focus group session, if you feel uncomfortable you have the right not to answer any questions or to discontinue participation at any time.

Potential benefits to participants and/or to society

There are no direct benefits to you for taking part in this study, but through this exercise, more information will be made available to the community and to the government about what exactly is happening in the village with regard to land-use activities and transactions. This information can possibly be used to help people come up with beneficial plans for the village.

Confidentiality

We will be talking about what you know or how you feel about land sale and sand mining in this village. Since these are sensitive topics, you may not want people to know that you have shared certain views or pieces of information.

To protect your identity, your name will not be published anywhere in the research, and anything you say will be linked with an interviewee number instead of a name. Only my translator and I will know your interviewee number and have access to recording and field notes, and the data will be password-protected on a computer. The data will be deleted after one year, once the study is complete.

Researcher’s contact information

If you have any questions or want to get more information about this study, please contact me at 0799 733 874.

Rights of research participants – Contact information

In an endeavor to uphold the ethical standards of all SIT ISP proposals, this study has been reviewed and approved by a Local Review Board or SIT Institutional Review Board. If you have questions, concerns, or complaints about your rights as a research participant or the research in general and are unable to contact the researcher please contact the Institutional Review Board at:

School for International Training
Institutional Review Board
1 Kipling Road, PO Box 676
Brattleboro, VT 05302-0676 USA
irb@sit.edu
802-258-3132

Statement of Consent

“I have read the above and I understand its contents and I agree to participate in the study. I acknowledge that I am 18 years of age or older.”

Participant’s signature _____ Date _____

Researcher’s signature _____ Date _____

Consent to Audio-Record Interview

Initial one of the following to indicate your choice:

_____ (initial) I agree for the interview to be audio-recorded

_____ (initial) I do not agree for the interview to be audio-recorded

Consent to Video-Record Focus Group Discussion

Initial one of the following to indicate your choice:

_____ (initial) I agree to be recorded on video/photos for the focus-group discussion

_____ (initial) I do not agree to be recorded on video/photos for the focus-group discussion

INFORMED CONSENT FORM - Kiswahili
School for International Training
@ World Learning



Hujambo, jina langu ni Ernest Tan, mimi ni mwanafunzi wa university kutoka Singapore. Sasa, ninasoma katika Kenya kwa semesta moja. Ningependa kukualika kushiriki katika mradi ambao ninafanya kama sehemu ya uchunguzi wa program na School for International Training. Huu utafiti utatumika katika maso ya mwisho kwa shahada yangu katika Singapore.

Kichwa ya Utafiti:

Mabadiliko katika matumizi ya ardhi na umiliki, katika Usoma mjini, Kenya

Lengo la huu uchunguzi:

Lengo la huu uchunguzi ni kutaka kujua vile mashamba yanatumika na umiliki wa mashamba umebadilika kwa muda wa miaka hamsini iliyopita katika kijiji cha Usoma. Kwa mfano, inalenga kujua aina ya shuguli tofauti ambazo zinafanywa katika mashamba ya kijiji na kujua kwa nini watu wamekuwa wakiuzia watu wengine mashamba na mchanga.

Utaratibu wa uchunguzi:

Wakati wa mahojiano, nitakuuliza maswali kadhaa na kusikiliza majibu yako. Utaweza kuniuliza maswali na kueleza maelezo ambayo unafikiri ni muhimu. Hii itachukua karibu dakika ishirini mpaka thelathini. Nitarekodi mazungumzo yetu ili nisikose maelezo yako. Hata hivyo, kama hutaki kurekodiwa, bado unaweza kushiriki katika mahojiano na nitaandika majibu, ingawa hii haitakuwa kamilifu kama kurekodi.

Kama unashiriki kwa majadiliano ya kikundi utaombwa kujiunga na wanakijiji wengine kwa mkutano ambao utachukua karibu dakika thelathini mpaka arobaini na tano. Nitaauliza kikundi maswali kadhaa na nitasikiliza majibu ya kila mmoja. Pia nitaauliza kikundi kuangalia katika ramani ya kijiji na kuchora au kuandika maelezo kuhusu nani anamiliki kipande gani cha shamba na vile linatumika. Mazungumzo haya, yatarekodiwa ili nisikose maelezo yoyote kutoka kwenu, kama hutaki rekodiwa, hutaweza kushiriki katika hii sehemu ya uchunguzi.

Madhara na Kujitolea na haki ya kujiondoa:

Hakuna madhara yoyote yanaonekana kwa kushiriki katika huu uchunguzi na hakuna faini kama unamua kutoshiriki. Kushiriki ni kwa hiari. Wakati wa mahojiano, au kipindi cha kikundi, ukifikiri kuna shida yoyote, una haki ya kutojibu maswali yoyote au hutoendelea na ushiriki wakati wowote une.

Faida manufaa:

Hakuna manufaa kwa kushiriki katika huu uchunguzi, lakini kupitia ma mazoezi haiya, maelezo zaidi yatapatikana kwa jamii na kwa serekali kuhusu ni nini kile hasa kinafanyika kijijini kuhusiana na shughuli na uuzaji. Haya maelezo yanaweza kusaidia watu kuja na mipango kwa kijiji.

Usiri:

Tutakuwa tunazungumzia kuhusu kile unajua au vile unasikia kuhusu uuzaji wa shamba na uchimbaji wa mchanga katika hiki kijiji. Kwa sababu haya ni mambo nyeti, labda hutaki watu kujua kwamba umeleza maoni fulani.

Kukulinda jina lako halitachapishwa popote katika utafiti, na chochote utasema kitahusishwa na nambari ya mwenye kuhojiwa badala ya jina. Ni mimi na mtafsiri wangu tutajua nambari ya mwenye kuhojiwa na tunaweza kwingea katika rekodi na maelezo kutoka nyanjani, na maelezo yatawekwa na namba ya siri, na kulindwa na komputa. Maelezo yatafutwa baada ya mwaka moja, punde tu uchunguzi utakwisha.

Maelezo ya mawasiliano ya mtafiti:

kama una maswali yoyote au unataka kupata maelezo zaidi kuhusu huu uchunguzi, tafadhali wasiliana wa mimi kwa 0799 733 874.

Haki za wahusika – Maelezo ya mawasiliano

Katika juhudi za kutekeleza viwango vya maadili ya mapendekezo yote ya SIT, uchunguzi hu umekaguliwa na kupasishwa na kamati au taasisi ya uangalizi ya SIT. Ikiwa una maswali, wasiwasi, au malalamiko juu ya haki zako kama mshiriki wa utafiti au utafiti kwa ujumla na hawawezi kuwasiliana na mtafiti tafadhali wasiliana na Bodi ya Ukaguzi wa Taasisi kwa:

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Taarifa ya kubali

“Nimesoma na nimeelewa na kubali kuhusika kwa uchunguzi. Niko na miaka zaidi ya kumi na nane.”

Sahihi ya mhusika _____ Tarehe _____

Sahihi ya mtafiti _____ Tarehe _____

Kubali kurekodiwa kwa sauti

Tia sahihi kwa moja wapo ya hizi:

_____ Ninakubali kurekodiwa kwa sauti

_____ Sikubali kurekodiwa kwa sauti

Kubali kurekodiwa kwa video/picha

Tia sahihi kwa moja wapo ya hizi:

_____ Ninakubali kurekodiwa kwa video/picha

_____ Sikubali kurekodiwa kwa video/picha

LIST OF INTERVIEWEES

Code	Date	Profile	Language
01	16/4/18	Chairman, Beach Management Unit	Local
02	16/4/18	Resident, Sand Harvester	Local
03	18/4/18	Resident, Non-Indigenous Tenant	English
04	18/4/18	Government Physical Planner	English
05	18/4/18	Government Lands Officer	English
06	18/4/18	Government Adjudication Offr.	English
07	19/4/18	Resident, Land Sale Agent	English
08	20/4/18	Resident, Evicted from Airport	Local
09	20/4/18	Resident, Senior Citizen	Local
10	24/4/18	Freelance Land Surveyor	English
11	26/4/18	Community Health Volunteer, Resident	English
12	26/4/18	Village Elder, Resident	English
13	27/4/18	Resident, Farm Sand Harvester	Local
14	27/4/18	Resident, shifted dwelling within Usoma	Local
15	27/4/18	Resident, Farm Sand Harvester	Local
16	27/4/18	Resident, Farm Sand Harvester	Local
17	27/4/18	Resident, Farm Sand Harvester	Local
18	30/4/18	Resident, Senior Citizen	Local
19	30/4/18	Resident, Farm Sand Harvester	Local
20	30/4/18	Resident, shifted dwelling within Usoma	Local
21	30/4/18	Resident, sold land within Usoma	Local
22	2/5/18	Citizen Activist, Resident of Korando	English
27	9/5/18	Resident, Lake Sand Harvester	Local
28	11/5/18	Resident, Sand Agent	Local
29	11/5/18	Citizen Activist	English
30	11/5/18	Resident, sold land within Usoma	English
31	11/5/18	Resident, sold land within Usoma	Local
33	14/5/18	Community Health Volunteer, Resident	Local
34	14/5/18	Community Health Volunteer, Resident	Local
35	14/5/18	Community Health Volunteer, Resident	Local

Note: Code numbers run from 01-35, excluding numbers 23-26 and 32. The unused numbers were assigned to interviews conducted for a separate project. As such, total number of interviewees participating in this study was 30.

SAMPLE INTERVIEW GUIDE

Interview Guide for Villager

Current status

How long have you been living in this house?
How did you/your family receive this piece of land?
Has the land been subdivided from a bigger plot?
What was this land used for in the past? E.g. growing crops
Why have the land-use activities changed?

Land ownership

Has any part of your landholdings been sold?
When did you sell the land?
What made you sell the land?
Did the compensation seem fair to you at the time? Is your life better or worse after the land sale?
Did anyone oppose your choice to sell the land?
When did you sell your land, and to whom? How is the person using your land?
Do you think your father would have allowed land sale to take place?
Were there graves on the land? what happened to them?

Why is it important for somebody to own land?
Why is land important to you?
Is sending your child to school or letting them inherit land more important?

Land use

How do you make a living?
Do you grow crops? How is the harvest?
How have fish catches changed over time?
Have you constructed rental housing?

Sand Harvesting

How much do you earn from sand harvesting?
Why did you start sand harvesting? Why did you stop?
Do you think sand harvesting should be allowed or stopped?
Are you aware of the National Sand Harvesting guidelines?
Do you think sand harvesting is good or bad for the environment?
What makes you think so?

FOCUS-GROUP DISCUSSION PLAN

What happened after land adjudication?

- How many households lived in the area at that time?
- How much land did the typical household own at that time?
- Did people start selling land?
- How has the size of people's lands changed since then?

How did the airport expansion affect the village?

- How many households were moved and where did they go?
- What was the compensation like? Was it fair?
- Were there problems?

-How did the Kenya Pipeline Company affect the village?

- How many households were moved and where did they go?
- What was the compensation like?
- Were there problems?

-Beachfront developments and land buying (empty tracts owned by outsiders)

- Was the compensation fair? Was it coerced?
- Where did people go? How did they use the money?
- How do you feel about outsiders buying land in the village?

-Sand harvesting

- When did it start? Who started it?
- Why did people engage in sand harvesting?
- How did people use the money?
- Did anybody try to stop the sand harvesting?
- What were people doing on the land before?

KENYA: URBANIZATION, HEALTH AND HUMAN RIGHTS

ISP REVIEW SHEET

This page should be completed and attached to your ISP paper as the final page. It is for the use of future SIT students interested in your topic and is intended to give them nuts and bolts information about the types of problems they can expect in the field, as well as the suitability of both the topic and the ISP site.

1. Your topic – suitability, development, accessibility

On hindsight, the choice of topic was too broad and this affected the depth and completeness of my data. I would have benefited from formulating a narrower research question and using a simpler methodology. I would recommend future students to do a study specifically on sand harvesting, perhaps in another area. The amount of material that can be obtained is significant, and it is an important topic. Selecting one single village is a good approach because you can become a familiar face to the community.

2. Location of field study – where you conducted your field study, who helped set it up (who was helpful and who was not, include names, addresses, and phone numbers), strengths and weaknesses of the site

Usoma is a fascinating site. My advisor Dr Leah. Onyango was very well-connected and she helped me get an audience with important government contacts. She recommended that I work with Michael, the village elder, to recruit study participants in Usoma. Michael was very friendly and accommodating but on hindsight while being with the village elder makes things easy, it may seriously skew your results. So, get approval from the elder but use CHVs for participant recruitment instead. Bernard Odhiambo has a good work ethic and translates well. Contact me if you want to get his information.

3. Nuts and bolts – where to get water & food, where to stay, bugs & other critters, other problems

I always went to the field after lunch at 2pm. Benefits of this are 1) you can eat in town, food options in Usoma are close to NIL, 2) doing fieldwork for half a day is a lot more realistic than working for the full day, and you can spend the morning doing your preparations or hunting down government officials, 3) people are generally more available to be interviewed in the afternoon as compared to the morning, 4) you can avoid being pressured into paying your research assistants for lunch.

4. Other noteworthy comments

To avoid paying bribes, insist on a receipt for any payment you make to the Ministry of Lands.