

## **Peri-Urbanisation Pressure on Customary Land Tenure System and its Management: A Case Study of Kasese Municipality**

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### **Abstract**

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Today's world is rapidly urbanizing, with radical urban expansion in developing countries. Rapid rate of urbanization has led to an increasing demand for more land for housing, industrial, commercial and agricultural purposes. This land is not available within the already planned cities but at the peripherals where the unplanned customary land is being converted to urban land at a faster rate. This impacts on the peri-urban in terms of changes in land use new forms of household composition, differential access to urban benefits (such as health infrastructure and employment) and increased pressure on land. Current research has mainly focused on the effects of urban sprawl on land cover dynamics hence studies on peri-urbanization and its management on customary tenure system is limited. Therefore, this study focused on examining the nature of developments and how to manage peri-urbanization on customary land in Kasese municipality, Uganda. Used a descriptive research design which uses both qualitative and quantitative methods of data collection and a sample of 88 respondents were selected using purposive, stratified and simple random sampling techniques with the questionnaires and interview guides as the data collection tools. Aerial photographs for the period 1998-2018 were used to compute spatial-temporal changes in the extends of the municipality as a result of urbanization. The study revealed that majority of the developments in the peri-urban parishes are temporally (42.0%) and semi-permanent (40.9%) while permanent structures were only (17%) this is attributed to many factors for example tenure insecurity. It was also found out that majority 86.4% of the respondents did not get plan approval from municipal council to build and this explains the development of unplanned houses which have led to growth of informal settlements. This research through literature suggested and recommended the use of land readjustment an inclusive and equitable peri-urban land development tool that can meet the needs of local peri-urban communities for proper peri-urban land administration and management.

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**Keywords:** peri-urbanization, customary land tenure, Land use and land cover, land readjustment

### **1. Introduction**

The unprecedented growth of urban population in Africa followed by high levels of rural-urban migration has resulted into the observed hiking urban expansions in many parts of the world, causing an exceptionally rapid increase in the demand for urban land. As the cities begin to expand and grow, urban lands are demanded by civil society, the private and public sectors under the customary tenure for further development to accommodate the urban expansion.

The rising demand for urban land therefore tends to be met primarily by converting peri-urban customary land at the periphery of the existing built-up area (UN-Habitat, 2010, Toulmin, 2008). Urban development is characterized by physical growth which extends beyond metropolitan and city planned boundaries into the unplanned urban fringe areas that contain a (dis)organized cluster of residential, commercial, rural-residential, and often varied agricultural uses (Mandere, Ness & Anderberg, 2010). The unavoidable expansion of these cities takes place in areas that are not part of the already planned city boundaries, making developments to occur in unplanned way hence imposing challenges in planning cities and regions, land administration and management in these peri-urban areas.

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In Africa, peri-urban zones are prospective places for disease outbreaks and other social hazards due to their general lack of planning and institutional integration (Chirisa, 2010). There are also important processes related to the environment, including agricultural decline, dispersed patterns of urban occupations, illegal settlements, disposal of solid and toxic waste, and environmental stress on green and recreational area (Aguilar, 2008; Douglas, 2006).

Some studies on how to accommodate urban expansion and the administration of customary lands have suggested the formalization of the land delivery system by land titling (Makabayi & Musinguzi, 2015), Replanning and the adoption of land administration project to support land secretaries of the customary land institutions to manage their land, (Mends, 2006). However, Babatunde et al. (2014) and Olanlere & Agbato (2014) found ignorance, high processing costs, delays and lengthy processes, extortion of money by officials, and government insensitivity to be obstacles to land titling. Ojo (2014) found end-users' dissatisfaction as a significant factor that make the title registration process difficult. Titling may increase insecurity (Lanjouw & Levy, 2002). Ambiguous legal framework and institutional problems (Thontteh & Omirin, 2015). Holden & Ghebru's (2016) found that titling leads to displacement of the poor and vulnerable groups in favor of the rich. The above approaches are not inclusive and equitable to the peri-urban communities and hence land management and administration in the peri-urban communities still remains a big challenge as the customary land tends to meet the demand for urban lands.

In view of the above, it was necessary to carry out this research to assess the response, management approaches of customary land tenure system to the pressure of peri-urbanization and suggest an inclusive and equitable peri-urban land development tool that can meet the needs of local peri-urban communities for proper peri-urban land administration and management. This was accomplished through determining the parameters that influence the demand and supply of land for urbanization, spatially illustrating the trends and patterns of customary land transitions into urban setting, identifying and comparing the different peri-urban land management approaches and to suggest a model that best suit peri-urban land development approach on customary land tenure system.

## 2. Literature review

The face of the world is changing more rapidly now than at any time in history. The trend primarily responsible for the transformation is the rapid growth of the world population. People are moving into cities at a rate not seen since the industrial revolution filled the cities of the developed world more than a century ago (UN-HABITAT, 2006). Urbanization is expected to continue rising in both the developed and the less developed regions so that, by 2050, urban dwellers will likely account for 86 % of the population in the developed regions and for 66% of that in the less developed regions. According to the expected result, 64.7% population in Asia and 61.6% population in Africa will have settled in urban regions by 2050. Similarly, 90.1% in North America, 88.8% in Latin America and the Caribbean, 84.3% in Europe and 74.8% population in Oceania is expected to be urban by 2050 (UNDESA, 2010; UN, 2009). Today, the largest and fastest-growing cities are located in developing countries of Africa, Asia, Central and South America. The urban growth rates are high for every region in Africa but much more in East Africa (UN-HABITAT, 2006), with the Urban population in Africa expected to grow at 3 % per annum over the next two decades.

Peri-urbanization can be defined as the process of urbanization in peri-urban areas and in other words refers to the process through which peri-urban areas are physically and functionally incorporated into the urban system (Webster & Muller, 2004). It involves the conversion of rural agricultural lands to urban built-up properties and thereby entails changes in landownership patterns and transfer processes. Peri-urbanization also refers to the transformation of economic structures, from rural-based agricultural economy to urban-based economy (manufacturing and services). The process also entails the transformation of existing rural settlements into urban settlements (UNFPA, 2007). Researchers have widely written about the issues arising out of unregistered interests and their effects on development, which is a major characteristic of customary land in Uganda. According Schwartz (2008) conflicts and tenure insecurity generally have a significant productivity-reducing impact and discourage land-related investment. As regards customary tenure, the law itself has additionally logged out large areas of land from the development process.

For purposes of planning particularly in urban areas, the complexity of tenure comes into play as over 60% of city dwellers in Uganda are informal settlers on land (Landnet, 2016). Therefore, although land tenure creates security to land holding, it has a direct effect to development as the perception of the holders of rights only perceive their security of tenure in light of the proposed developments. In other words, if an area is declared an industrial park, the landowners in that area who live and derive benefit from such land begin to perceive themselves as insecure in light of

the physical development plan. This often causes resistance and failure of enforcement mechanisms to be executed making development control difficult. This is corroborated by the findings by UNHABITAT (2008).

The concept of land readjustment has evolved out of rural land consolidation as an instrument to assist urban growth situations (Home, 2007). Land readjustment is also known as land pooling, replotting, land re-assembly, parcellation, repartition, Kukakuseire (in Japan) and Umlegung (Germany). Different authors have expressed the concept of land readjustment in different ways. Land readjustment refers to a land development technique which is used for both new developments in the peripheral areas of the city and redevelopments of the structured urban areas (Larsson, 1993). Expropriation is ensuring that land is available when needed for essential infrastructure, a contingency that land markets are not always able to meet.

In Uganda, the power to compulsorily acquire Land by Government is enshrined in the Land Acquisition Act, 1965 and the 1995 Constitution Article 26. The provisions in the Land Acquisition Act have facilitated Government to compulsorily acquire land smoothly until a critical provision under section 7 was expunged by both the Constitutional and Supreme Court in 2014. This provision gave the Minister of Land, after an award of compensation valued has been made by an assessor, to take possession at any time after the publication of the declaration if the Minister certified that it is in the public interest for him or her to do so.

The current process of compulsory acquisition of land for public infrastructure is undertaken under the above Act; through experience, it takes between three months to one year depending on the magnitude of the Land to be acquired to arrive at a fair and adequate value of land. Hence, if even one person rejects the compensation value, the Government is stuck and has to repeat the whole process leading to delay in delivering the public good to the majority who always accept the value presented through a participatory process. An act of rejection by one property owner or persons having interest in /or right over the property within the project corridor causes delays and at times makes the project unattainable

Once rejected by the property owner or persons having interest in property, Government cannot proceed with payment as per the Constitutional requirement and thus Government cannot take possession to proceed with the development projects. From the review of the existing peri-urban management approaches, several good aspects of land readjustment can be extracted for developing a land readjustment model workable for the peri-urban areas of Uganda. The first fundamental aspect of land readjustment is fostering participatory urban land development.

### 3. Materials and Methods

The study area was Kasese municipality which is located 00 26n and 290 42'e north of lake George in the western region of Uganda and it is the chief town of Kasese district. it originally grew around the copper mine at Kilembe, while attention later turned to cobalt mining. about 98% of the land in Kasese district is under customary land tenure system.

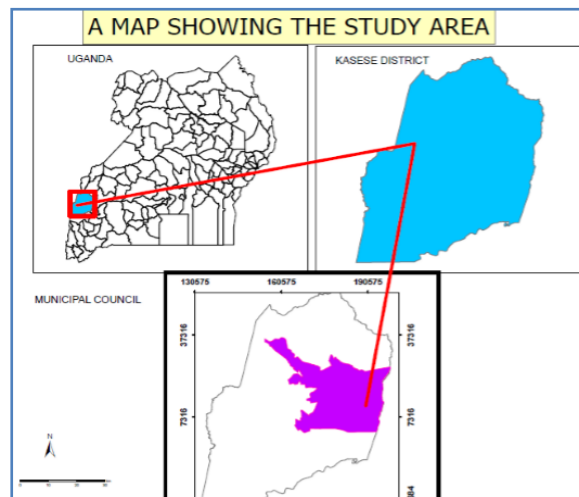


Figure 1: Study area

The study used a sample size of 99 respondents to give responses as it was enough to provide the information that is relevant to the response and management of peri-urban areas and urban land development. The sample size was chosen using (Yamane, 1967) approach.

$$\frac{N}{1 + N(e)^2}$$

$$n = \frac{13794}{1 + 13794 * (0.1)^2}$$

$$n = \frac{13794}{1 + 137.94}$$

$$n = \frac{13794}{138.94} = 99.28026 \text{ approximately } 99 \text{ respondents}$$

Probability and non-probability sampling techniques of simple random and purposive sampling techniques in addition to purposive sampling techniques were used to select the urban physical planners with skills and knowledge on the themes of the study, while simple random sampling technique was used to select the households and landlords.

**Table 1 : sampling procedure and size**

Category	Population	Sample	Procedure
Area households	13794	99	Stratified sampling
Landlords and clan heads	10	5	Simple random sampling
Physical planners	2	2	Purposive sampling
TOTAL		106	

Self-administered questionnaires were employed to 99 area households and they aimed at obtaining responses that could not be anticipated and different questions were used in interviews with urban physical planners and land supervisors. Documentary review method was also used to help in extracting data from documents. The above methods were handy in getting the necessary information from the respondents. Field observation was another primary data collection tool employed in the transitional peri-urban areas. Field visits were undertaken to the informal settlement areas and photographs were captured in the field. Three cloud free Landsat images for the years 1998, 2010 and 2018 were downloaded at no cost from Earth Explorer (<https://earthexplorer.usgs.gov/>). All data used in this study was projected to the Universal Transverse Mercator (UTM) projection system (zone 36N, World Geodetic System 84).

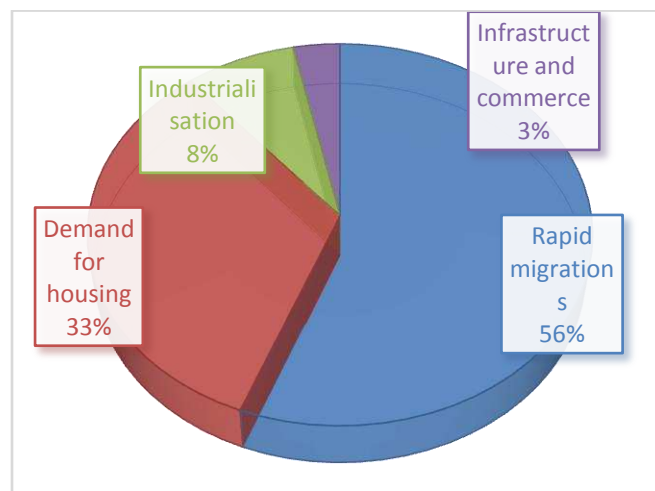
Image pre-processing was done in ENVI 5.2 and ArcGIS 10.5 to prepare the images through correction for atmospheric effect, georeferencing, spatial modelling, image enhancement and classification. Atmospheric corrections were performed on each of the bands of the images downloaded for the different years (1998, 2008 and 2018). After correcting of each of the bands of the three years, resampling was done on each band for the year 1998. Resampling registers the data in one grid system to a different grid system covering the same area. Each of the bands of 1998 had a resolution of 60m yet 2008 and 2018 had 30m resolution, therefore the 60m resolution bands were resampled to 30m resolution using one of the bands of 2008. A well distributed set of ground control points (GCPs) about their position in the input reference system (1998) and the position they should take in the output reference system (2008) were used in the resampling process. The ground control points were entered manually. Registration was also done for each of the bands of 2018 to bring the bands into precise alignment with 2008.

After resampling and registration, false color composites for 1998, 2008 and 2018 were produced using the composite tool in ArcMap. The resampled bands (456) of 1998 were used to make the false colour composite for 2008, the corrected bands (234) were used to make the false colour composite and for 2018, bands 345 were used. The composites made were then masked to the study area (Kasese municipality and its peri-urban).

The false color composites for the three years that were masked were used to form signatures which were used to perform a supervised classification of remotely sensed imagery using maximum likelihood classifier. Each pixel in the image was assigned, based on its spectral signature, to the class it most closely matched. Land cover maps with classes of built-up, water bodies and vegetation were produced after the classification.

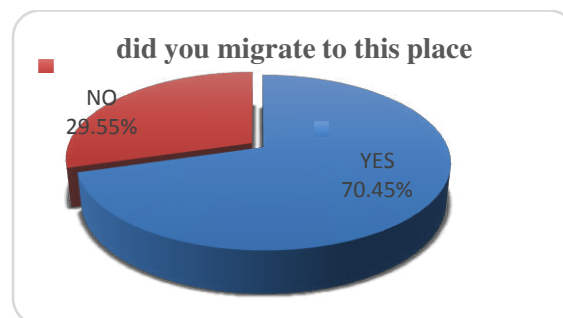
#### 4.0. Results and Discussion

The population in the study area is quite high contributed mostly by immigration (see figure 2) and original landowners (parents) subdividing the parcels amongst their sons. In addition, many people working in the town centres have moved to the area as a result of the housing shortages in the city. The high population provides market for the agricultural and some of the light industrial goods produced in the area. Immigration brings in people with skills as well as potential private investors who direct their resources in place contributing development. Increasing population has led to increased land subdivision that has led to clearance of large chunks of land as well as encroachment into the natural vegetation.



**Figure 2: Urbanization parameters**

From the questionnaires, 70.45% of the respondents were not originally born in these areas but acquired land to settle in these areas. Out of this, 45.5% of them agree to have stayed in the area for over ten years because of the agricultural prospects of the area. The influx of these migrants has serious consequences on the land use changes of the area which influences the demand and supply of land in the peri-urban areas. The desire to own and use land by all these migrants has contributed to the land use changes currently occurring in the study area. About 68% indigenes in the peri-urban areas are into agriculture. An interview with the land supervisors clearly shows that about 70% of the residential developments taking place in the peri urban areas in Kasese municipality are attributed to the contribution of migrants.



**Figure 3: migration information**

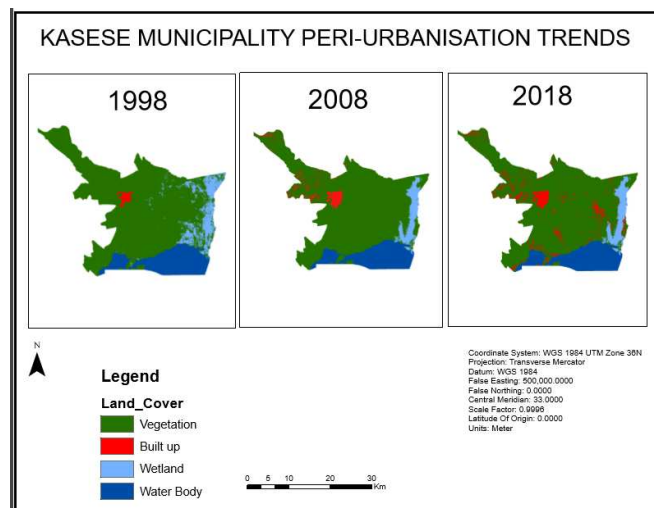
Many people acquire land for agricultural, residential and commercial purposes. Just a few (4.5%) people now acquire land for agricultural purposes whereas commercial and residential land acquisition accounted for 20.5% and 75% respectively.

As the urbanization rate continues to rise, housing is becoming a major Impediment to development. Supply has now outstripped the demand creating a huge shortage for the same. Proximity of the area to the city makes the study area strategic due to the convenience of getting to the working places in time. Victims of this circumstance in an effort to fulfill their dreams of owning a home have turned to the fringe to purchase plot for building homes. This has created high demand for the plots which has seen land prices going as high as four million for quarter an acre in a well serviced plot especially those ones along the road. This huge sum of money has attracted the local land owners to subdivide their land for sale.

This is evidence by the large number of individuals more so the rentals and the magnificent homeowners who have acquired their land through buying. This demand is also occasioned by congestion and high land prices in the town center that pushes out people from residing in the city in search for spacious and environmentally sound residences. Surrounding developments for example the development of Hima cement factory, chalk mines in Muhokya, fishing around Lake George and the Kazinga channel. These have greatly increased and affected the demand and supply of land near the municipality peri-urban areas and hence increase land values. Proximity to these developments also affects demand for land. Land that is close to social amenities including parks, shops, sporting facilities, transport facilities and schools go for high prices because of high demand. The demand and supply for land with close proximity to social amenities and employment opportunities is high with increase in demand

The increasing commercialization of Kasese municipality due to developments of infrastructure for example markets in the peri-urban areas is one of the major factors accounting for the demand and supply of land and the changes in land use in these peri-urban areas. The municipal center has been choked with commercial activities and residential facilities are being converted into shops. The pressure in the city has forced some city dwellers to move to the peri urban areas. Residential lands in prime locations in the municipal center are being taken over by commercial activities while at the same time prime agricultural lands in the peri urban areas are also being taken over by residential developments.

**Urbanization trends into the peri-urban customary land**



**Figure 4 : Land cover maps**

**Table2: Percentage coverage of land cover classes**

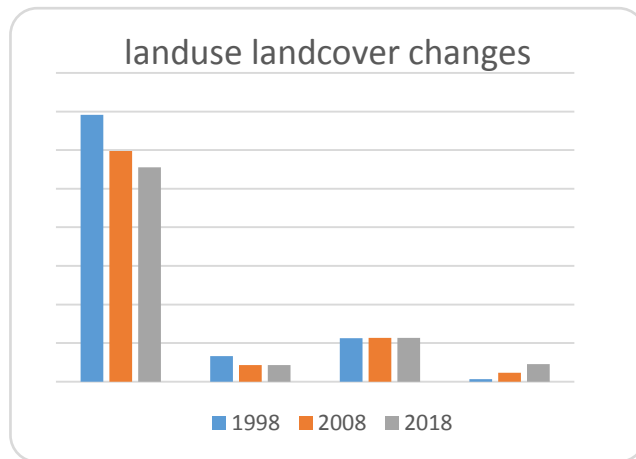
YEARS	1998	2008	2018
vegetation	78.79	76.89	73.3
wetland	7.59	5.55	5.69
water body	12.84	14.57	14.96
built up	0.78	2.97	6.05

In 1998, the built-up area was 0.78%, vegetation was 78.79%, wetland was 7.59% and the water bodies was 12.84%. This was because at that time, very few people had started settling in Kasese municipality therefore the vegetation was still a lot. In 2008, the built-up area increased to 2.97% and this was because more people had settled in Kasese municipality and so more vegetation was destroyed and that is why vegetation dropped to a percentage of 76.89%. Built-up area further increased to 6.05 % in 2018 because more houses were setup as a result of rapid population increase which leads to increased demand for land for housing. The vegetation further reduced to 73.3% because it was being destroyed to put up more buildings.

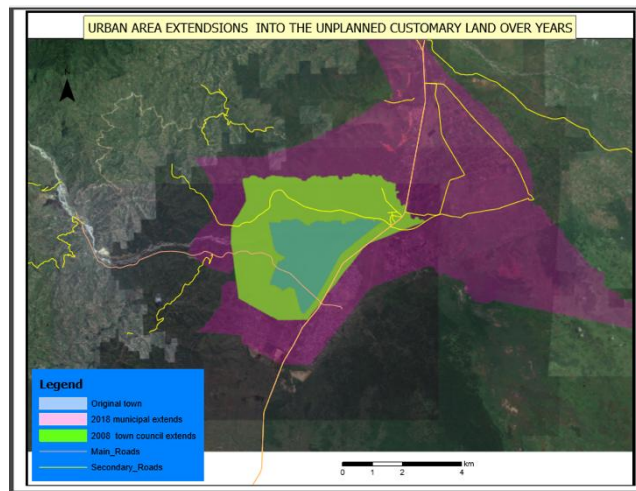
**Table 3: Rate of change**

YEARS	1998-2008	2008-2018	Average rate of change
vegetation	-0.02	-0.05	-0.04
wetland	-0.27	0.03	-0.12
water body	0.13	0.03	0.08
built up	2.81	1.04	1.92

The main contributor to the reduction of vegetation is the expansion of the built-up structures. The study showed that built up increased at an average rate of 1.92 while vegetation reduced at rate of approximately 0.04.



**Figure 5 : Land use/ Land cover changes**



**Figure 6: Urban extends into customary land**

The figure above illustrates how the urban area has been extending into the rural customary areas. The inner blue polygon shows the original town center where most of the built-up and commercial activities takes place. The second polygon (green) shows the extends of the town in the year 2008 when the town eventually became a municipality and the purple polygon shows the current extends of the municipality. This clearly shows how the developments have been extending into the unplanned neighborhood.

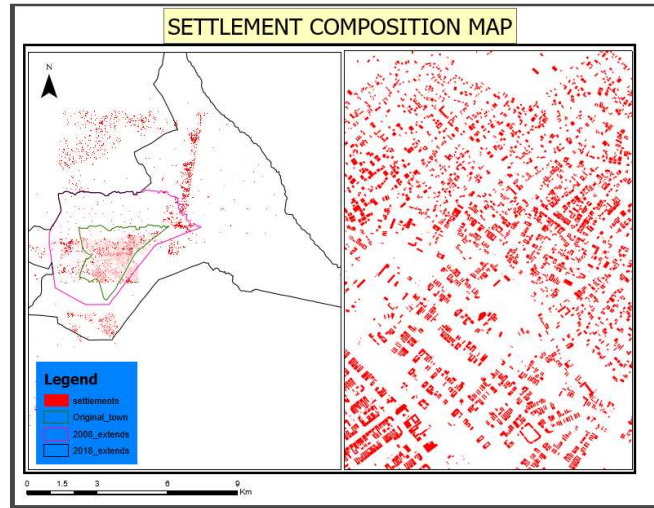


Figure 7: settlement composition

The figure above shows how settlements are distributed in both the inner original town (green outline) and the outer extends of the town. With an interview held with the physical planner of Kasese municipality, it is from this kind of settlement composition that gives the planning authority an indication that such places outside the planned town extends are tending into urban setting. Hence this is responded to by; Opening roads in such areas since developments follow these road networks, drafting utility maps to ease the provision of services and to avoid further developments of haphazard settlements and providing tenure security to all public land in such areas by titling such pieces of land under the town council name. The above are initial stages the planning authority takes before these outer areas of the planned town are incorporated into the existing structural plans since plan updates take place after a period of ten years.

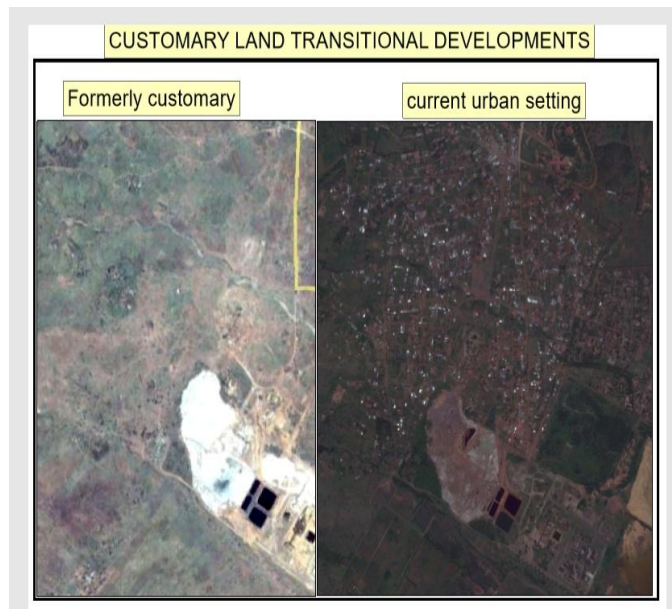


Figure 8: original customary lands vs. current urban settings

From the figure above, the urban areas consist of both statutory and customary tenures where a few people have legal documents required for development approval. However, the documents of ownership held by the people are sale agreements and certificates of customary occupancy. According to the physical planner of Kasese municipality, no development plan is approved without the possession of land title. This has led to the increased rise of haphazard developments in the area since people lack land titles. The planner emphasized that starting this year 2019, all the land being absorbed into the urban setting automatically changes status from customary to statutory. And no issuance of certificates of customary occupancy in the urban areas. This will create a uniform tenure system that supports urban development.

**The patterns and effects of peri-urbanization on customary land**

**Table 4: Patterns of developments**

type of development		Count N %
Permanent	15	17%
semi-permanent	36	40.90%
Temporally	37	42.00%
Total	88	100.00%

From the above table about 42.0% are temporary, 40.9% houses are semi-permanent, and only 17% are permanent houses. The semi-permanent houses are constructed of corrugated iron sheets roof, brick walls which are mostly unplastered, with cement screed floors while temporary houses are constructed ranging from mud and wattle to un-burnt bricks with site concrete floors. Permanent houses are constructed with reinforced concrete frames in fills of burnt bricks plastered rendered and painted, expanded metal lathing ceiling.

According to the municipal division physical planner, the majority of the settlements in the peri-urban areas of Kasese municipality are informal made out of cheap and in some cases locally available building materials. Several of these can be termed as shacks. This affirms the 42% temporally houses and 40.9% of the semi-permanent houses.



**Figure 9: Temporary developments**



**Figure 10: Semi- permanent developments**

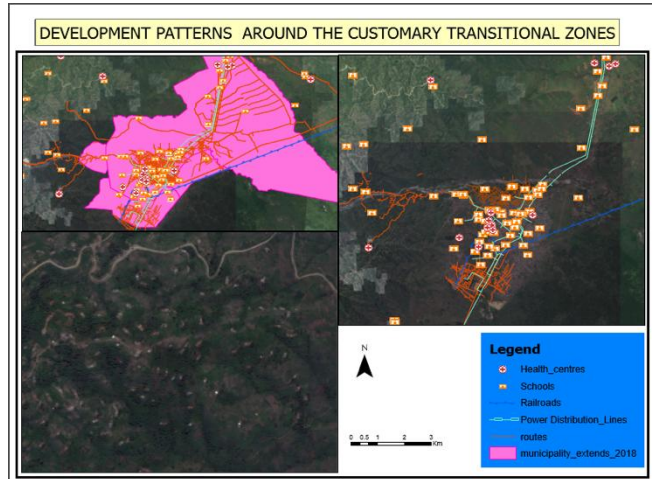


Figure 11: Development composition in the peri-urban area

**Lack of adequate access roads**

Settlements in the peri-urban parishes of Kasese municipality are basically characterized by inadequate and poor access roads. Most plots are with very narrow access roads while others just have footpaths as their only accesses. The majority of the zones in settlement do not have well planned access roads. This means that the majority of the plots (homes) are ‘land locked’ and only accessible by footpaths.

**Table 5: services and utilities**

utilities_services	Frequency	Percent
Power_sourcs	50	56.8
Water	21	23.9
Access_road	5	5.7
Garbage_collection	12	13.6
Total	88	100

**Services and utilities**

The settlements are also characterized by lack of basic utility services such as safe water, garbage collection and power sources as seen in the table above. Only 23.9% of the total household respondents have access to water by NWSC and 13.6% have proper garbage disposal system. Majority of the tenants don’t have gazzeted places for solid waste disposal. A given percentage of 56.8% have electricity mains connected to their properties. It was found out that many households get connected through neighbors but not directly from the mains.

**Poor sanitation and disposal systems**

Parishes such as Nyakasanga, Kidodo and Kirembe have no properly ‘defined’ garbage dumping areas. This has left a lot of waste and garbage dumped any how including alongside access roads and in trenches such that wherever it is raining, garbage is deposited in trenches by storm water. This has left most trenches blocked and thus continued to narrow the few available access roads and foot paths. Sewerage disposal is to the septic tanks and soak pits for those households with permanent houses while semi- permanent houses mostly use pit-latrines. Most temporary houses have no pit-latrines.

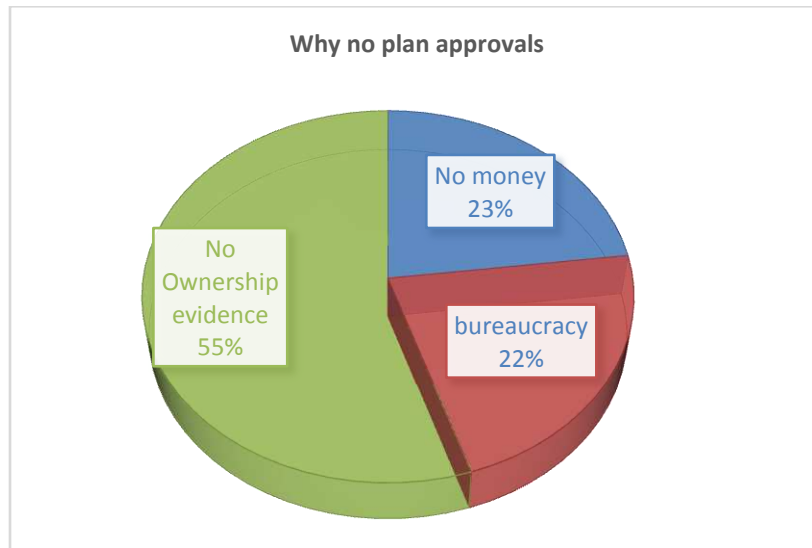
**Land development in the transitional peri-urban**

Out of the 88 respondents, 76% had no approval from the municipal planning authority to develop. This is also attributed to lack of ownership, costly process of plan approval hence Majority of the developments in the peri-urban Kasese municipality are constructed without approval from municipal planning authority

**Table 6: Development approval**

Approval_to_develop	Frequency	Percent %
yes	12	13.6
no	76	86.4
Total	88	100

From the figure above 13.6% of the respondents obtained plan approval from municipal division for development, this percentage to those that get offer letters from the clan leaders to develop on the land which are then forwarded to the division planning authority for approval while 76% of the respondents did not get approval from planning authority to start developing the land this is due to many reasons (see figure below)



**Figure 12: Reasons for not obtaining plan approvals**

**High levels of poverty**

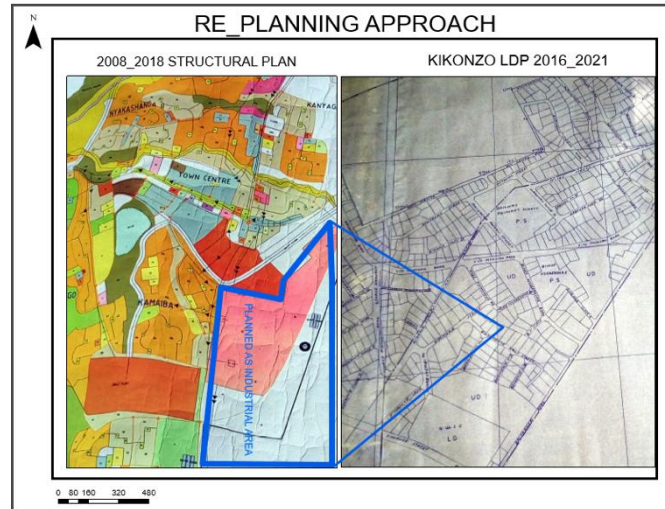
Traversing the parishes, it was found out that households appreciate the need to have planned developments. However due to many reasons, they tend not to comply with the building regulations. One of the reasons as to why households in some parishes don't get approvals for development is due to lack of resources to facilitate the process of plan approval. This is due to the fees charged by local authorities i.e. municipal planning authorities to have their plans approved. This explains the nature of uncoordinated developments that are put up by households. It was revealed by municipal physical planner that when such people fail to obtain approvals they go ahead to build at night so that they are not stopped by the enforcement officers.

**Lack of evidence of ownership**

About 79.5% of the respondents interviewed acquire their land through inheritance from their parents. This makes them reluctant to obtain registrable interests on the land since they claim land belongs to them and no one can chase them away. Only 15% of the respondents acquired land through purchase.

**Identification and comparison of the different peri-urban land management approaches**

**Replanning (Local development plans) Approach**



**Figure 13: Replanning approach**

The municipal council has prepared a local development Plan for Kikozo the period 2016-2021 which is aimed at enabling efficient and effective delivery of services to the people within its jurisdiction. There are various documented constraints to planning and implementation at the local level as shown in the table below.

**Table 7: Replanning challenges**

Replanning Challenges	Count	Percent
Conflicting land uses	3	75%
difficult in verifying ownership	3	75%
Lack of technicality	3	75%
Areas inaccessible limiting service delivery	3	75%
Lack of awareness of benefits of planning	1	25%
difficult to regulate development	1	25%
lack of compliance	3	75%
political interference	2	50%
<b>Total</b>	<b>4</b>	<b>100%</b>

**Conflicting land uses**

From an interview with the municipal planner and the land supervisor, it was stated that there exists conflicting land uses especially in the transitional areas. This is indicated by 100% response from physical planners and land administrators. A case in study is the Kidodo industrial area which has turned to be a mix up of residential and commercial land uses. Secondly the Kilembe mines area which was leased as a mining site has been occupied by the people who have constructed and hence mixed up land uses. Another conflicting land use is the constant encroachment on the railway and river reserves where people have illegally carried out some activities including buildings and farming in these areas. The process of urbanization has brought about typical land use associations where the contemporary and dynamic land use pattern is developing side by side in the contemporary context. Old houses, new residential apartments, commercial and farming are not nearly sorted out into homogenous areas but are intermingled in a random manner which gives a distinctive quality to the land use pattern of the area.

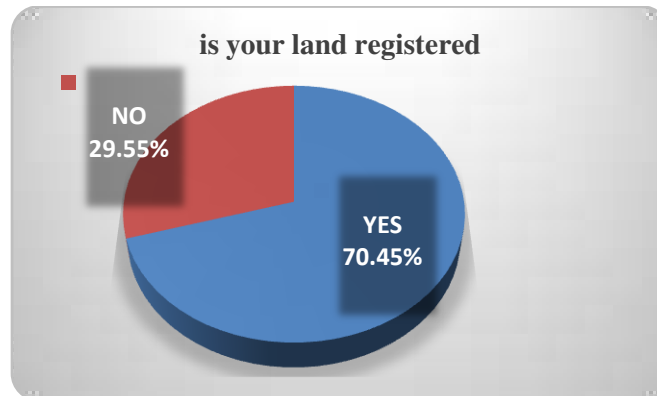
The haphazard development of houses for rental purposes, piecemeal commercial developments, intermix of conforming and non-conforming uses of land combined with inadequate services and facilities have become a common feature in the study area. The dynamic change from rural to urban land use is so fast that the resultant need and complex uses coupled with shortage of land have led to speculation and increase in land values.

**Lack of accessible roads**

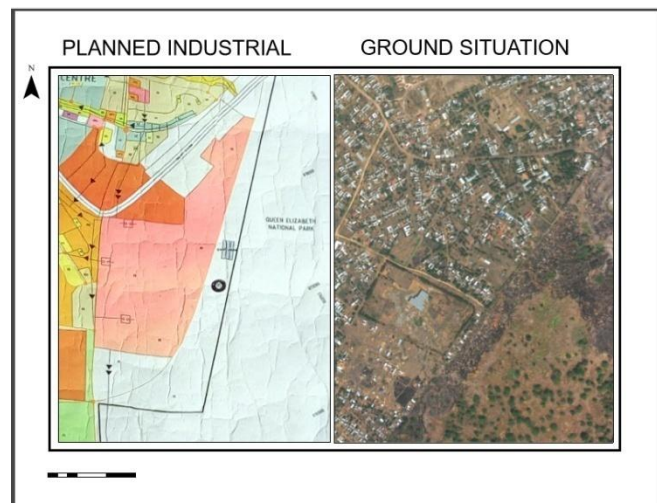
The above table indicated that 75% of the respondents stressed the lack of accessible motor able roads that limit service delivery in the parishes. This is due to the unplanned developments that do not allow for provision of sufficient roads. According to the physical planner I interviewed he asserted that since these areas are un accessible, it becomes difficult to provide services such as clean water, electricity mains and sewer lines.

**Difficulty in verifying ownership**

About 93% of the response was attributed to the difficulty in verifying ownership. This is because there is no clear register where these occupants can be identified and reached. According to the physical planner I interviewed at Kasese municipal council, he asserted that since these areas are un accessible, it becomes difficult to provide services such as clean water, electricity mains and sewer lines. Secondly most of the people in these areas have no legal certificates of ownership. The respondents I interviewed revealed that planning authority requires them to have land titles to have their plans approved. Majority of households have sale agreements and LC1 agreements which kicks them out of the requirements for plan approval. This was common in zones such as Nyakabingo, Kigoro and Mburakasaka, where all the land is owned by families on clan basis. This kind of land ownership impedes development since they feel satisfied with the kind of owning land and cannot obtain titles as a pre requisite for them to have their plans approved.



**Figure 14: Land registration**



**Figure 15: Lack of compliance to drafted plans**

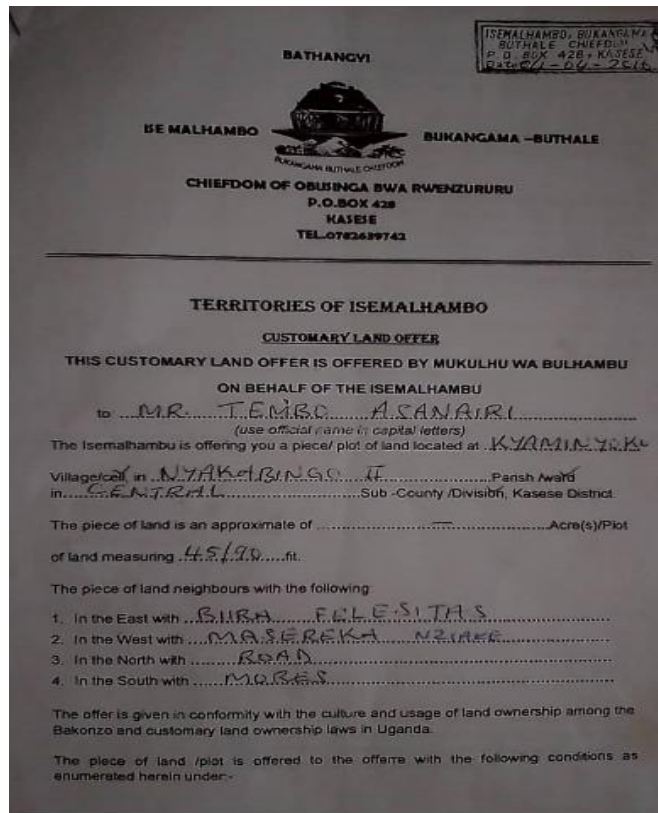
**Lack of compliance**

The process of urbanization has brought about typical land use associations where the contemporary and dynamic land use pattern is developing side by side in the contemporary context. Old houses, new residential apartments, commercial and farming are not nearly sorted out into homogenous areas but are intermingled in a random manner which gives a distinctive quality to the land use pattern of the area.

The haphazard development of houses for rental purposes, piecemeal commercial developments, intermix of conforming and non-conforming uses of land combined with inadequate services and facilities have become common features in the study area. The dynamic change from rural to urban land use is so fast that the resultant need and complex uses coupled with shortage of land have led to speculation and increase in land values.

**Social institutional approach**

Social cultural Administration which is represented by the office of the Sub-Chief is another approach used to manage peri-urban lands in kasese municipality. The office of the assistant chief is organized in such a way that community participation is enhanced. Various community groups pursuing different interests are involved in the day to day management of the sub-location affairs. Community participation in planning and development control is more effective than the top down approach. Under this approach, Local Authorities are empowered to control subdivision within their areas of jurisdiction



**Figure 16: Local land offer**

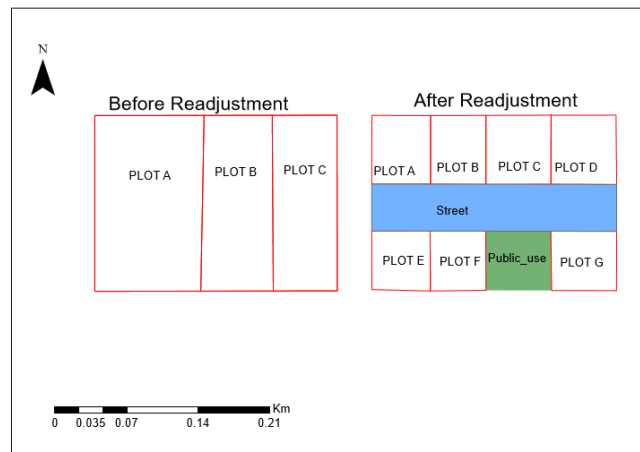
The chiefs within which the study area lies have no capacity to perform such a function due to lack of professional. Their Councils do not have qualified physical planners or technical personals. This incapacity has resulted into bureaucracy that has discouraged landowners from following the right procedures during land subdivision. As a result, illegal developments characterize the area.

**Land readjustment approach for peri-urban land management**

Given the limitations of the conventional methods applied largely in the peri-urban areas as an urban development and growth strategy, land readjustment as an alternative tool is not well known in the Ugandan land development system. Thus, this section is devoted to explain and justify the significance of introducing land readjustment as land development tool to the changing peri-urban areas of Uganda.



**Figure 17: Land readjustment model**



**Figure 18: Readjustment plot distribution**

Participatory and consensual urbanization through continuous negotiations between peri-urban land owners and the statutory authorities rather than simply implementing compulsory acquisition of land in the newly designed urban territory. Land readjustment is found to be useful in protecting the land rights of the local people in the peri-urban areas since landowners whose land is included in the urban territory and whose livelihood is dependent on it can retain part of their land after readjustment.

Adapting land readjustment as peri-urban land development can create a chance to share development benefits or the increased value of the land after its conversion from farming fields to urban building plots rather than receiving simple compensation money (cash compensation) calculated to the current agricultural value. The landholders/farmers in the peri-urban areas are encouraged to contribute part of their land for urban development voluntarily without a sense of displacement being created. In return, everyone gets a new parcel proportionate in size or value to what they put in

## 5. Conclusions

The whole process of urbanization in the customary land from this research is attained through the interaction of demand and supply. This interaction of demand and supply goes on well and the customary land owners supply the land for urban plots. It is the individuals (civil society), private and public sectors who demand the urban lands and develop it causing urbanization in customary lands. The main parameters that influence the demand and supply of land include; the increased rapid migrations and the demand for housing facilities. There is increased tendencies of rural-urban migrations hence land in the planned areas becomes limited making people to run to peri-urban areas.

The research findings indicated that land in the peri-urban areas has been constantly changing from vegetation to built-up where most of the houses in the peri-urban areas of Kasese municipality are semi-permanent and temporally. The growth of a few existing permanent houses in the transitional zones have led to rise of uncoordinated and haphazard developments due the unregulated tenure and other factors such as insecurity of tenure and lack of compliance from the relevant planning authorities. There is also lack of adequate accessible roads in the area that limit service delivery. The study revealed people in the peri-urban areas of Kasese municipality do not appreciate the need for obtaining planning permission from urban division offices in Kasese municipality. People claim that obtaining titles to develop their land with approvals too is expensive. This has created an impasse where developments on land are undertaken informally which land is highly demanded due to high population increase and demand for housing facilities

The research findings indicate that Replanning and social-institutional approaches are the approaches being used to manage peri-urbanization of customary land in kasese municipality. However, these approaches are not able to adequately manage these transitional zones. Through literature a comparison between some other peri-urbanization management tools shows that land readjustment is a better peri-urbanization management tool compared to expropriation.

### **The best peri-urban land management tool**

We recommend the use of land readjustment for peri-urban management since it was found out that the effects resulting from customary tenure are linked to lack of formal legal documentation to the land which can be used as a requirement for plan approval and also be used to prove ownership of the land. It was further found out that most of remedies to the effects are long term hence can take long to be implemented by the planning units. This calls for a development tool that builds up a participatory and voluntary partnership between the municipality and local peri-urban landholders. Partnership arrangements through land readjustment, in which the peri-urban landholders can have a stake and say is welcomed, indicating that implementation of this tool would be well accepted by the local community. Fostering partnering relationships between different actors who have a stake on land is the basic feature of land readjustment

### **General Conclusion and Recommendations**

The overall response of the customary land to the pressure of peri-urbanization is negative as shown by the findings of this research and is attributed to the development of informal unplanned settlements in the peri-urban areas of Kasese municipality due to the poorly administered customary land rights which are largely informal while land development regulations procedures and implementation is pegged on presentation of formal legal documentation. Owners of land on this tenure usually have LC1 agreements, sale agreements which are not recognized by the planning authority as a requirement to prove ownership for their building plans to be approved. The result has had an impasse to land development since the customary landowners continue to develop informally due to the high demand for housing caused by high population growth. The insecurity of tenure has led to development of semi-permanent and temporary structures since landowners lack absolute ownership of the land. Due to the unplanned developments, there are no access roads instead foot paths are used to access homes something that limits service delivery.

In this study it has been found out that land readjustment is potentially the keyway to convert peri-urban landholders into urban land rights. Land readjustment is a means to achieve fair distribution of land development benefits and costs between the municipality and the local peri-urban community. This study has explored that introducing land readjustment as a peri-urban development tool builds up a participatory and voluntary partnership between the municipality and local peri-urban landholders. Partnership arrangements through land readjustment, in which the peri-urban landholders can have a stake and say is welcomed, indicating that implementation of this tool would be well accepted by the local community.

Therefore, introducing land readjustment to the peri-urban can reduce the local landholders' resistance to urban development, but can also minimize the involvement of the local peri-urban people in the informal transaction and subdivision of land. Making an intensive negotiation and consultation through consecutive meetings with all stakeholders helps to persuade and reach in consensus about the ongoing urban development with the community. Finally, creating a chance for consecutive meetings, negotiations and consultation through land readjustment helps to maintain the power balance between the municipalities and local peri-urban landholders.

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