



# A framework for improvement of informal settlements in Kampala City, Uganda

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Submitted in fulfilment of the requirements of the degree of Master of Built Environment in Quantity Surveying in the Faculty of Engineering and Built Environment at the Durban University of Technology

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October 2022

## **ABSTRACT**

In today's world, informal settlements are fast emerging and remain one of the massive challenges to sustainable urban development and prosperity. Efforts to drive Uganda's vision 2040 are driving rapid urbanization in Kampala City. Consequently, several people will continue to flock to the city due to the multiple benefits related to urbanization. This study, therefore, focused on the drivers for informal settlements, challenges in the informal settlements, and how to improve the living conditions in the informal settlements in Kampala City.

The study adopted three research designs cross-sectional, descriptive, and interpretive research designs, accompanied by the quantitative data collection approach. A total of 120 household heads were the respondents in this study, from the informal settlements of Bwaise, Kamwokya, Katanga, Naguru, Namuwongo, and Wabigalo.

The study revealed the availability of job opportunities, availability of better social services, family issues, sufficient security and safety, social/peer pressure, and better living conditions as factors contributing to the migration into the city. However, the core factors for settling in informal settlements are family attachment, low costs of housing, proximate to the workplace, easy access to the central business district, access to education services, access to health services, and low income. Living in informal settlements is challenging as there are problems that exist in informal settlements. These included poor waste management, unemployment, insecurity, lack of toilet facilities, disease epidemics, natural disasters, unsafe drinking water, poor health facilities, limited road infrastructures, limited access to basic education, congestion/over population, and limited sources of energy. The study is to find a solution and further know that there have been considerable efforts by the development stakeholders in the urban development space to address some of these challenges. Some of the challenges addressed include waste management, insecurity, lack of toilet facilities, unsafe drinking waters, and poor health facilities. The possible interventions for addressing the problems included cleaning water drainage channels, job creation, improving education services, and construction of toilet facilities.

The study recommends mediation approaches initiating the further development of informal settlements by considering the issue of these settlements at the city level where their acknowledgement is significant.

## **DECLARATION**

I hereby declare that this dissertation is my work and to the best of my knowledge it neither contains materials previously published nor written by another author and it has not been submitted in part or whole for the award of another degree at Durban University of Technology (DUT) or any other educational institution. I also declare that the academic content of the dissertation is based on my work. All literature cited and contributions made by others have been acknowledged in this work.

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## **DEDICATION**

I dedicate this dissertation to my loving, selfless and hardworking mother Alice Geera for making me who I am, and in recognition of her unwavering support towards my education.

## **ACKNOWLEDGEMENT**

I am extremely grateful to my academic supervisors, Dr Samuel HP Chikafalimani (PhD) and Dr Nathan Kibwami (PhD) for their inspiration and guidance from the time I began developing the research proposal, through data collection, data analyses, and dissertation write-up. As very dedicated mentors, they read through my work from page to page to make sure I produced a sensible master's dissertation. Thank you so much, Supervisor, for having shaped my scientific understanding for all that period, until I attained this master's level of education. Thank you, Co-Supervisor, for your timely responses to hundreds of my email messages regarding various drafts of documents I made during this master's undertaking.

My humble appreciation to all local community participants from Kampala City, who provided the responses that were aggregated into the final report.

Special thanks go to my niece Agaba Aisha, without whom I would have never met the deadlines or submitted a readable dissertation. Thanks for proofreading, editing and advising on the write-up.

I am also grateful for my mentor, Prophet Brian Kagyezi whose prayers and support are one of the factors that pushed me to complete this dissertation.

Above all, I am grateful to the Almighty God for opening a way for me to undertake and complete this work.

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## **LIST OF ABBREVIATIONS**

CBD	Central Business District
CBO	Community Based Organizations
COVID-19	Coronavirus Disease
FBO	Faith Based Organizations
FGDs	Focus Group Discussions
ICF	International Consulting Firm
KCCA	Kampala Capital City Authority
NAADS	National Agricultural Advisory Services
NGO	Non-Government Organization
PDM	Parish Development Model
UBOS	Uganda Bureau of Statistics
UN-Habitat	United Nations Human Settlements Programme

## CHAPTER ONE: INTRODUCTION

### 1.0 Background of the study

In today's world, informal settlements are fast emerging and remain one of the massive challenges to sustainable urban development and prosperity. Numerous definitions of informal settlements withstanding, Akirso (2021:3) defines informal settlements as dense and unplanned settlements with the irregular shape of settlement pattern comprising community houses that are self-constructed and without formal land tenure. They are a common practice world over and this is certainly true as approximately one billion people are living in informal settlements (UN-Habitat, 2022) and this is expected to grow to 3 billion people in 2050 (Tihabo, 2019:26) if patterns are left unchecked. However, the proportion of informal settlements vary across the global regions, national, regions, and countries. Regionally, informal settlements are pre-dominant in Sub-Saharan Africa with 6,261,000, followed by Latin America and the Caribbean with 3,528,000, Northern America and Europe with 2,593,000, Northern Africa and Western Asia with 2,489,000, Eastern Asia and South-Eastern Asia with 1,826,000, Central Asia and Southern Asia with 1,308,000 and Oceania with 733,000 (UN-Habitat, 2022).

In Africa, the unplanned settlements continue to expand at the expense of agricultural land and areas of natural beauty have tandem with the informal settlement (Koroso *et al.* 2021). As such, informal settlements have gathered substantial traction in Africa. This is evidenced by the reports that two-thirds of the population live in informal settlements annually with only 2 million expecting to move out from there (UN-Habitat, 2015). At the country level, UN-Habitat (2022) shows Rwanda (949,000), Burundi (738,000), Gabon (674,000), Guinea Bissau (647,000), Tunisia (643,000), Equatorial Guinea 626,000), Namibia ((554,000), Djibouti (496,000), Lesotho (394,000), and Gambia (322,000) as the leading ten countries with the highest urban population living in informal settlements.

Uganda, just like other countries in the global south still faces increasing informal settlements. Hari (2015:14) noted that urban areas have always been perceived as a means of improving people's quality and standard of living, besides getting better jobs and incomes. With the little financial resources, the first dilemma these migrants face, and which persists for a long period, is getting settled into good and decent housing. Under such difficult circumstances, the only option available to them is to illegally occupy vacant pieces of land to build rudimentary shelters popularly known as informal settlements (Gilbert, 2005:1). The UN-

Habitat (2022) shows that 4,838,000 people living in informal settlements account for its twenty-eighth position in Africa. The prevalence of informal settlement is not any better in Kampala, where evidence shows that the city is experiencing an informal settlement of 60% residing in areas such as Bwaise, Namuwongo, and Katanga, among others (SSali, 2020). Other evidence also points to a widespread informal settlement in the city. A case in point is Richmond *et al.* (2018) who indicate that the informal sector at least forms a quarter of the total city area and these are widely spread throughout the city.

Consequently, the universal phenomenon of informal settlement adversely affects the environment, and economy among others. Environmentally, informal settlements have been associated with anthropogenic activities that result in an effluent discharge into streams altering their water quality (Morole *et al.* 2021), which alters the water quality of streams. Msimang (2017:16) discusses that informal settlements are characterized by poor waste management practices that lead to low aesthetic value, the entanglement of biodiversity especially plastic, and flooding. Similarly, Tsenkova (2009:14) depicts that informal settlements result in land use and land cover changes that are linked to severe consequences such as landslides. Economically, informal settlements have depreciation and low value of the property in adjacent communities while health wise, informal settlements lead to the emergency and re-emergence of infectious disease hazards (Saff, 2010).

Nevertheless, informal settlements play a significant role in the development of a city. This is evidenced by Andrea *et al.* (2020) who attest that informal settlements enhance the value of tourism enterprises and enrich the tourist gaze by offering a less polarized and more inclusive perspective. Similarly, Ono and Kidokoro (2020) contend that much as informal settlements are often portrayed as chaotic, they provide housing to meet the needs of the rapidly growing population. In addition, informal settlements promote social capital and cohesion, act as a platform for mobilization against inequality, itinerary to shortage and high rent urban homeownership, provide a chance to acquire and/or sharpen skills, and economic contribution through local authority taxes to mention but a few (Magigi, 2021).

As shown above, informal settlements can significantly contribute to the development of an urban city. As such, the perceptions towards informal settlements should be skewed toward a solution developed by the urban poor due to multiple challenges rather than a housing crisis. There are significant policies related to housing in Uganda such as the National housing policy backed up by a regulatory board of the Ministry of Lands Housing and Urban Development to provide policy direction, national standards and coordination of all matters

concerning lands, housing and urban development. However, the vast informal settlements in Kampala and Uganda at large indicate the ineffectiveness of the policy. This implies there is a need to develop more effective housing policies as well as developing a framework for improving informal settlements which can be achieved through a comprehensive field-based understanding of the informal settlements. This study, therefore, assessed the underlying drivers, challenges, and framework for improvement of the informal settlements in Kampala City, Uganda. This information is to assist in advocating for effective decision-making in policy and approach to halt while improving the already existing informal settlements.

### **1.1 Research Problem**

Efforts to drive Uganda's vision 2040 are driving rapid urbanization in Kampala. This is certainly true as the city remains the primate city experiencing rapid urbanization. Consequently, several people will continue to flock to the city due to the multiple benefits related to urbanization like better service delivery and employment opportunities. Considering, Uganda's effectiveness in housing policies there is no doubt that informal settlements will develop at a faster rate but disastrously to meet the housing demands exacerbated by high rates of urbanization. So far, there is some literature providing insights into the informal settlements in Kampala. However, these studies have been skewed toward identifying drivers of vulnerability in informal communities that are a consequence of urbanization, the effect of urbanization on the informal settlement, and re-conceptualizing sustainable urban sanitation. These studies have not focused on a comprehensive understanding of the drivers for informal settlements, challenges in the informal settlements, and how to improve the living conditions in the informal settlements in Kampala City which can provide critical information for developing a framework for improving informal settlements. Furthermore, in the past, policy makers have also tried to eradicate informal settlements and disperse the informal settlement dwellers using forceful measures. These efforts in Kampala City have yielded nothing since the informal settlement dwellers eventually re-group and continue to occupy the vacant pieces of land they find and have access to, and these are mostly open spaces. Instead of opting to push the informal settlement dwellers out of Kampala City, which will not materialize, authorities need to consider other fruitful interventions to solve the problem of informal settlements. If this is not done, informal settlements will continue to grow beyond what the local authorities can handle further deteriorating the housing sector and the lives of people. The only way to address this challenge is to consider the adoption of an appropriate approach that aims at improving informal settlements, by striking a balance between the informal settlement dwellers' rights and sustainable urban development.

As such, there is still a need for more studies to provide a comprehensive understanding of the drivers for informal settlements, challenges in the informal settlements, and how to improve the living conditions in the informal settlements in Kampala City. This study, therefore, focused on the drivers for informal settlements, challenges in the informal settlements, and how to improve the living conditions in the informal settlements in Kampala City. This information will act as a benchmark to establish a framework for sustainable development of Kampala city and also improvement of informal settlements.

## **1.2 Aim of the study and objectives**

### **1.2.1 Aim of the study**

The aim of the study was to develop a framework for improving the informal settlements in Kampala City, Uganda.

### **1.2.2 Specific objectives of the study**

The specific objectives of the study were;

- i. To identify the major reasons which lead to the development of informal settlements in Kampala City, Uganda.
- ii. To explore the existing problems in the informal settlements which are faced by the informal settlement dwellers in Kampala City, Uganda.
- iii. To develop a framework which supports the improvement of informal settlements in Kampala City, Uganda

## **1.3 Research questions**

The following research questions guided the study.

- i. What are the major reasons that lead to the development of informal settlements in the City of Kampala in Uganda?
- ii. What are the existing problems, which the informal settlement dwellers are currently facing in Kampala City, Uganda?
- iii. What is the appropriate framework for adoption in order to adequately improve informal settlements in Kampala City, Uganda?

#### **1.4 Rationale for the study**

The study will provide insights into the drivers, challenges and possible interventions for improved informal settlements that can stimulate policy formulations and legal reforms that target improving housing and urban development in Uganda. In addition, this will also highlight the need to invest in appropriate housing estates in planned urban areas to provide decent urban settlements. This is in line with Uganda's vision 2040 where the government commits itself to improving standards of living for citizens through quality housing. Furthermore, this also contributes to the realization of the 11<sup>th</sup> Sustainable Development Goal of Sustainable Cities and Communities which targets to ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums by 2030.

The findings of the study will further guide the Kampala Capital Authority leaders and government at large by providing a framework to halt the establishment of informal settlements, thus fostering the development of formal settlements. The study findings can be utilized by the informal settlement dwellers to advocate for programs to improve their well-being. This is because the study has ably depicted that there are challenges that exist in informal settlements. The findings can be used in lobbying for more government programs such as the Parish development model (PDM) and international development agencies programs to come up with sustainable livelihood programs that in turn will contribute to the welfare of the informal settlement dwellers.

The findings of the study contribute to the scanty literature on the informal settlements in Kampala City. In addition, the study may spur future researchers in the academic and policy space to conduct similar studies to enrich the literature on informal settlements, their drivers, challenges, and possible interventions in Uganda and the world over.

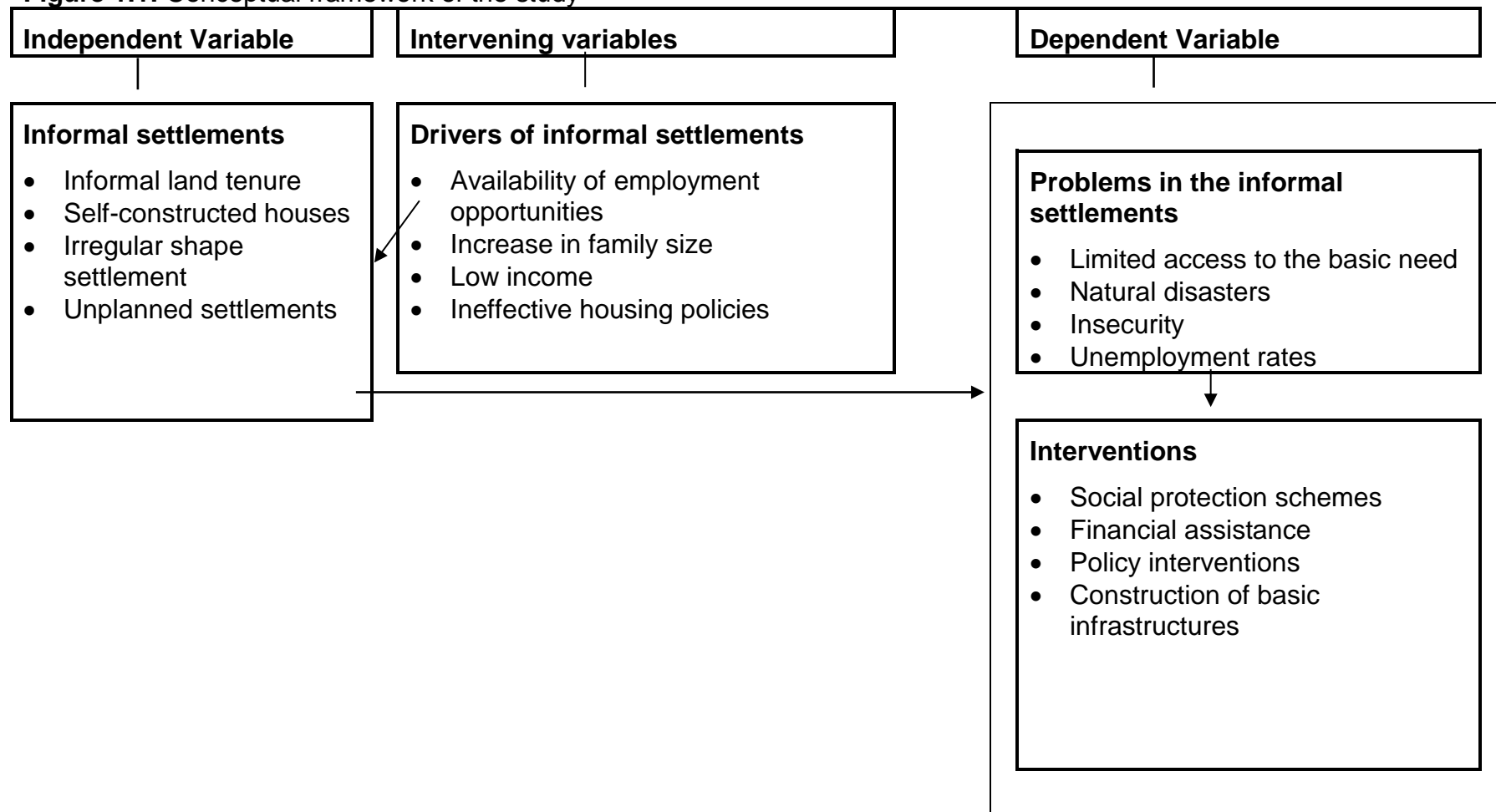


## **1.5 Conceptual framework**

As indicated by Staff (1993: 235), an informal settlement is a reduced settlement which comprises of networks that have developed they own homes under conventional or formal land residency. Staff adds that these kinds of settlements are normal in Third World nations and are the metropolitan helpless' answer for lodging deficiencies.

The study asserts that informal settlements in Kampala City are a result of certain driving forces, while the settlements in these informal settlements are associated with challenges that require a framework for improvement. The rapid urbanization in Kampala continues to stimulate migration into the city. The influx of people in the city outweighs the formal settlements which culminates in the development of the informal settlements. Other factors include low income and high rent expenses in a formal settlement among others. The establishment of informal settlements which are often unplanned is associated with challenges such as limited infrastructures, and increased unemployment rates to mention but a few (Srinivas, 2005). Since the challenges in the informal settlements are not wicked problems, the government and other developing agencies can strive to improve the standards of living in the informal settlements. The above relationships can be shown in the Figure 1.1 below.

**Figure 1.1:** Conceptual framework of the study



## **1.6 Scope of the study**

### **1.6.1 Context**

The study was specifically set out to (i) ascertain the reasons that lead to the development of informal settlements in Kampala City, Uganda, (ii) explore the existing problems in the informal settlements of Kampala City, Uganda, and (iii) develop possible framework which supports the improvement of informal settlements in Kampala City, Uganda.

### **1.6.2 Geographical**

The study was conducted in the major informal settlements of Kampala the capital city of Uganda. Kampala city is suitable for the study because of the rapid urbanization which has resulted in densely populated informal settlements (World Bank, 2015).

## **1.7 Limitation of the study**

The main impediment to this study was time and monetary limitations. The study was carried out during a period of lockdown limitations, on account of the COVID-19 pandemic. The researcher faced challenges in getting hold of key informants amidst the pandemic and the corresponding restrictions, as the targeted informants continuously changed meeting dates given their bustling timetables. In any case, the researcher effectively carried out the study and is certain that it is a direct representation of the data collected, as critically reviewed, analyzed and reported.

## **1.8 Structure of the Thesis**

The chapters that follow are sequenced in a manner that seeks to provide the reader with a logical understanding of the overview of the study. Figure 1.2 on the next page illustrates the study in summary

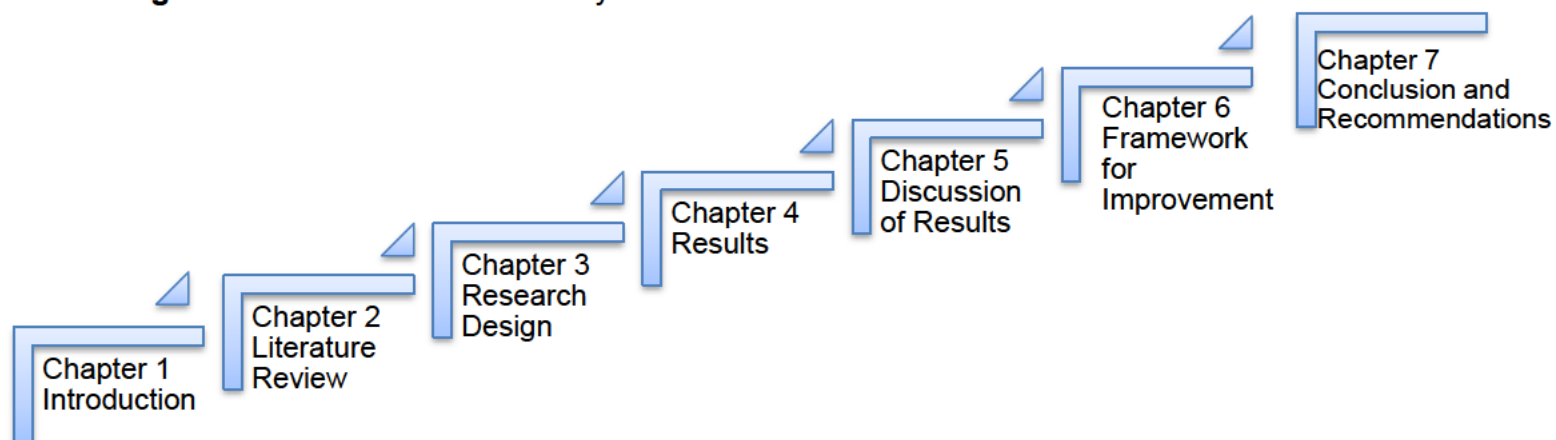
## **1.9 Methodology**

The study adopted three research designs cross-sectional, descriptive, and interpretive research designs, accompanied by the quantitative data collection approach. A total of 120 household heads were selected in this study from the informal settlements of Bwaise, Kamwokya, Katanga, Naguru, Namuwongo, and Wabigalo

## **1.10 Conclusion**

The study recommends mediation approaches initiating the further development of informal settlements by considering the issue of these settlements at the city level where their acknowledgement is significant

**Figure 1.2:** Illustration of the study structure



### **Chapter 1: Introduction**

This is the introduction chapter of the study. It entails the study background, research problem, aim of the study and objectives, research questions, the rationale for the study, theoretical framework, conceptual framework, limitation of the study, and scope of the study.

### **Chapter 2: Literature Review**

This chapter presents the literature review based on the themes derived from the three study objectives. The literature was obtained from different sources including journal articles, institutional reports, and conference proceedings. The chapter discusses the factors contributing to the development of informal settlements, the problems that exist in the informal settlements, and the frameworks for improving informal settlements.

### **Chapter 3: Research Design**

Grove, Burns and Gray (2013) define research design as the blueprint of a study. Other researchers are of the view that research design involves planning the procedure of problem conceptualization, data collection and analysis interpretation, and the writing the final research report (Creswell, 2013). This chapter elaborates on the methods that were used to collect data to achieve the research objectives. In addition, this chapter discusses the study area description, research approach, process of research, target population and sample size, data collection methods and tools, data quality control, data analysis, and ethical considerations.

## **Chapter 4: Results**

This chapter presents the results. The primary data for this research was collected through structured questionnaires. According to Bryman and Cramer (2009), the responses to quantitative questionnaire allowed reliable data to be collected.

## **Chapter 5: Discussion of Results**

In analyzing the captured data, the researcher used the latest edition of the statistical package for social sciences (SPSS) version 24.0. This is a set of reliable statistical tests. Descriptive inferential statistics were utilized to make meaning of the data.

## **Chapter 6: Framework for Improvement of Informal Settlements**

Chapter 6 discusses the processes through which the different stakeholders can work together to improve the access and living conditions of affordable housing that meets the basic habitable conditions in Kampala City, Uganda.

## **Chapter 7: Conclusion and Recommendations**

Chapter 7 discusses the research outcomes. The final conclusions are drawn based on the research findings from the previous chapter. Also, the chapter provides information on the practical implications of the research findings and recommendations for the improvement of informal settlements in Kampala City, Uganda.

## **CHAPTER TWO: AN OVERVIEW OF INFORMAL SETTLEMENTS**

### **2.0 Introduction**

Chapter two of the study presents the literature review based on the study objectives. The literature was obtained from different sources including journal articles, institutional reports, and conference proceedings. It should be noted that this study is based on informal settlements in Kampala City.

Informal settlements are residential areas, which have been developed without legal claims to the land and permission to build from the concerned authorities, leading to inadequate infrastructure and other services because of their illegal status (Hari, 2015:14). It is also important to mention that failure of governments to provide sufficient housing to the rapidly growing population in the urban community contributed to the origin of informal settlements (Tumwebaze, 2012).

According to Hari (2015), informal settlements have three main categories of challenges and characteristics, namely: physical, legal and socio-economic characteristics. Firstly, physical characteristics include poor and lack of decent housing and infrastructure services, which fall below acceptable minimum levels. Secondly, legal characteristics cover all aspects of lack of ownership of the land and non-legal status of the rudimentary shelters constructed by informal settlement dwellers. Finally, socio-economic characteristics refer to the lower income group the informal settlement dwellers belong to. Similarly, informal settlements in Kampala City possess these characteristics and challenges.

Significantly, Kulabako (2010) laments that despite informal settlements being situated in or closely to the city, the informal settlement dwellers remain separated from other city inhabitants along the basis of access to good infrastructure, capital, education and health facilities, among others. Informal settlement dwellers in Kampala City are also equally exposed to the same disadvantages which are related to marginalization.

### **2.1 Factors contributing to the development of informal settlements**

Ben (2010:1) emphasizes that formation and proliferation of informal settlements is one of the most visible and enduring manifestations of urban poverty in developing countries. This observation is also applicable to informal settlements in Kampala whereby they have emerged because the majority of informal settlement dwellers are poor and cannot afford decent housing in the city. Additionally, there is fair literature that depicts that there are factors contributing to the development of informal settlements. These factors are categorized into: demographic dimension, institutional factors, cultural, political, and socio-economic factors.

### **2.1.1 Demographic dimension factors**

Literature has shown that age contributes significantly to the development of informal settlements. An example is Friesen *et al.* (2018) who reported age in particular young people, being a factor contributing to the development of informal settlements. In the same line, Zweig (2016) found young men leading to the development of informal settlements by migrating into urban centers in search of improved welfare in South Africa. Another study on the determinants of expansion of squatter settlements in southern Ethiopia revealed that age contributes to the development of informal settlements with young people migrating to urban areas for employment opportunities (Ochocho *et al.* 2018). Lastly, a study by Baye *et al.* (2020) on the drivers of informal settlements in the peri-urban areas of Woldia in Ethiopia revealed age as a significant factor contributing to the development of informal settlements.

In addition, a study by Baye *et al.* (2020) on the drivers of informal settlements in the peri-urban areas of Ethiopia revealed marriage as a significant factor contributing to the development of informal settlements. Regarding family size, Heshmati and Zarabadi (2016) revealed that family size, with an increase in the number of family members, can lead to the development of informal settlements in Iran. Another study found that family size significantly affects the expansion of informal settlements with large families under the pressure of housing demand leading to living in informal settlements (Meshkini *et al.* 2015).

### **2.1.2 Institutional factors**

Numerous studies have established long and delayed bureaucracy in obtaining legal building documents as a factor contributing to the development of informal settlements. For example, in a study which was set out to identify the causes of the informal settlement in Zambia, (Sakala, 2016:4) that the delays in getting building documents from the government land-use planning and management department are a responsible factor for the growth of informal settlements.

Similarly, Msuya *et al.* (2017) presented a cumbersome process of land provision leading to the expansion of informal settlements in Tanzania. Asefa (2020:8) also identified the establishment of informal settlements as an alternative to the centralized bureaucratic procedures in land management and acquisition of land in the Amhara regional state. In Ethiopia, Akirso (2021) and Wondimu (2021) showed the procedural problem of legal land provision leading to the development of informal settlements. Lastly, the UN-Habitat (2019) reported extensive bureaucratic procedures associated with land acquisition and building permits as institutional factors contributing to the growth of informal settlements.

Some authors have reported lack of effectiveness in planning and enforcement of settlement regulation as one of the factors accounting for the development of the informal settlement. An assessment of the genesis of the informal settlements in Zimbabwe depicted poor planning as the genesis of the informal settlements (Matamanda, 2022). Sakala (2016) examined the causes of informal settlements in Zambia and found that the lack of enforcement of the building regulations in the country as a factor exacerbating the development of informal settlements. Similarly, Marutlulle (2017) depicted municipal inefficient administration as a factor contributing to the growth of informal settlements.

There is evidence pointing out the lack of sanctions on informal settlement offenders as a factor contributing to the informal settlement. For instance, Mensah *et al.* (2013) found a lack of sanctions against offenders contributing to the expansion of informal settlements in Ghana, and an investigation on the causes of the informal settlement in Zambia depicted a lack of sanctions against offenders especially landlords who establish informal structures as a pillar of the development of infrastructures (Sakala, 2016:7). In a study of informal housing in Greece, it was found that the absence of sanctions against offenders as a factor contributing to the expansion of the informal settlement (Minetos and Polyzos, 2013).

Some studies have shown corruption in the legal procedure of legislators of settlements as a factor contributing to informal settlements. It was found that there is corruption in attaining building documents accelerating informal settlement development in Zambia (Sakala, 2016:7). Corruption is cross-cutting as the UN-Habitat (2019) attributed the reported growth of informal settlements to the corruption of public officials and experts in charge of formal settlements. In South Africa, Marutlulle (2017) showed lack of control and corruption are some causes of the growth of informal settlements. Matamanda (2019) demonstrated that corruption has positively resulted in the expansion of informal settlements in Harare, Zimbabwe.

### **2.1.3 Cultural factors**

A study investigating the causes for the development of informal settlements noted that marriage and family ties is one of the factors that cannot be under-looked (Sakala, 2016:6). Sakala (2016:6) attributed informal settlement development in Zambia to marriages and family ties and also found that religious reasons accounted to the development of informal settlements, due to proximity to their gathering places. Furthermore, Jones (2012) found family disputes and tribal fighting as some of the factors for the growth of squatter and informal settlements in Pacific towns and cities.



#### **2.1.4 Political factors**

Mensah *et al.* (2013) who examined the behavioral dimension of the growth of informal settlements in Ghana revealed gaps in land and plan legislation, outdated building regulations, inadequate housing policies of governments and political instability as determinants for the expansion of informal settlement as they depict inadequate housing policy by the government. In another study, it was highlighted that inadequate housing policy was among the factors contributing to the development of informal settlements in Zambia (Sakala, 2016:6).

Tsenkova (2010) attributed the expansion of the informal settlement in East Europe countries to outdated and rigid legislations and inefficient house policies. Lastly, Matamanda (2019) revealed inappropriate and rigid planning laws, legislative standards, political influence in planning, and failure to control construction sectors as driving factors for the expansion of informal settlements in Zimbabwe.

Sakala (2016:7) identified political instabilities as a cause for increased development of informal settlements. Mensah *et al.* (2013) showed political instability as one of the major factors influencing the expansion of informal settlements in Kumasi, Ghana. A study by Matamanda (2022) reported that a lack of political will to prevent the development of informal settlements as a factor contributing to their continuous development, like in Zimbabwe where the lack of political will to facilitate municipalities and their policies was reported as the genesis of the development of informal settlement and the political reluctance to confront the situation as the genesis of the Hopley Farm informal settlement in Zimbabwe. In addition, Sakala (2016:5) found a lack of political will to prevent unauthorized structures among the causes of informal settlement development in Zambia.

#### **2.1.5 Socio-economic factors**

Sakala (2016:7) assessed the causes of informal settlement planning in Zambia and concluded that rapid population significantly contributed to the expansion of the informal settlement to meet the housing demands. Meshkini *et al.* (2015) depicted population growth playing a significant role in the expansion of informal settlements in babol city. In an evaluation of effective contributors to the formation of informal settlements in Iran, the study presented a rapid population growth rate to significantly accelerate the informal settlements (Heshmati and Zarabadi, 2016).

Additionally, a review of lessons from the Zimbabwe informal settlements revealed accelerated population growth leading to the demand for housing in the informal settlements

(Matamanda, 2019). In Ethiopia, Ochocho *et al.* (2018) explored the determinants of the expansion of informal settlements and found population growth as a buzz factor contributing to the expansion of informal settlements.

Another factor attributed to the development of informal settlements is high land prices. Baye *et al.* (2020) established that high prices of land hinder the process of proper acquisition of land and establishment of proper structures accelerating the development of informal settlements in the peri-urban areas of Woldia, Ethiopia. Diab *et al.* (2020) showed expensive land tandem with informal settlement establishments in the Arab Region. In an investigation of the factors for the establishment of informal settlements in babol city, (Meshkini *et al.* 2015) revealed expensive land significantly contributes to the expansion of informal settlements.

Sakala (2016:6) depicted the high prices that acquire land expensive as one of the factors for the development of informal settlements in Zambia. Additionally, investigations into the dimension of the growth of informal settlements in Ghana, (Mensah *et al.* 2013) revealed that high land prices foster the development of informal settlements as people cannot afford legal acquisitions of land for proper structure establishments.

In a study on the dimension of the growth of informal settlements in Ghana, (Mensah *et al.* 2013) revealed a shortage of formal housing fostering the development of informal settlements. Sakala (2016:6) depicted a shortage of formal housing significantly affecting the expansion of informal settlements in Zambia. Meshkini *et al.* (2015) revealed high house rent plays a significant role in the expansion of informal settlements in Babol city. In Egypt, the price of land is the cause of the expansion of informal settlements (Diab *et al.* 2020). Lastly, an investigation into the factors affecting the formation of informal settlements in Iran showed that high standards of housing in the formal settlements accelerating the establishment of informal settlements (Amiri and Ghanbari, 2016).

Akirso (2021) depicted that shortage of formal housing and unaffordable cost of formal housing for urban dwellers contributed to the expansion of informal settlements in Ethiopia, while (Sakala, 2016:5) found that the non-affordability of land and high rent charges in the formal settlement contributed to the development of informal settlements in Zambia.

The low-income level is cross-cutting as a similar study depicts low-income levels among the factors accounting for the development of informal settlement in Zambia (Sakala, 2016:5). In the same regard, it was noted that poverty played a significant role in the expansion of informal settlements in Babol city (Mensah *et al.* 2013). In Egypt, poverty has been shown among the causes of the expansion of informal settlements (Diab *et al.* 2020).

A study on the analysis of the effective factors in establishing informal settlements in Babol city, (Meshkini *et al*, 2015) confirmed that rural to urban migration was an important factor with a significant role in the expansion of informal settlements. Sakala (2016:5) identified rural-urban migration as one of the factors contributing to the development of informal settlements in Zambia. In Egypt, rural-urban migration causes the expansion of informal settlements (Diab *et al*. 2020).

Niva *et al*. (2019) recognized informal settlements as retardants caused by people through migration. Additionally, Msuya *et al*. (2017) pointed out that rural-urban migration significantly contributes to the development of informal settlements in Tanzania. Lastly, in Ethiopia it was found that expansion of informal settlements was positively associated with low rural-urban migration (Ochocho *et al*, 2018).

An analysis of the causes of the informal settlement in Zambia showed employment as one of the factors contributing to the development of the informal settlements as people go to urban areas in search of employment (Sakala, 2016:6). On the other hand, in understanding the growth of squatter and informal settlements in Pacific towns and cities, there was found a lack of new productive investment and rising levels of unemployment leading to the development of informal settlements (Jones, 2012). Similarly, an analysis of the effective factors in establishing informal settlements in babol city showed a lack of employment opportunities as one of the factors that contribute to the expansion of informal settlements in Babol city (Meshkini *et al*. 2015).

## **2.2 Problems existing in the informal settlements**

In assessing residential satisfaction among households in informal settlements of Accra, a lack of basic services was found as the most cited complaint (Addo, 2015). In India, Parikh *et al*. (2015) established limited access to basic needs accompanied by mismanagement of infrastructure of the available infrastructure as one of the changes in India's informal settlements.

In Zambia, Sakala (2016:7) found inadequate basic infrastructure in the settlement as the most indicated challenge in the informal settlements. Additionally, Uwizeye *et al*. (2022) revealed residents of informal settlements being challenged with inadequate access to education and sub-standard healthcare services in Rwanda. Ulrich (2016:4) reported that these informal settlements are characterized by overcrowding, poor housing structures and poor infrastructure services. Of significance, UN-HABITAT (2009:4) indicated that informal settlements in Kampala are also not connected to the centralized sewerage system.

Additionally, unimproved pit latrines are the predominant type of sanitation facilities available while public sanitation systems and open defecation are also common challenges that exist where access to good toilets is limited (Kulabako, 2010:4; Maoulidi, 2012:2; and Tumwebaze, 2012:2).

Due to the poor condition of sanitation facilities, informal settlement dwellers are exposed to physical risk since they are mostly located in environmentally degraded sections of Kampala City (Pryer, 2003:3). Arimah (2010:2) indicated that there is a need to improve the economic well-being of poor and low-income households through policies that support livelihood strategies specifically designed to cater for those within the lowest income distribution to address the challenges noted above. Mukiibi (2015:4) stressed that poverty alleviation is a key factor in any low-income housing area, emphasizing that if dwellers cannot afford to maintain the homes that are built for them, then they will inevitably sell them off and move elsewhere.

Finally, there is a view that cities in the developing countries need to be planned based on the principles of sustainable urbanization as they address the problems of informal settlements (Hellen, 2015:3 and UN-HABITAT, 2009:4). Furthermore, local authorities need to be strengthened by providing them with the necessary resources and capacity to undertake upgrading of informal settlements (Turner, 1968:6).



**Figure 2.1:** A charcoal vendor in an informal settlement

**Source:** Photo KCCA, 2016

Lastly, Simiyu *et al.* (2017) found a lack of essential basic infrastructure characterizing the living conditions of households in the informal settlements in Kenya.

Hari (2015:14) also identified three main categories of challenges and characteristics of informal settlements. Physical characteristics include poor and lack of decent housing and infrastructure services, which fall below acceptable minimum levels. Secondly, legal characteristics cover all aspects of lack of ownership of the land and non-legal status of the

rudimentary shelters constructed by informal settlement dwellers. Finally, socio-economic characteristics relate to low income status of informal settlement dwellers.

Handzic (2010) noted that informal settlement households faced tenure insecurity which discouraged them to invest in other services in the Favela Bairro Program. In another assessment of the lived experience of the urban poor in Harare's selected informal settlements, found that informal settlement dwellers are challenged with insecure housing (Bandaiko *et al.* 2022).

Sakala (2016:5) found that most of his study participants affirmed the prevalence of floods in the informal settlement in Zambia. In addition, an assessment of the lived experience of the urban poor in Harare's selected informal settlements revealed overcrowded house conditions as one of the challenges faced in the informal settlements (Bandaiko *et al.* 2022). Simiyu *et al.* (2019) established flooding during the rainy season is a common challenge in informal settlements.



**Figure 2.2:** Conditions of the drainage system in an informal settlement

**Source:** UN HABITAT (2007)

Daneshmand *et al.* (2015) found social isolation or lack of social capital to get rid of poverty as a major challenge in the informal settlement of Eslamshahr. In addition, an assessment of the lived experience of the urban poor in Harare's selected informal settlements showed discursive territorial stigmatization as one of the challenges faced in the informal settlements (Bandaiko *et al.* 2022). Social vices have been identified as existing challenges in informal settlements. Sakala (2016:7) found the prevalence of social vices such as rape, prostitution, child labour, and armed robbery as some of the challenges in informal settlements and overcrowding as a highly witnessed problem in informal settlements (Sakala, 2016:6).

Poor sanitation is one of the challenges that has been found to exist in informal settlements.

Sakala (2016) found that there was prevalence of poor sanitation in the informal settlements of Zambia. In addition, the Institute of Policy Analysis and Research of Rwanda (2015) discovered problems with existing sanitation systems and pollution of groundwater under or near pit latrines in informal settlements of Kigali. Simiyu *et al.* (2019) found a lack of sanitation facilities as one of the challenges in informal settlements. Tumwebaze *et al.* (2023:8) and Gomez *et al.* (2023:6) further emphasize that the residents rely mainly on shared sanitation systems with low access to safely managed drinking water, sanitation services and better oversight of fecal sludge disposal which is evidence that achieving the SDGs' universal target in informal settlements (home to over a billion slum dwellers) may not be achieved by 2030. Household waste management practices are dynamic and influenced by varying factors, including lack of access to waste collection services, waste streams, and the purpose or benefit sought (Muheirwe *et al.* 2023:9)



**Figure 2.3:** Typical garbage collection situation in an informal settlement

**Source:** Photo, Kampala City Council

Simiyu *et al.* (2019) reported that informal settlement dwellers complained about the poorly constructed structures that leaked during the rainy season in Zambia. Additionally, Daneshmand *et al.* (2015) found a lack of appropriate housing as one of the challenges in the Eslamshahr informal settlement.

### **2.3 Possible Frameworks for improvement of informal settlements**

In an assessment of the efforts to access basic household needs in Kigali's informal urban settlements, it was found that informal settlers suggest social cohesion and mutual social support within the community for addressing and accessing services. The provision of employment opportunities is another framework for improving informal settlement. In Rwanda, informal settlers highlight the provision of employment alternatives as a possible intervention to address their challenges (Uwizeye *et al.* 2022).



Walter and Beal (2020) contended that the development and adoption of a long-term strategy to mobilize financial resources is a practice model for addressing water and wastewater services challenges in informal urban settlements in Tanzania. Lambert and Denckla (2020:8) revealed addressing intimate partners and other forms of interpersonal violence in informal settings and holds implications for tailoring interventions for this marginalized population as a possible intervention to addressing the challenges of post-traumatic stress and depression among women in Kenya's informal settlements.

An empirical investigation into the lived experiences of the urban poor in Harare's selected informal settlements by (Bandauko *et al.* 2022) revealed the development of ambivalence of Harare's urban policy toward informal settlements as a more positive approach to improving the livelihoods of people living in informal settlements.

## **2.4 Literature Gap**

Evidence presented in this section shows a fair understanding of the factors that contribute to informal settlements, the challenges in the informal settlements, and possible frameworks for improving informal settlements. However, this literature has paid limited attention to the informal settings of Uganda. Due to the differences in the geographical locations, and social-economic backgrounds among others, there is a need for such studies in the Ugandan context. This study will seek to fill this gap and provide the factors contributing to the development of informal settings, the challenges in the informal settings, and the frameworks for improving informal settlements.

## **CHAPTER THREE: RESEARCH DESIGN**

### **3.0 Introduction**

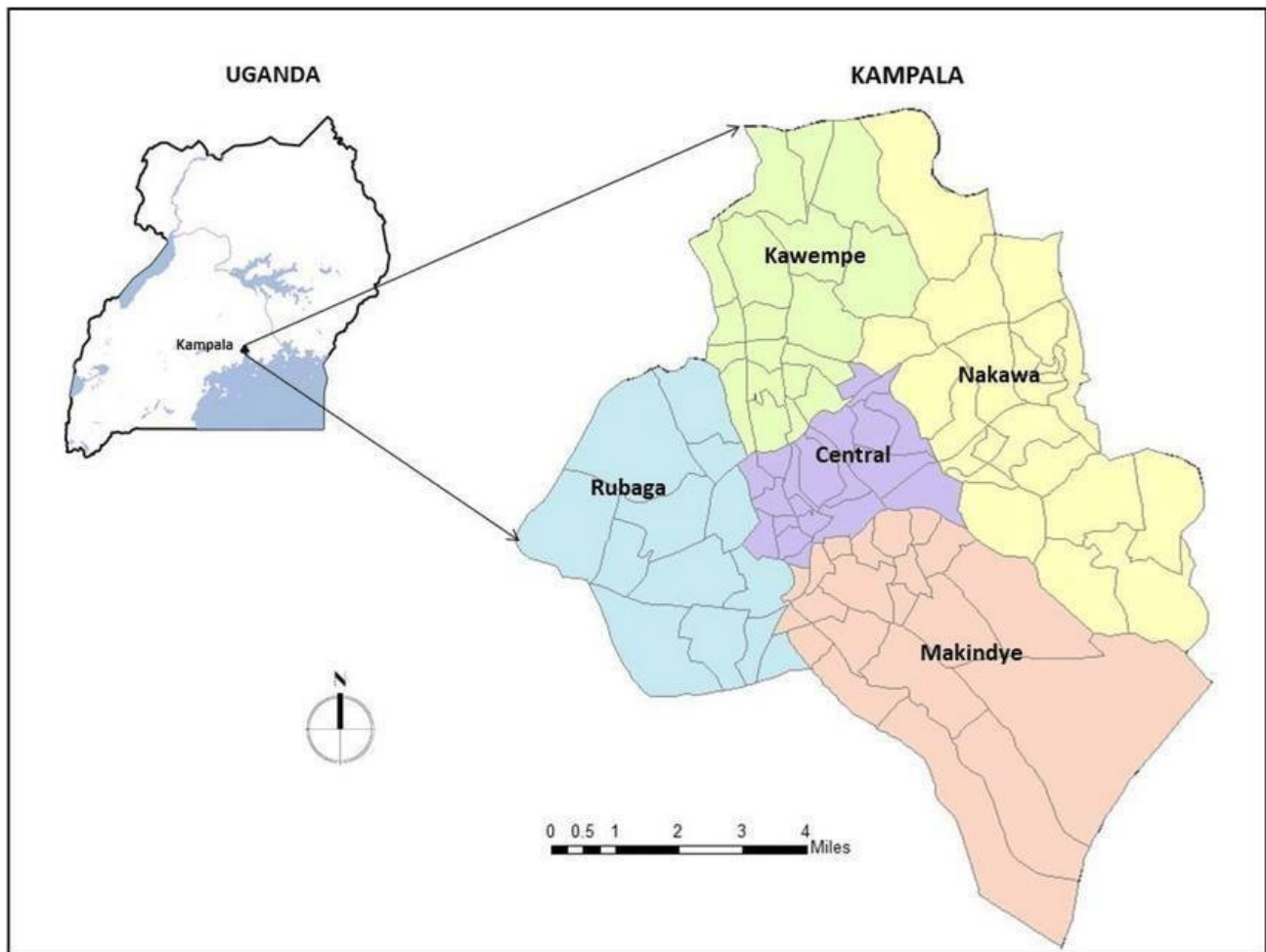
This chapter contains the strategy used to arrive at solutions to resolve the study's research questions. The technique embraced in this study gives the methods that are vital for acquiring the data expected to structure the examination survey, gather information, break down the gathered information, and decipher and present the outcomes. The methodology used in this overview is illustrated in the following areas.

### **3.1 Study Area Description**

The study was conducted in the 6 major informal settlements in Kampala City, Uganda namely; Bwaise, Katanga, Namuwongo, Wabigalo, Naguru, and Kamwokya (Mukiibi, 2015:3). The city is divided into five administrative divisions of Makindye, Rubaga, Kawempe, Nakawa, and the central division. Figure 3.1 shows the five divisions of the Kampala city. Each of the 5 divisions has an informal settlement which forms part of this study. The City is located on the northern shores of Lake Victoria, Africa's largest freshwater lake. Kampala city is situated on 24 low flat-topped hills that are surrounded by wetland valleys covering 189 km<sup>2</sup> (Lwasa and Owens, 2018). In addition, the city has a population of 1.5 million (Uganda Bureau of Statistics (UBOS) and ICF, 2016) and is one of the fastest-growing African cities with annual growth rates of 5.6% (Vermeiren *et al.* 2012).

The study area is deemed appropriate for the study's gradual manner and sustained long period in the growth of the informal settlements. This is largely attributed to the rapid urbanization which has resulted in densely populated informal settlements (World Bank, 2015). In addition, the institutional ineffectiveness of the Kampala City administration has resulted in the development of informal settlements as many infrastructural developers have not complied with the infrastructure development standards (Ssali, 2020).





**Figure 3.1:** Map of Kampala City showing the five divisions, as the target area.  
**Source:** KCCA, 2005

### 3.2 Research Approach

Creswell (1994:175) characterizes quantitative study as exploration that gathers mathematical data that is broken down utilizing select measurements. Cohen (1980) states that quantitative exploration uses observational techniques and test explanations. Furthermore, Cohen (1980:5) characterized an observational technique as a particular clarification about what the circumstance “is” truly, rather than what the situation ought to be.

The study adopted three research designs which are; cross-sectional, descriptive, and interpretive research designs (Creswell, 1994). The cross-section research design enabled the researcher to conduct rapid data collection from a relatively extensive population using a sample that was used to make inferences about the entire informal settlements in Kampala. In addition, a descriptive research design was used to systematically describe and accurately present the drivers for the development, problems, and framework for supporting the

improvement of informal settlements in Kampala City. Lastly, the study utilized the interpretive researcher design to facilitate deriving underlying meaning from the results of the study respondents (Bogna *et al.* 2020).

The study utilized the quantitative approach to gather adequate data for the study. Quantifiable data was obtained using questionnaires which were tallied into aggregated responses to make deductions on the research questions under each objective. Appendix B contains copy of the questionnaire administered to collect data for the study.

### **3.3 Process of Research**

Approval to conduct the study was vailed by the Durban University of Technology Research Ethics Committee- Research and Postgraduate Support Directorate to get clearance from the Local Council Authorities. Following this, the aim of the study was clearly explained to the local authorities in the local dialect to ensure they understand the aim of the study and also seek permission to conduct the study. The local authorities also stamped on the letters that were presented to them upon approval to engage with the informal dwellers. This was intended for security purposes, smooth access to the respondents, and not to create any suspicions. The researcher then identified herself to each respondent with the National ID and the University letter that contained a stamp from the local authorities. The researcher oriented the informal settlement dwellers on how to respond to the questionnaires. The researcher moved house after house. The researcher posed the questions, fully explained them to the respondents and recorded their responses on the questionnaires. Appendices A, C and D contain copies of the full ethics clearance approval, letter of information and gate keeper's letter respectively for the study.

### **3.4 Sampling procedures and techniques**

As indicated by Mugo (2002), examining is a procedure or cycle to choose a proper example, or to address a populace and the findings are also used to decide the qualities of the whole populace. With the end goal of this study, purposive sampling was utilized to choose the six major informal settlements in Kampala City and the respondents therein, while random sampling was utilized to choose the house hold participants who were the respondents to the research questionnaire.

Owed to the uniformity in social and economic status across the household heads in the informal settlements, considering  $p=60\%$  as the proportion of the city population that dwell in informal settlements (Alfred,2011:9), margin error of 8.7% and 95% confidence interval. Using equation below, a sample of 122 participants was generated. This offered equal chances for all the

household heads in the informal settlement to participate in the study. The local council leaders from each informal settlement assisted the researcher to mobilize the participants who are the household heads to take part in the study. Participants included were informal settlement dwellers above the age of 18 years and were household heads because they were presumed to understand and answer the questions better, while those excluded from participating in the research were those that were deemed mentally incapacitated to take part in the study. The selection of participants was not gender specific. The selected number turned out to be study participants.

$$n = \frac{Z_{1-\frac{\alpha}{2}}^2 p(1-p)}{d^2}$$

Where,

p is the expected proportion

d is absolute precision

1-  $\alpha/2$  is the desired level of significance

Sample Size, Dr Gayatri Vishwakarma, CDSA (2017)

### 3.5 Target population and sample size

A study by Mukiibi (2015) indicated that there are six major informal settlements in Kampala City, namely; Bwaise, Katanga, Namuwongo, Wabigalo, Naguru, and Kamwokya which were considered as the study population. Given that the formula above generated a sample size of 122 respondents, to get a uniform distribution of the participants of the study, the researcher randomly selected 20 household from each of the six major informal settlements in Kampala City. A sample size of 120 informal settlement households was used for this study. These 120 households were evenly distributed (twenty) from each of the informal settlements.

### 3.6 Data collection methods and tools

#### 3.6.1 Household survey

As per Oppenheim (1992:236), questionnaires are utilized to accumulate and record information on a particular issue of interest. However, they fundamentally involve a rundown of inquiries and should likewise include clear headings or directions and space for answers. The inquiries presented ought to have an unmistakable association with the targets of the investigation, and it ought to be obvious from the beginning how the discoveries will be utilized. Respondents ought to be made aware of the point of the study and ought to be educated on how and when they will get input on the discoveries. For this investigation, closed and open-ended inquiries were presented to respondents, with more accentuation on the last as they gave answers longer than a single word or two and furthermore worked with

improved collaboration and comprehension. Respondents were offered the chance to articulate their thoughts more transparently on challenges they faced and what arrangements could be promoted.

The household survey was used to obtain quantitative data from the 120 household heads in the informal settlements. The utilization of the questionnaire helped the researcher to obtain numerical data from a larger sample. This method was rendered appropriate for the study as it contained both closed and open-ended questions. Thus, offered the respondents a chance to select their deemed answers from the options provided from the close ended questions as well as articulate their thoughts more transparently from the open-ended questions.

### **3.7 Data Quality control**

The research tools are composed of research questions derived from literature relevant to the study. The tools were pre-tested using the four household heads from the informal settlements to ensure the tools are appropriate and of status to generate meaningful results. The researcher personally got involved in the data collection process, and assistance was obtained from an editor to check language accuracy in both the tools and the final report as attached in Appendix F

### **3.8 Data Analysis**

Creswell (2009:192) recognizes the initial phase in data analysis as getting organized; this includes arranging and organizing field notes. Quantitative data was edited, coded, and subjected to further analysis using statistical package for social sciences (SPSS) version 24.0. and Excel. After entry, data was checked for errors and then descriptive statistics of frequencies were conducted. The statistical tools for data analysis will include proportions, percentages, mean and median scoring. This was achieved with the aid of a statistical package in order to compile and analyses the data.

Exploratory analysis was be carried out entailing frequencies, median, means and standard deviations. To ensure that quality research is attained, a professional statistician was consulted as attached in Appendix E.

### **3.8.1 Data Analysis Approach**

An exploratory analysis was done with the sample size which was selected to reflect and represent the entire study. Fisher's Exact test was used for all comparisons between categorical variables. For the questions that allowed for multiple responses, multiple responses analysis was applied and chi-square or Fisher's exact tests were considered where applicable. Data analyses were performed using Stata 14 (StataCorp, College Station, TX). In addition, data analysis was done in-line with the study objectives. Analysis was done based on the entire sample size as well as comparisons across the informal settlements.

### **3.9 Ethical Considerations**

The research incorporated present, past and future informal settlement conditions in Kampala City, Uganda. To ensure reliability of this research in informing the improvement framework of informal settlements in Kampala City, quality control measures like training of the questionnaire administrators, repeating questions to inform clarity and making sure the subjects understand the questions were adhered to.

Confidentiality and anonymity were key in this research to ensure the integrity of information and protect the respondents from prejudice. The research questions and data collection methods ensured objectivity that respondents were at liberty if they so wish not to be identified. The participant names did not appear in the research nor have the names been discussed before, during or after the research. Allocation of a numbering system has been used to identify participants to protect their identity during the research process. The data collected was by both hard paper and electronic data. Hard paper has been kept securely in a lock-in cabinet and electronic data on both a portable external drive and CD, all of which will be destroyed after 5 years if no longer required.

## CHAPTER FOUR: RESULTS

### 4.0 Introduction

Chapter Four presents the findings and analysis from the distributed questionnaires.

### 4.1 Questionnaire Response Rate

Dissemination of questionnaires was face-to-face delivery. This was preferred given that the literature review done prior emphasized that delivering questionnaires face-to-face was known to improve the response rate. A total of 120 questionnaire sets were administered to the sample of the target group who were residing in select major informal settlements in Kampala i.e., Bwaise, Katanga, Kamwokya, Naguru, Namuwongo and Wabigalo. All the questionnaires were duly filled out.

**Table 4.1:** Questionnaire distribution and response

INFORMAL SETTLEMENT	NUMBER DISTRIBUTED	NUMBER RESPONDENTS	PERCENTAGE (%) RESPONSES	CUMULATIVE
Bwaise	120	120	100%	16.70%
Katanga	120	120	100%	16.70%
Kamwokya	120	120	100%	16.70%
Naguru	120	120	100%	16.70%
Namuwongo	120	120	100%	16.70%
Wabigalo	120	120	100%	16.70%

### 4.2 Socio-demographic characteristics of the respondents

Data was collected from 20 respondents from each of the selected informal settlements of Bwaise, Katanga, Kamwokya, Naguru, Namuwongo, and Wabigalo. As such, a total of 120 respondents were recruited to achieve the objectives of this study. The demand for housing is often influenced by socio-demographic characteristics. As such, the socio-demographic characteristics of the respondents were assessed and depicted in table 1. In the study, there was a reasonable representation of both the male and female-headed households. Of the households, the male-headed households dominated the study with 59% while the rest

(41%) were female-headed households. Regarding age, all the age categories were represented except children below the age of 18 years. In the study, the youth (19 to 35 years) dominated the study (52.5%), followed by the productive age bracket (36 to 65 years) with 37.5%, and the elderly (65 and above) with 10%. In the case of marital status, the majority (46.6%) of household heads were married, 41.7% of the household heads were single (never married), 6.7% were widowed, and 5% were divorced. Concerning education, most of the study participants had attained some level of education. The majority of the household heads (42.5%) had attained some education up to the secondary level, followed by those who had attained up to the primary level (36.7%), the least had acquired tertiary (13.3%), and those that never attained any educational level (7.5%). In addition, the employment status of the household heads was as follows; the majority (55%) were self-employed, 32.5% were unemployed, and 18.5% were employed. For those who were self-employed or employed, most (40.7%) were engaged in casual work, 30.9% were engaged in full-time work, 21% were engaged in street vending, and 7.4% were engaged in seasonal/part-time work. Their income size ranged from less than UGX 50,000 (17.3%), 50,001 to 100,000 (18.5%), 100,001 to 300,000 (29.6%), 300,001 to 500,000 (17.3%), and more than 500,001 (17.3%). Lastly, occupancy per household was about 5, with a range (of 3-6) dwellers and this comprised of about an average 2 adults and children ranging between (1-3), and per household, about 2 of these children were attending school. The study also revealed that more (30%) of the respondents had lived in the informal settlement for 2 to 10 years, 26% for over 20 years, 24% since their birth, and 10% for only 2 years. Of those who have not lived in the informal settlement since birth, most had migrated from the western region (37%), 26% from the central regions, 18% from the Eastern region, and 17% from the Northern region. These are presented in table 4.2 below.

**Table 4.2:** Respondents' socio-demographic profile

<b>Characteristic</b>	<b>Response</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Sex	Male	71	59
	Female	49	41
Age	19 to 35 years	63	53
	36 to 65 years	45	38
	66 and above	12	10
Marital Status	Single	50	42
	Married	56	47
	Divorced	6	5
	Widowed	8	7
Education level	None	9	8
	Primary	44	37
	Secondary	51	43
	Tertiary	16	13
Employment Status	Unemployed	39	33
	Self-employed	66	55
	Employed	15	19
Nature of work	Casual Labour	33	41
	Full-time Job	25	31
	Street Vendor	17	21
	Seasonal/ Part-time	6	7
Income Size	less than 50,000	14	17
	50,001 to 100,000	15	19
	100, 001 to 300000	24	30
	300001to 500000	14	17
	More than 500001	14	17



### 4.3 Factors contributing to the development of informal settlements

The highest proportion of the respondents had dwelt in informal settlements for over two years; 30% had stayed for less ten years, 26% for over ten years while 24% since birth. However, this was found to be different across the informal settlements. For Bwaise and Wabigalo, the highest proportion of the residents had stayed there since birth while the highest proportion of residents in Kamwokya, Katanga and Naguru had stayed there for over 10 years. A small proportion of residents across all informal settlements had stayed for less than two years, as shown in Table 4.3.

Respondents reported to have mostly come from the Western (37%) and Central (25%) regions to reside in Kampala. Majority of the people sampled in the different informal settlements were coming from the Western region (80%, 53%, 42%) to resettle in Namuwongo, Katanga and Wabigalo respectively, Central region (65%, 54%) to resettle in Kamwokya and Bwaise respectively and Northern region (65%) to resettle in Naguru, as demonstrated below in Table 4.3.

**Table 4.3:** Dweller's longevity in the informal settlements

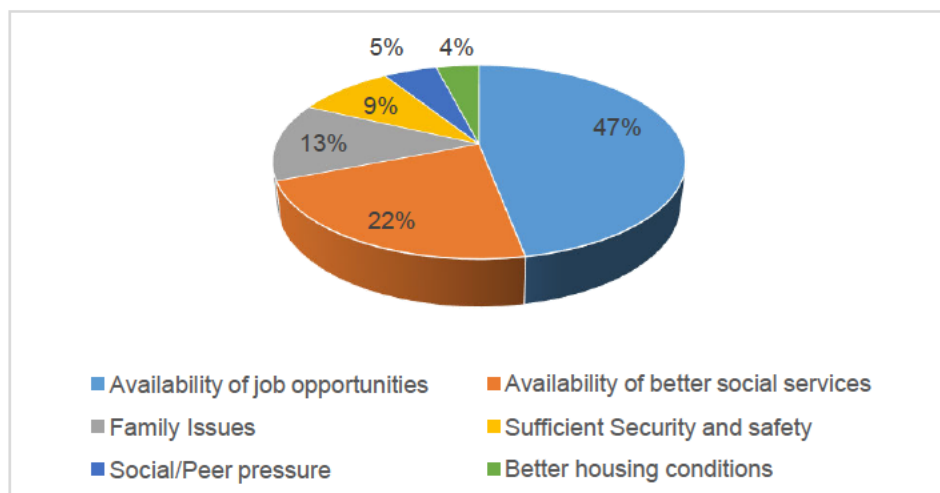
GENERAL			INFORMAL SETTLEMENT					
	Frequency	%	Bwaise	Kamwokya	Katanga	Naguru	Namuwongo	Wabigalo
<b>Duration of staying in the informal settlement</b>								
< 2 years	12	10%	2 (11%)	2 (10%)	3 (15%)	1 (5%)	2 (10%)	2 (10%)
2-10 years	35	30%	2 (11%)	7 (37%)	4 (20%)	6 (30%)	10 (50%)	6 (30%)
Above 10 years	43	26%	6 (33%)	8 (40%)	10 (50%)	10 (50%)	4 (20%)	5 (25%)
Since birth	28	24%	8 (44%)	3 (15%)	3 (15%)	3 (15%)	4 (20%)	7 (35%)
<b>Residence before coming to Kampala** (Regions)</b>								
Western	33	37%	2 (18%)	2 (12%)	9 (53%)	3 (18%)	12 (80%)	5 (42%)
Central	25	28%	6 (54%)	11 (65%)	3 (18%)	1 (6%)	0 (0%)	4 (33%)
Northern	15	17%	2 (18%)	0 (0%)	1 (6%)	11 (65%)	0 (0%)	1 (8%)
Eastern	16	18%	1 (9%)	4 (23%)	4 (23%)	2 (12%)	3 (20%)	2 (17%)

#### 4.3.1 Migration as a key factor for development of informal settlements

One of the outstanding reasons for the development of informal settlements was the migration of people from rural to the urban areas of Uganda, and the convenience and desire to settle in areas near the Central Business District, Kampala District.

Of the respondents, 47% reported finding work as the main reason for migrating to Kampala, followed by the availability of services in the city (22%) as well as family reasons (13%). This was common across the informal settlements; finding work was a common reason in Katanga (70%), Namuwongo (50%), Kamwokya (45%), Wabigalo (40%), Naguru (35%) and

Bwaise (30%). However, search for better housing conditions was least motivators to migrating to Kampala as shown in Figure 4.1.



**Figure 4.1:** Main reasons for moving to Kampala

As shown above, the availability of job opportunities was the major factor contributing to the influx of households into Kampala City. The majority of the households perceived that there is a wide range of employment opportunities that one can engage in to earn a living. This finding supports a study which found that looking for employment opportunities is one of the factors for the migration into the cities in Tanzania (Magweiga and Urassa, 2017). This consistency in findings can be attributed to the availability of employment opportunities both informal and formal in Kampala due to the rapid growth in industries and businesses. This finding suggests the need to strengthen government poverty eradication programs such as the “emyoga fund”, Parish Development Model (PDM), and NAADS in rural areas to discourage migration into Kampala City.

The study also revealed the availability of better social services as a factor contributing to the influx of people into Kampala City. The households highlighted the better schools for quality education and better hospitals for health facilities as some of the factors that pushed them into migrating to Kampala City. This finding supports the results which found the lack of infrastructures in rural settlements as a push factor for the city to look for better services for a better life (Gollopeni, 2015). This result can be attributed to the uneven infrastructure development in the country where urban places are often provided with first-class structures compared to rural areas. The implication of this result is the need for fair distribution and development of social facilities such as roads, educational facilities, and health facilities among others in the rural settlements to discourage the movement of people from villages to cities.

The study findings also revealed family issues accelerating migration into the cities. The households in the informal settlements pointed out the family issues of conflicts, violence, and separation as factors that motivated them to move into the city as this was perceived as the best conflict resolution alternative. This study finding is in line with the researcher who established family conflicts contributing to migration into the city in China (Wen and Hanley, 2015). An explanation for this result may be that family conflicts often accelerate to reach the violence stage characterized by witchcraft and murders as such households would prefer moving far away from the conflict counterparts to avoid such. This finding indicates that there is a need for the development of a framework for supporting families and building family resilience in rural areas to halt migration into cities.

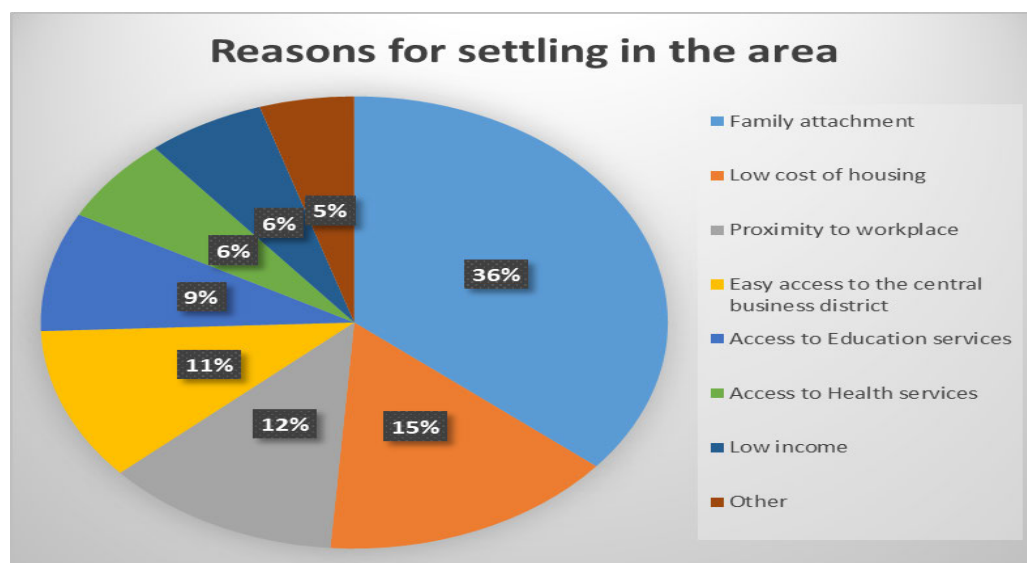
The study findings indicate sufficient security and safety as another factor fostering migration into Kampala city. The study household heads contended the security in the city was a factor that made them move into the city. This result has been earlier where insecurity issues were found as a push factor into the city (Gollopeni, 2015:9). There are many explanations for this factor some of which may include the limited formal help-response institutions such as policy and courts of law. This result may help us understand the need for establishing security-response institutions in rural areas. This can be achieved by increasing the number of police posts in rural areas to offer sufficient security, and other supplementary security outfits like the Local Defense Units (LDU's) and community policing initiatives like the once popular '*Mayumba Kumi*',

The study showed social/peer pressure as a factor honing migrations into Kampala city. The study household heads mentioned peer pressure where they are forced to move into the city due to the influence of their colleagues who had earlier moved into the cities. This result has not been earlier described by previous researchers. However, this finding can be attributed to the fact that most informal settlements are dominated by the youth who are always under the influence of their fellow youths to fit into society. This indicates that interventions to halt migration into the city should not exclude the youths.

Lastly, the better housing conditions in the city influenced the migrations into the city, however this was the least ranked reason for moving to the city. This can be explained by the high poverty rates in rural areas where they already they are not able to access finances to afford good housing regardless of whether they move to the city or not. This indicates the need to offer the population low cost housing that has the minimum acceptable standards but still affordable to the majority city dwellers.

### 4.3.2 Reasons for settling in the informal settlements

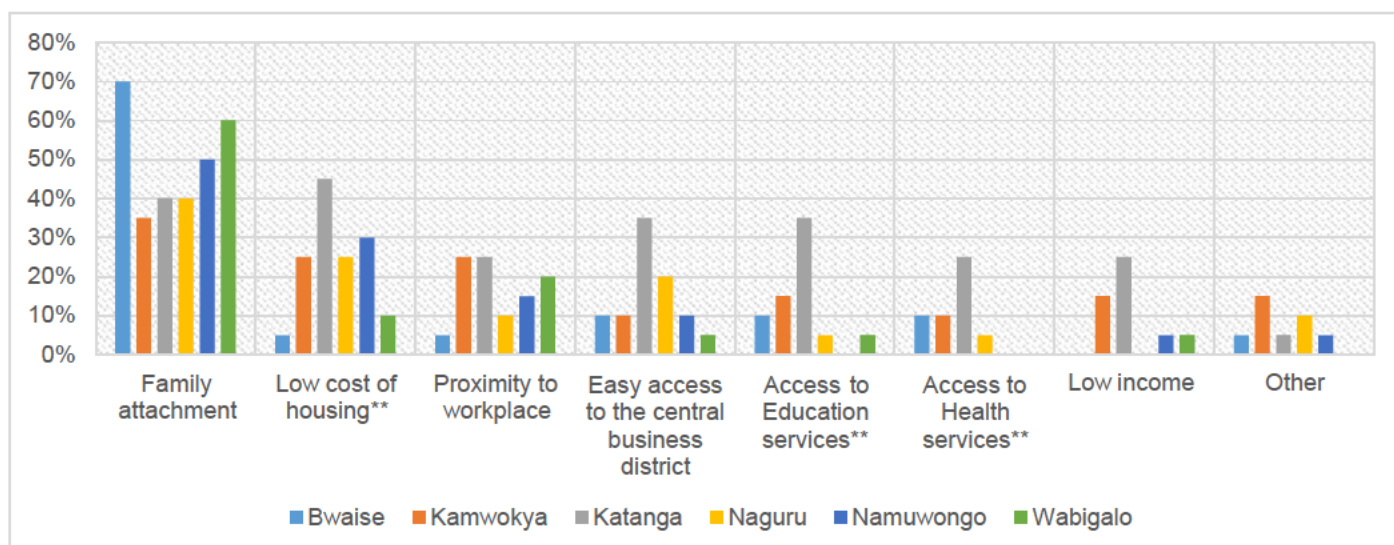
Even with the challenging situation with informal settlements, the respondents opted to stay in informal settlements due to numerous reasons such as family attachment, low costs of housing, proximity to the workplace, easy access to the Central Business District, access to the education services, access to health services, and low income. Family attachment was the most common reason for settlement (36%), followed by low cost of housing (15%) and proximity to workplace (12%) as shown in Figure 4.2.



**Figure 4.2** Reasons for settling in the informal settlements

To further break it down per settlement, the main reason for settlement was similar across the informal settlements; family attachment ranked highest in Bwaise (70%), Wabigalo (60%), Namuwongo (50%), Naguru and Katanga (40%), with the percentage lowering in Kamwokya (35%). Some reasons for settlement were statistically similar across the informal settlements; low cost of housing, proximity to workplace, easy access to the CBD, etc. as shown in Figure 4.3 below.





**Figure 4.3:** Reasons for settling in the particular informal settlements

Note: \*\* Statistical significance across the informal settlements

The figure above shows family attachment as one of the reasons for settling in informal settlements. The study households opted to settle in the informal settlements because most of their family members were already staying in there. Meshkini *et al.* (2015:48) supported the idea by reporting that family was found as a significant factor contributing to the development of informal settlements in the peri-urban areas of Woldia. This result can be explained by the fact that most people move into the informal settlements to seek social support from their family members who have earlier settled there.

Another reason for settlement in the informal settlements in the current study is the low costs of housing. The household heads were motivated to move and stay in the informal settlements because of the low rent costs compared to the rent costs in the formal settlements. Sakala (2016:5) also found that non-affordability and high rent charges in the formal settlement contributed to the development of informal settlements in Zambia. This finding can be attributed to the low-income rates and high poverty rates in Uganda due to the absence of some regulatory tools such as minimum wage bills. As such, households maybe exploited; leading to low incomes to afford the formal settlements. It is therefore important for the government to regulate the rent costs in the formal settlements as well as establish an act such as a minimum wage bill to ensure people in the city can afford the formal settlements.

The study also revealed proximity to the workplace and ease of access to the central business district as a factor contributing to the informal settlements in Kampala city. The households who were working mentioned easy access to the workplace and reduced costs of transportation as a reason for their settlement in the informal settlements. Much as earlier researchers have not paid attention to this finding, it implies that there is a need for government to come up with supporting policies that ensure that companies offer formal settlements to their employees or offer an appropriate salary to cater for the day-to-day expenses of their employees.

The study findings showed that access to education and health services was a reason for their settlement in the informal settlements. The household heads highlighted how their intention to access education and health facilities influenced their decisions to stay in the informal settlements. This result has not been earlier described by previous researchers; however, this finding can be attributed to the availability of better social services in the city. In this regard, people settle in the informal settlements for easy access to these services at convience rather than travelling back and forth in the rural areas. It is therefore important to consider infrastructure development in other areas to reduce informal settlements in the city.

The study finding also shows low income as one of the reasons for the informal settlements. The households comfortably settled in the informal settlements due to low incomes that tandem with low disposable income for renting in the highly-priced formal settlements. This finding is in line with the study which found that low income and poverty were among the causes of the expansion of informal settlements in Egypt (Diab *et al.* 2020).

#### **4.4 The current situation of the informal settlements**

##### **4.4.1 Housing conditions in informal settlements**

In Table 4.4, majority (74%) of the people in the informal settlements were tenants. Most of the people were living in houses with brick and cement walls (72%), iron sheet roofing (98%) and cemented floors (77%). About half (52%) of the respondents reported worry for being evicted from their residence. The reported reasons included risk of eviction by National authorities (38%), risk of eviction by the Local authorities (24%) and risk of eviction by the landlord (21%). Risk of eviction by National authorities was an outstanding reason reported among respondents in Namuwongo (100%), Bwaise (67%) and Katanga (60%) while risk of eviction by the Local authorities was common within Kamwokya (67%) and also in Katanga (53%) and risk of eviction by landlord was mostly reported within Bwaise (50%) and Wabigalo (44%).

**Table 4.4** Housing conditions in the informal settlements

General			Informal Settlement					
	Frequency	Percentage (%)	Bwaise	Kamwokya	Katanga	Naguru	Namuwongo	Wabigalo
<b>Housing Status**</b>								
<b>Owner</b>	27	23%	9 (47%)	2 (10%)	0 (0%)	3 (16%)	8 (42%)	5 (25%)
<b>Tenant</b>	86	74%	8 (42%)	17 (85%)	19 (100%)	16 (84%)	11 (58%)	15 (75%)
<b>Other</b>	3	3%	2 (11%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Housing Material</b>								
<i>Walls</i>								
<b>Brick+Cement</b>	87	72%	18 (90%)	12 (60%)	12 (60%)	14 (70%)	13 (65%)	18 (90%)
<b>Brick+Mud</b>	7	6%	1 (5%)	0 (0%)	2 (10%)	2 (10%)	2 (10%)	0 (0%)
<b>Wood+Mud</b>	16	13%	1 (5%)	5 (25%)	4 (20%)	2 (10%)	3 (15%)	1 (5%)
<b>Mud</b>	9	8%	0 (0%)	3 (15%)	2 (10%)	2 (10%)	1 (5%)	1 (5%)
<b>Metallic</b>	1	1%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (5%)	0 (0%)
<i>Roofing</i>								
<b>Iron sheets</b>	118	98%	20 (100%)	20 (100%)	20 (100%)	18 (90%)	20 (100%)	20 (100%)
<b>Tiles/Slates</b>	2	2%	0 (0%)	0 (0%)	0 (0%)	2 (10%)	0 (0%)	0 (0%)
<i>Floor</i>								
<b>Cement</b>	93	77%	17 (85%)	10 (50%)	16 (80%)	18(90%)	15 (75%)	17 (85%)
<b>Mud</b>	21	17%	3 (15%)	8 (40%)	3 (15%)	1 (5%)	5 (25%)	1 (5%)
<b>Tiles</b>	4	3%	0 (0%)	0 (0%)	1 (5%)	1 (5%)	0 (0%)	2 (10%)
<b>Wood</b>	1	1%	0 (0%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Others</b>	1	1%	0 (0%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Worried about being evicted from residence</b>								
<b>Yes</b>	63	52%	12 (60%)	6 (30%)	15 (75%)	6 (30%)	15 (75%)	9 (45%)
<b>No</b>	49	41%	5 (25%)	11 (55%)	5 (25%)	13 (65%)	5 (25%)	10 (50%)
<b>Don't know / refused to respond</b>	8	7%	3 (15%)	3 (15%)	0 (0%)	1 (5%)	0 (0%)	1 (5%)
<b>Reasons for worry of being evicted*. **</b>								
<b>Risk of eviction by National authorities</b>	36	38%	8 (67%)	2 (33%)	9 (60%)	0 (0%)	15 (100%)	2 (22%)
<b>Risk of eviction by the Local authorities</b>	23	24%	5 (42%)	4 (67%)	8 (53%)	2 (33%)	0 (0%)	4 (44%)
<b>Risk of eviction by the landlord</b>	20	21%	6 (50%)	2 (33%)	6 (40%)	2 (33%)	0 (0%)	4 (44%)
<b>Rent owed</b>	11	12%	3 (25%)	1 (17%)	4 (27%)	2 (33%)	0 (0%)	1 (11%)
<b>The documents I have do not protect me (no contract, no identity documents)</b>	4	4%	2 (17%)	0 (0%)	2 (13%)	0 (0%)	0 (0%)	0 (0%)
<b>Other</b>	1	1%	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (11%)

Note: \* This was a multiple response question

As shown above, the majority of the households lived in proper houses with walls made from bricks and cement, iron sheets as roofing materials, and cement as the floor material. However, most of these were tenants as many household heads acquired their houses renting from an individual. This finding differs from that of Taylor *et al.* (2015) who showed self-constructed houses as the most method of acquisition of houses in the informal settlements of Zambia. The contradiction in the findings can be attributed to the high risk of mobility in the informal settlement's households due to marriage, employment/appointment issues, desire to live independently, and divorce among others. This indicates the need to consider problems associated with tenancy as a core part of the Kampala City housing issues.

On top of this, the respondents in the informal settlement were living a worrying life as slightly more than half (52%) reported worrying about being evicted from their residence. The respondents were in worry about being evicted from their informal settlement by several stakeholders such as National Authorities, local authorities, and landlords. A portion of thirty-eight per cent (38%) of the respondents reported worry of eviction by the National authorities and this was a particular case in the Namuwongo settlement (100%). The other 24% highlighted the fear of eviction by the local authorities especially in Kamwokya (67%) while 21% were in fear of eviction by the landlord but severe in Bwaise (50%).

The study showed that household heads in informal settlements live a worrying life. This is because many were in fear of eviction. This can be attributed to the illegal settlement and political tensions that are associated with informal sector dwellers among others. This finding adds to the need for the development of laws that are clear and seek preventative solutions rather than the courts doing damage control after peoples' rights have already been violated

#### **4.4.2 Perceptions toward living in the informal settlements**

From the Table 4.5 below, the study participants also held a positive attitude towards living in informal settlements. This was after the majority of the respondents (67%) attested that they would, while 33% would not recommend their family and friends to stay within the informal settlement. Those who would recommend their family and friends to stay within the informal settlement attributed this to the low cost of living (36%), good leadership and peace (26%) and business-friendly environment (18%). On the other hand, those who would not recommend highlighted some of the factors among which included poor sanitation (40%) and insecurity (23%). This signifies the fact that the most challenging problems faced by the informal settlement dwellers is poor sanitation and insecurity plus the effects that come with



these. Therefore, if the informal settlements are to be improved, the major areas the authorities need to focus on are proper sanitation and better security services,

It is also noted from the study results that household heads have a positive attitude towards living in informal settlements. Previous researchers have not paid particular attention to the attitude issue. However, this result indicates the possibility of noncompliance with interventions aimed at improving informal settlements that require reallocation of funds to upgrade the informal settlements. Owing to their positive attitude to stay in the informal settlement, household heads in the informal may resist relocation due to benefits derived from their informal settlements.

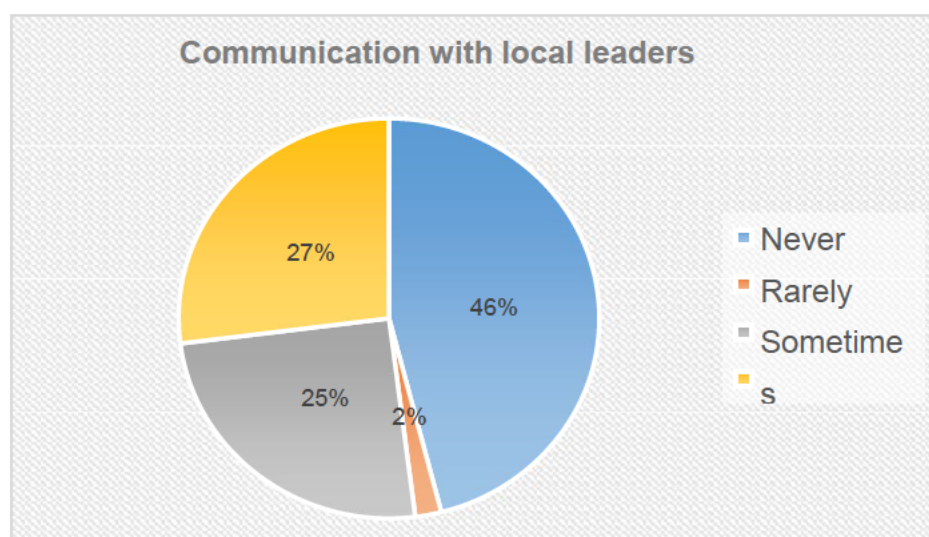
**Table 4.5:** Perceptions about staying in an informal settlement

	General		Informal Settlement					
	Frequency	Percentage (%)	Bwaise	Kamwokya	Katanga	Naguru	Namuwongo	Wabigalo
<b>Recommend family/friends to stay in this area</b>								
Yes	80	67%	14 (70%)	16 (80%)	13 (65%)	16 (80%)	10 (50%)	11 (55%)
No	40	33%	6 (30%)	4 (20%)	7 (35%)	4 (20%)	10 (50%)	9 (45%)
<b>If yes, reasons</b>								
Low cost of living	26	36%	7 (54%)	2 (14%)	4 (44%)	4 (25%)	8 (80%)	1 (10%)
Good leadership and peaceful	18	25%	4 (31%)	9 (64%)	1 (11%)	1 (6%)	0 (0%)	3 (30%)
Business friendly	13	18%	0 (0%)	3 (21%)	1 (11%)	3 (19%)	2 (20%)	4 (40%)
Easy access to services and CBD	8	11%	0 (0%)	0 (0%)	1 (11%)	5 (31%)	0 (0%)	2 (20%)
Availability of work	7	10%	2 (15%)	0 (0%)	2 (22%)	3 (19%)	0 (0%)	0 (0%)
<b>If no, reasons</b>								
Poor sanitation	14	40%	2 (50%)	2 (50%)	1 (17%)	1 (33%)	6 (67%)	2 (22%)
Insecurity	8	23%	1 (25%)	0 (0%)	2 (33%)	0 (0%)	3 (33%)	2 (22%)
High cost of living	5	14%	0 (0%)	0 (0%)	1 (17%)	0 (0%)	0 (0%)	4 (44%)
Poor standards of living	5	14%	1 (25%)	0 (0%)	2 (33%)	1 (33%)	0 (0%)	1 (11%)
No jobs	3	9%	0 (0%)	2 (50%)	0 (0%)	1 (33%)	0 (0%)	0 (0%)

*Note: \* This was a multiple response question*

#### 4.4.3 Communication with the local leaders

The respondents reported having no communication with their local leaders in all the informal settlements. This is certainly true as most (46%) of the respondents consented to not having any, 27% often, 25% sometimes, and 2% rarely communication with the local leaders as shown in the Figure 4.4 below.



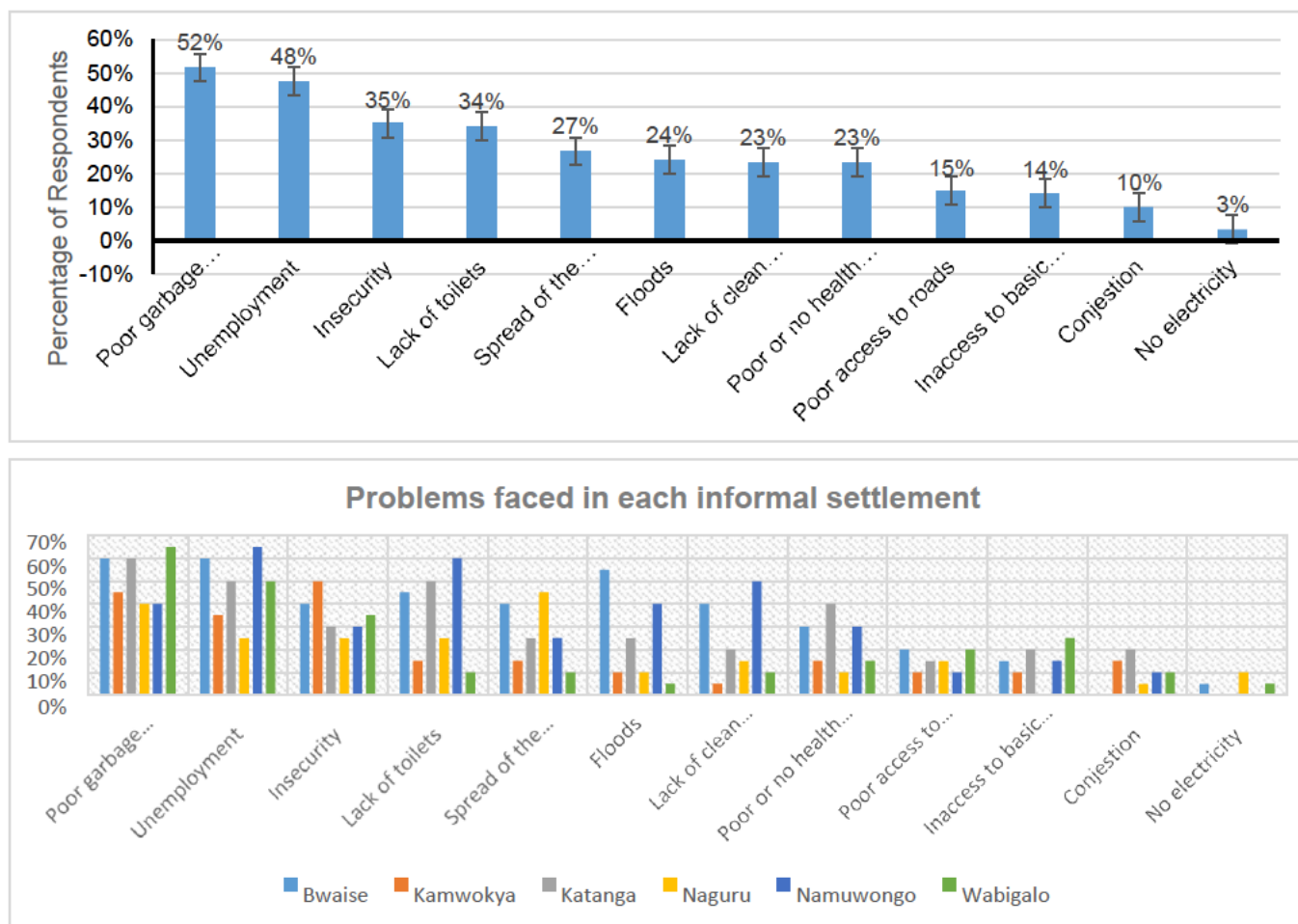
**Figure 4.4:** Communication with the local leaders

The study revealed limited communication with the local leaders in the informal settlements. Many households never communicate with their local leaders. Since, community leaders have a significant role in voicing the concern of the public for widening access to public services by the government and helping to overcome the temporality of tenure of the plots (Haque *et al.* 2021; Rivera, 2020). This suggests that there is a need for better supporting informal settlement leaders to collaborate with the household heads in the informal settlement for better service delivery.

#### **4.5 Problems existing in the informal settlements**

Living in informal settlements is challenging as the study clearly showed that the respondents were faced with challenges as presented below.

The common problems to all the settlements highlighted were poor garbage collections systems (52%), followed by unemployment (48%), insecurity (35%) and lack of toilets (34%) as shown in Figure 4.5. Additionally, the reported problems ranked differently by residents in each informal settlement were poor garbage collection systems for Wabigalo (65%), Bwaise (60%), Katanga (60%), while insecurity (50%) for Kamwokya, unemployment (65%) for Namuwongo and spread of the epidemic for Naguru (45%).

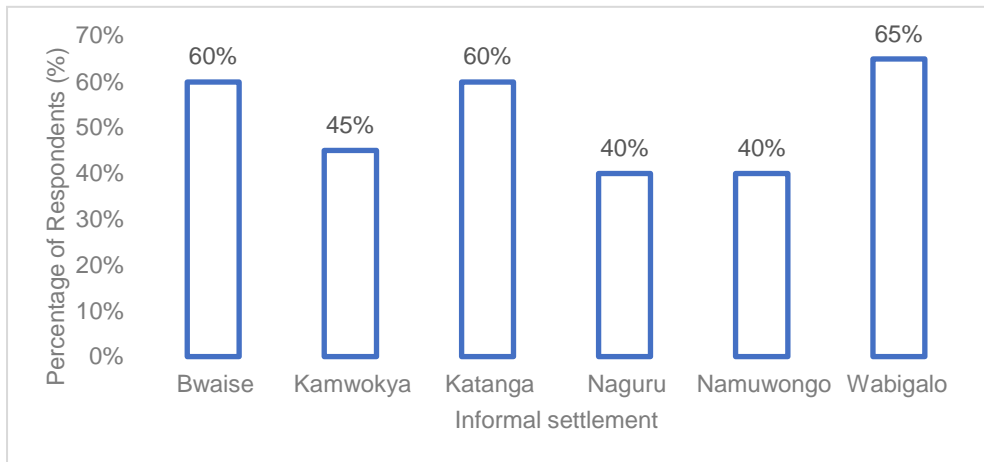


**Figure 4.5: Problems faced within the informal settlements**

#### 4.5.1 Sanitation and hygiene challenges

##### a) Poor garbage management

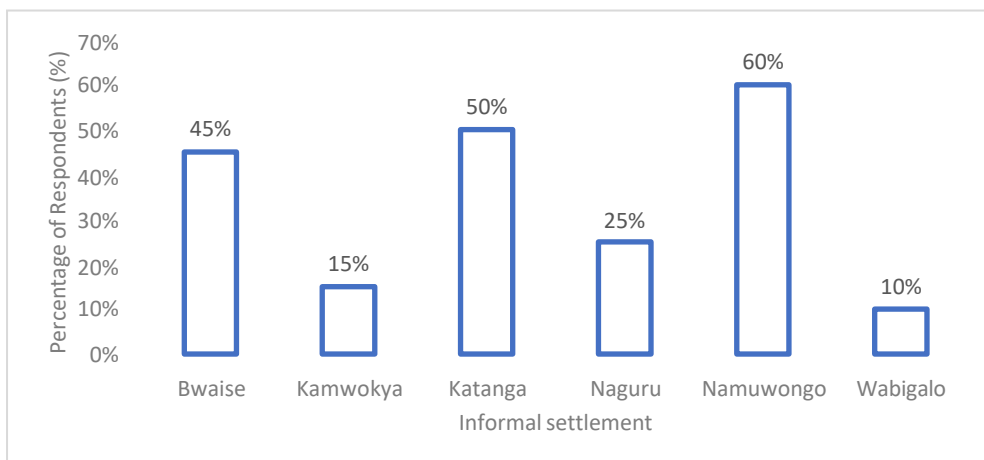
The study found that people living in informal settlements have a challenge of poor garbage management. (52%) of all the study respondents highlighted being challenged with poor garbage collections mechanisms. This was a challenge across all the study of informal settlements but predominant in the Wabigalo informal settlement as shown in Figure 4.6.



**Figure 4.6:** Poor waste management in informal settlements

### **b) Lack of toilet facilities**

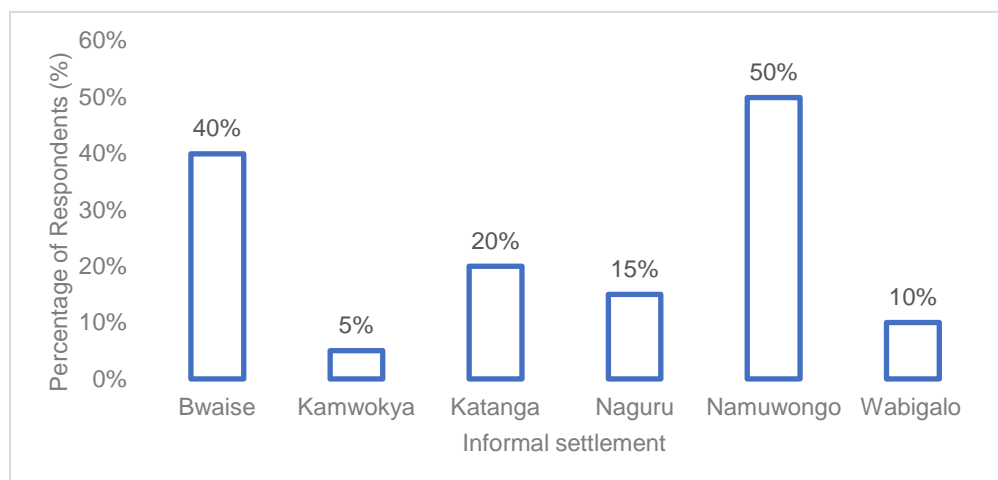
The study found that respondents (34%) in informal settlements are challenged with a lack of toilet facilities. The situation in most informal settlements is communal toilets which have to be paid for. There is dire need for every household to have a toilet facility so that waste is not dumped in trenches and garbage collection points. The lack of toilet facility challenge is a big issue in the Namuwongo informal settlement (60%) much as it extends to all the other informal settlements.



**Figure 4.7:** Lack of toilet facilities in informal settlements

### **c) Unsafe drinking water**

The study found that respondents (23%) in informal settlements are challenged with unsafe drinking water. This particular challenge was highlighted in all the informal settlements but predominant in Namuwongo informal settlements where it was ranked at 50%.



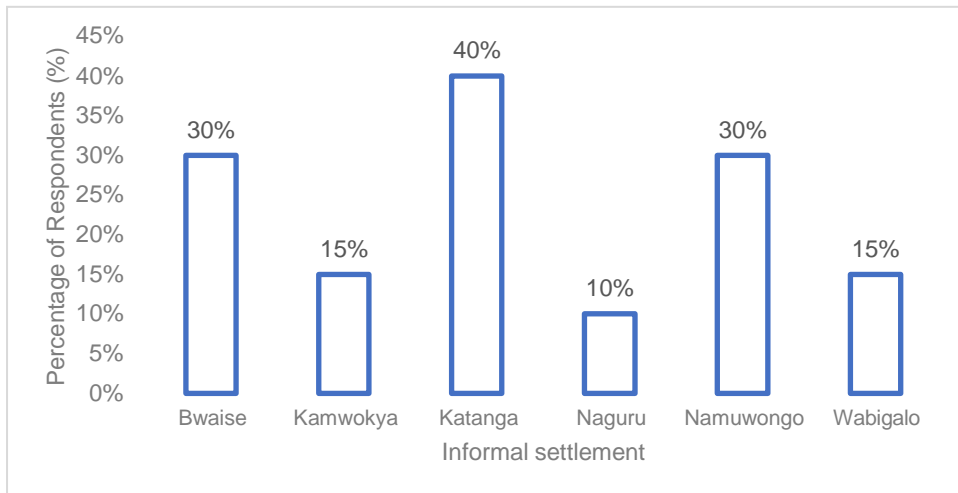
**Figure 4.8:** Unsafe drinking water in informal settlements

As shown in this section of the study, household heads in the informal settlements are faced with poor garbage management, lack of toilet facilities, and unsafe drinking water. The household heads mentioned that depicting the increase in waste management services by the KCCA and private companies, waste management has not received consideration in the informal settlements. In addition, the households didn't have household toilet facilities which often resulted in improper household sanitation practices such as open defecation. Lastly, the households also lacked access to safe drinking water. This finding supports and is consistent with the findings that revealed poor sanitation as one of the challenges in informal settlements (Simiyu *et al.* 2019). This result can be attributed to the unethical behaviors of dumping rubbish anywhere as well as the focus on waste collection focusing on marketplaces, formal settlements, and roads. This indicates that there is a need to empower members in the informal settlements to adopt circular economy practices such as plastic recycling, and making briquettes among others to address the issues of poor waste management. This can be through offering training to enhance their skills as well as offering capital to stimulate waste to wealth or waste to energy initiatives in the informal settlements. In addition, there should be interventions by the government to build shared toilets and water facilities in the informal settlements.

#### 4.5.2 Infrastructure challenges in the informal settlements

##### a) Poor health facilities

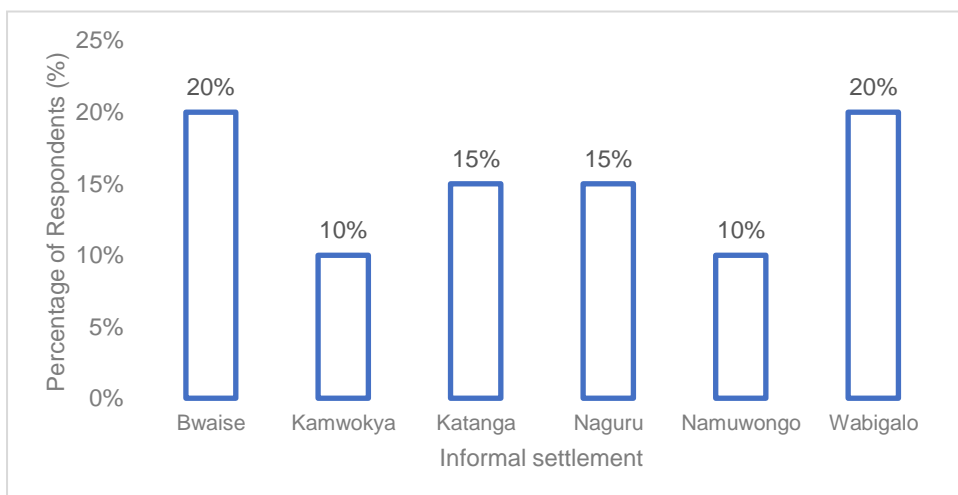
The study found that respondents (23%) in informal settlements are challenged with poor health facilities. This particular challenge was highlighted in all the informal settlements but predominant in Katanga informal settlements where it was ranked at 40%.



**Figure 4.9: Poor health facilities in informal settlements**

#### **b) Limited road infrastructures**

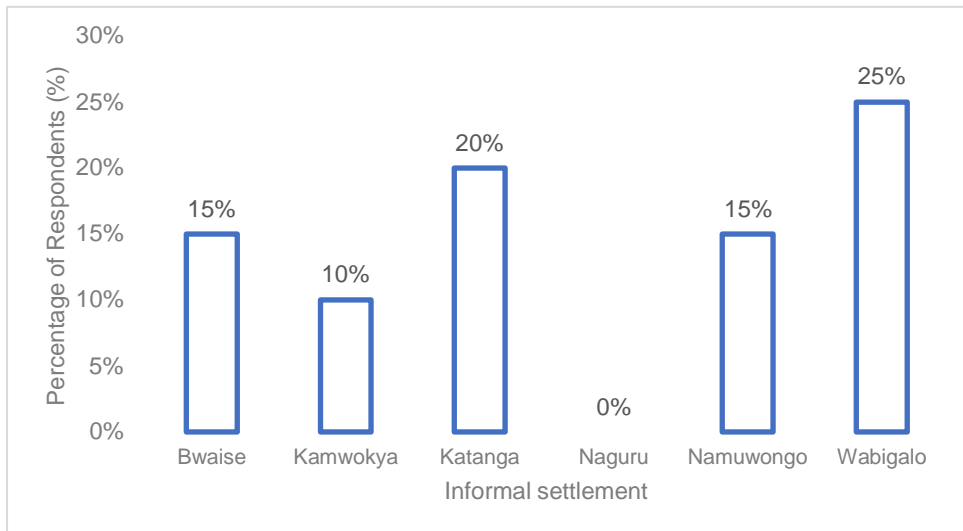
The study found that respondents (15%) in informal settlements are challenged with limited road infrastructures. This particular challenge was highlighted in all the informal settlements but predominant by 20% in both Naguru and Wabigalo informal settlements.



**Figure 4.10: Limited road infrastructure in informal settlements**

#### **c) Limited access to basic education**

The study found that respondents (14%) in informal settlements are challenged with limited access to basic education. This particular challenge was highlighted in all the informal settlements but predominant in Wabigalo informal settlements at 25%.



**Figure 4.11:** Limited access to basic education in informal settlements

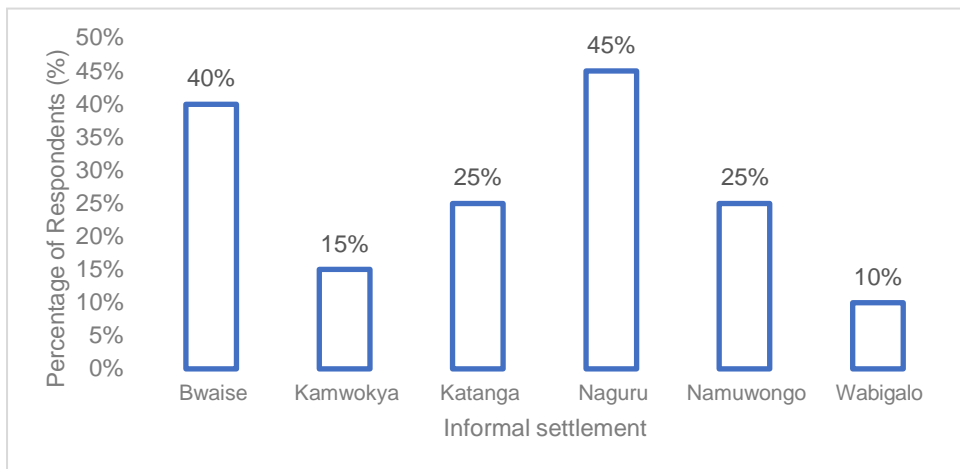
The study ably depicted poor health facilities, limited road infrastructures, and limited access to basic education as the infrastructure challenges in the informal settlements. The household heads pointed out how they didn't have the basic infrastructures while those that were available were in a poor state. It is worth noting however, that in some of the informal settlements, access to basic education was not highlighted as a problem which shows that the government intervention in providing access to basic education is progressing well. Uwizeye *et al.* (2022) matched this finding as his study revealed that residents of informal settlements are challenged with inadequate access to education and sub-standard healthcare services in Rwanda. This implies that infrastructure development should not be excluded from the interventions to develop the informal settlements.

### 4.5.3 Natural disaster challenges

#### a) Disease Epidemics

The study found that respondents (27%) in informal settlements are challenged with disease epidemics. This particular challenge was highlighted in all the informal settlements but predominant in Bwaise and Naguru informal settlements ranked at 40% and 45% respectively, for example Cholera which ripped Uganda through ghettos in 1998.

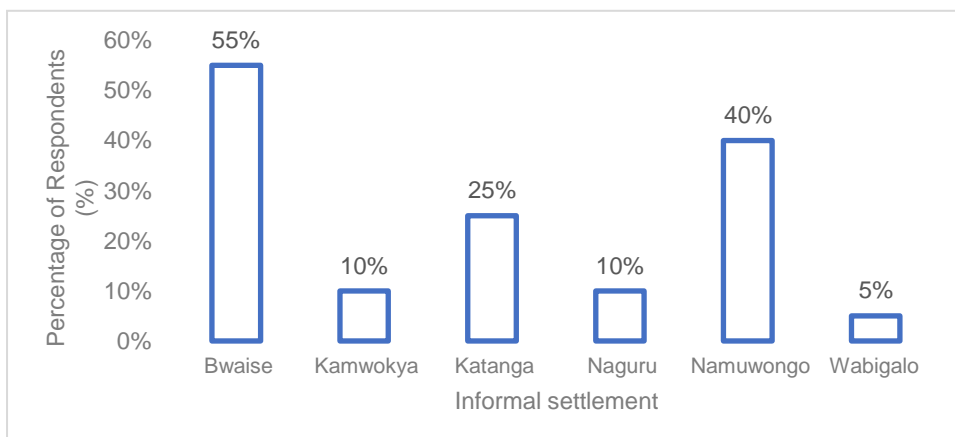




**Figure 4.12:** Disease epidemics in informal settlements

### b) Natural Disasters

The study found that respondents (24%) in informal settlements are challenged with natural disasters (floods). This particular problem was highlighted in all the informal settlements but predominant in Bwaise (55%) and Namuwongo (40%) informal settlements.



**Figure 4.13:** Natural disasters in informal settlements

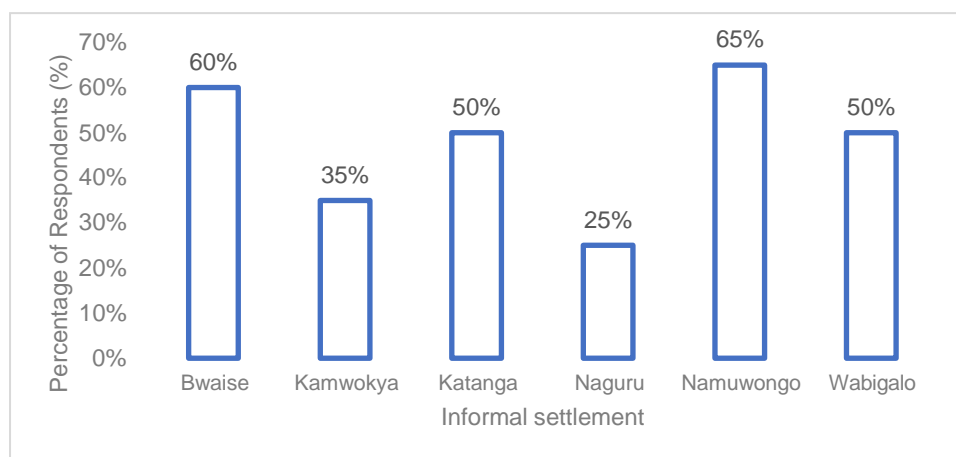
The study results show natural disasters and disease epidemics as the natural challenges in informal settlements. The household heads highlighted being challenged with diseases and floods. This finding agrees with that of Simiyu *et al.* (2019) who established flooding during the rainy season is a common challenge in informal settlements. This suggests the need for developing programs to mitigate and adapt to natural disasters such as floods. This can be through training people in the informal settlements on practical measures such as clearing drainage channels to avoid flooding.



#### 4.5.4 Livelihood challenges

##### a) Unemployment

Overall, some study participants (48%) highlighted that they were challenged with high unemployment rates. The challenge of unemployment was cutting across all the study informal settlements. However, this was a predominant case in the Namuwongo and Bwaise informal settlements where 65% and 60% respectively of the respondents are faced with unemployment as shown in Figure 4.14



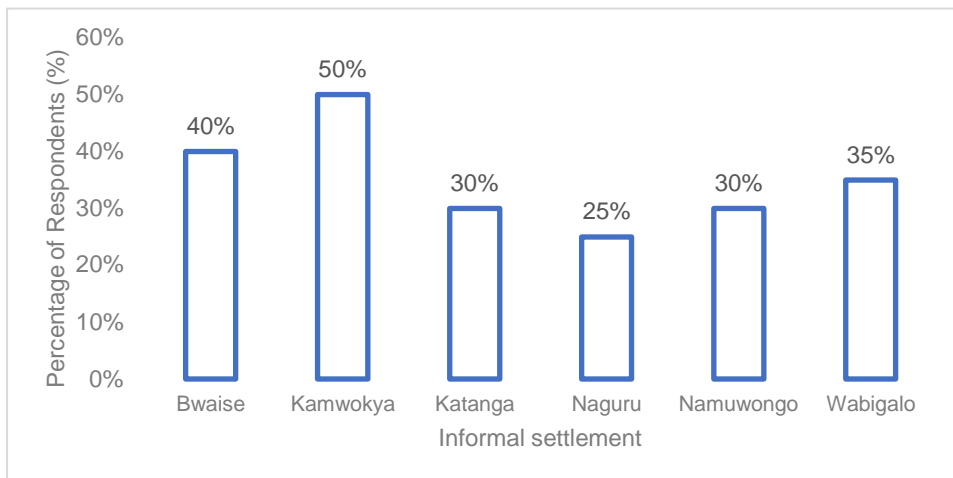
**Figure 1.14:** Unemployment in informal settlements

The figure 1.14 above shows unemployment as a cross-cutting challenge occurring in every informal settlement. The household heads cried out that were challenged with high unemployment rates despite their willingness to engage in work. This finding has received less consideration from previous researchers.

However, it uncovers the need to stimulate the development of informal businesses to increase employment opportunities for the people in the informal settlements. This can be achieved through offering capital to informal settlement-based saving groups, supporting the local small businesses in the informal settlements with soft loans, market, low or tax exemptions so that they can scale and employ even more people

##### b) Insecurity

Informal settlements are also challenged with insecurity issues as 35% of the study participants reported experiencing the challenge of insecurity. This insecurity challenge is an informal settlement phenomenon as this was highlighted in all the study informal settlements with Kamwokya informal settlement reporting it at 50% as shown in Figure 4.15.

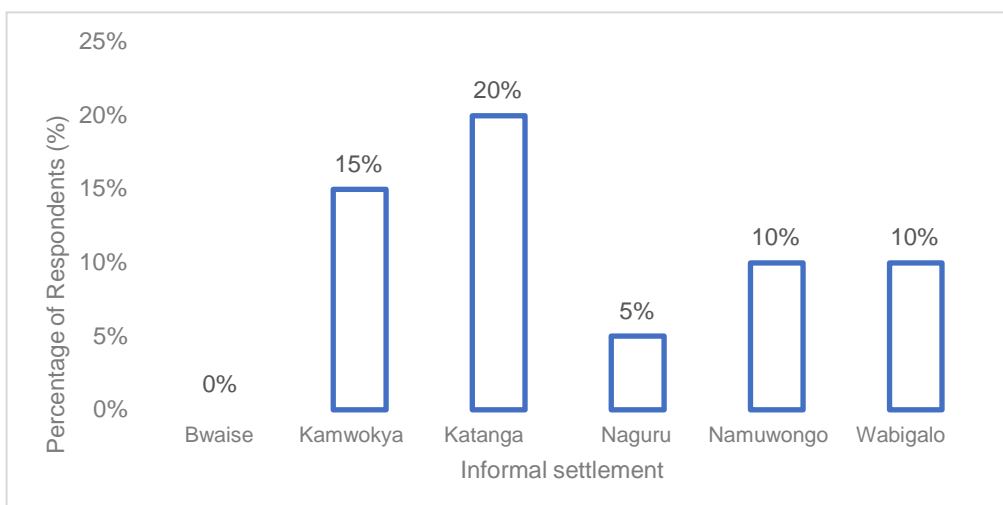


**Figure 4.15:** Insecurity challenge in the informal settlements

The study findings showed insecurity as one of the challenges in informal settlements. The household heads highlighted both land insecurity and safety insecurity as some of the challenges in the informal settlements. Bandaiko *et al.* (2022) in their study also found insecurity as a challenge in the informal settlements of Ethiopia. This result can be attributed to the legal land ownership in the informal settlements and political tension where people in the informal settlements are perceived to be the cause of political insecurity in the country. This shows a need for the government to establish proper housing facilities in the informal settlements or establish a well-elaborated procedure for acquiring land.

### c) Congestion / over population

The study found that respondents (10%) in informal settlements are challenged with congestion/overpopulation. This particular challenge was highlighted in all the informal settlements but predominant in Kamwokya and Katanga informal settlements.

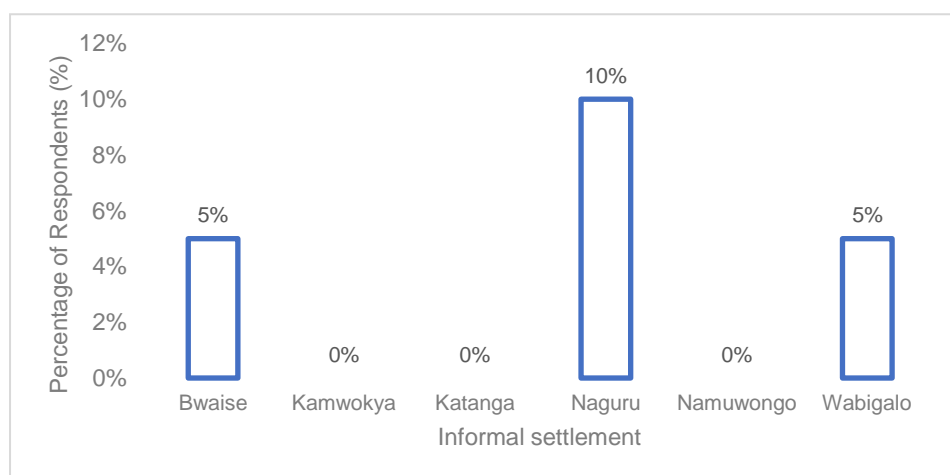


**Figure 4.16:** Congestion in informal settlements

The study revealed overcrowding as one of the challenges in informal settlements. The households felt that they didn't have enough space in the informal settlements. This result has not been earlier described by the previous researcher. However, it necessitates the need for decongesting the informal settlements through the development of other towns and cities in the country, relocation of the dwellers and putting up better planned settlements

#### **d) Limited sources of energy**

The study found that respondents (3%) in informal settlements are challenged with limited sources of energy. This particular challenge was not highlighted in all the informal settlements but predominant in Naguru informal settlements.



**Figure 4.17:** Limited source of energy in informal settlements

As shown above, lack of electricity did not come out as a major challenge in the informal settlements. The study household heads mostly in the Naguru informal settlement mentioned that they didn't have access to electricity while others lacked a source of fuel to prepare their meals. This indicates that households in the informal settlements are deprived of a livelihood. As such, there is a need for government to lower the tariffs for electricity in the informal settlements to ensure the availability of sources of energy.

## 4.6 Recommended solutions

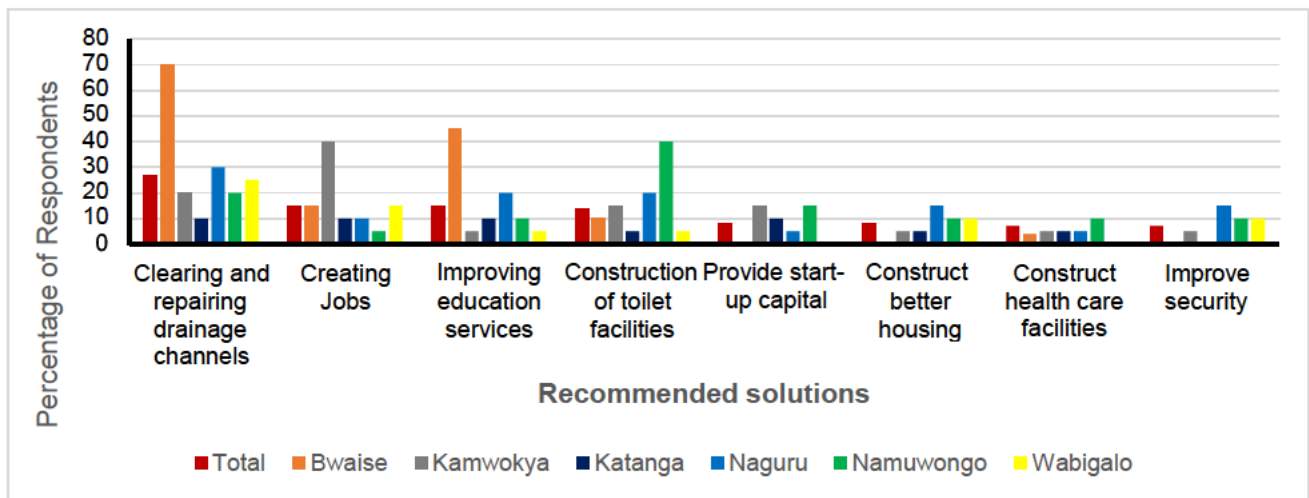
### 4.6.1. Solutions recommended by informal settlement dwellers

According to the respondents, the top-ranking solutions and recommendations given were sanitation [entailing clean water, drainage] (27%), job creation (15%), improving education services (15%) and construction of toilets (14%). The reported suggestions were statistically similar across the different informal settlements.

**Table 4.6:** Recommended Solutions

	General		Informal Settlement					
	Frequency	Percentage (%)	Bwaise	Kamwokya	Katanga	Naguru	Namuwongo	Wabigalo
Recommended solutions or areas of focus*								
<b>Sanitation **</b> (clean water, drainage)	35	27%	14 (70%)	4 (20%)	2 (10%)	6 (30%)	4 (20%)	5 (25%)
<b>Create jobs**</b>	19	15%	3 (15%)	8 (40%)	2 (10%)	2 (10%)	1 (5%)	3 (15%)
<b>Improve education services**</b>	19	15%	9 (45%)	1 (5%)	2 (10%)	4 (20%)	2 (10%)	1 (5%)
<b>Construct toilets**</b>	18	14%	2 (10%)	3 (15%)	1 (5%)	4 (20%)	8 (40%)	0 (0%)
<b>Provide start-up capital</b>	11	8%	0 (0%)	3 (15%)	2 (10%)	1 (5%)	3 (15%)	2 (10%)
<b>Construct better housing</b>	10	8%	0 (0%)	1 (5%)	1 (5%)	3 (15%)	2 (10%)	3 (15%)
<b>Construct health care facilities</b>	9	7%	4 (20%)	1 (5%)	1 (5%)	1 (5%)	2 (10%)	0 (0%)
<b>Improve security</b>	9	7%	1 (5%)	1 (5%)	0 (0%)	3 (15%)	2 (10%)	2 (10%)

The graph below shows a representation of the responses. The study revealed that some of the measures that can be put in place to improve their standards of living include cleaning water drainage channels, job creation, improving education services, and construction of toilet facilities as shown in the Figure 4.18 below.



**Figure 4.18:** Recommended solutions

The figure above shows that there are interventions that can be put in place to improve the informal settlements. These have also been found suggested by earlier researchers such as (Uwizeye *et al.* 2022; Walter and Beal, 2020; Lambert and Denckla, 2020; Bandauko *et al.* 2022). This indicates that there are some measures that the government of Uganda and other development agencies can rely on to improve the informal settlements.

#### 4.6.2 Solutions linked to the problems faced and stakeholders responsible

**Table 4.7:** Solutions to the challenge and responsible stakeholder

Challenges	Measures put in place	Responsible stakeholder
Waste management	Encouragement of circular Economy practices (39%)	International Development Agencies (e.g., GGGI, GIZ) (84%)
		Local leaders (7%)
		Informal settlement dwellers (9%)
	Hiring and increase in waste collection companies (61%)	KCCA (85%) Landlords (15%)
Insecurity	Community policing (10%)	Uganda policy (100%)
	Establishment of police cells and patrols (12%)	Uganda Policy (100%)
	Establishment of local defense units (70%)	Informal settlement dwellers (100%)
	Hiring private security companies (8%)	Landlords (100%)
Lack of toilet facilities	Construction of shared toilet facilities (67%)	Non-government Organizations (71%)
	Construction of household toilet facilities (33%)	Landlords (29%)
Unsafe drinking waters	Establishment of water collection points (100%)	NWSC (68%)
		Landlords (32%)
Poor health facilities	Construction of health facilities (29 %)	Government (20%)
		Non-Government Organizations (e.g., Marie-stopés) (80%)
	Free provisional of health services, health camps (71%)	Non-Government Organizations (e.g., Marie-stopés) (100%)

## **CHAPTER FIVE: DISCUSSION OF RESULTS**

### **5.0 Introduction**

Chapter five spotlights on conversation of results acquired in chapter four and answers the fundamental underlying research questions. The results of the data analyses are presented, understanding and relieving solutions are given under the individual major classifications. This chapter will look into the validation of the framework approach that will effectively improve the informal settlements in Kampala City, to achieve better habitable conditions for the informal settlement dwellers and improved service delivery in such areas.

The conceptualization of this research was shaped from the theory that a thoroughly examined and successfully executed system for informal settlements can bring about attainable human settlements. To achieve this, quantitative techniques were utilized. Research questionnaires were administered to the informal settlement dwellers in the areas of Katanga, Bwaise, Kamwokya, Namuwongo, Wabigalo and Naguru. The data gathered from the respondents was dissected with exploratory examination.

The study identified that for the respondents that remained in the informal settlements, the investigation tracked down that 30% of the respondents mentioned 2-10 years and 26% mentioned more than ten years. A big portion of the respondents had resided in the areas since birth, with Bwaise enrolling the most noteworthy number.

### **5.1 Reasons for migration from rural areas to Kampala city**

On the reasons behind the respondents' relocation to the informal settlements, 47% of them stated that they moved to look for some kind of employment while 22% moved looking for better service delivery. Several factors were fronted by the 120 respondents for reasons that influence migration from the rural areas to the city of Kampala. The reasons included:

- i. To find work
- ii. To access social services in the city
- iii. Family factors
- iv. Security and safety
- v. Social pressure
- vi. Better housing conditions and others

According to the 120 respondents from the six informal settlements areas of Katanga, Kamwokya, Bwaise, Namuwongo, Naguru and Wabigalo, finding work was the main reason that influenced migration and it stood at 47%. The second most crucial reason for migration was the need for social services which are readily available in the city at 22%. Family factor came third at 13%. 70% of the respondents from Katanga emphasized the need to find work as the major reason for migration from rural areas to the city of Kampala, Namuwongo was at 50%, Kamwokya was at 45%, Wabigalo at 40%, Naguru at 35% and lastly Bwaise at 30%.

On the other hand, the top three reasons given by respondents for settling in the informal encampments included:

- i. Family attachment, which was represented by 35%
- ii. Low cost of housing represented by 17%
- iii. Proximity to workplace represented by 12%

With respect to the issue of settling in the informal settlements, 35% of the respondents settled on account of family connection, followed by 17% who settled because of the low cost of housing. Bwaise recorded the most noteworthy number of respondents who settled due to family connection.

About living conditions, the investigation discovered that a greater part (74%) of the respondents were inhabitants with 72% of the respondents abiding in houses made up of block and concrete dividers.

On the part of correspondence and collaboration with local leaders, 46% of respondents said they never speak with them, with an alarmingly small percentage, just 2%, mentioning that they frequently spoke to their local leaders.

## **5.2 Problems currently faced by informal settlement dwellers**

The informal settlements in Kampala city have several problems they face on a daily. The findings revealed that poor garbage collection system was the number one problem for the respondents rated at 52%, followed by unemployment at 48%, insecurity at 35% and lack of toilets tied at 34%.

Regarding feedback per area, Wabigalo (65%), Bwaise (60%) and Katanga (60%) rated poor garbage collection system as the highest-ranking problem. Kamwokya on the other hand, rated insecurity (50%) as their highest-ranking problem. Namuwongo's highest ranking problem according to respondents was unemployment (65%) while for Naguru it was the spread of epidemic diseases (45%).



The study tracked down the 80 out of the 120 respondents who mentioned that they would freely suggest to their family members and companions in the rural regions to come and live with them in the informal settlements. This obviously showed that 67% of the respondents we engaged in the study loved living in the informal settlements. The reasons given were:

- a. Low average cost for basic items
- b. Good administration from the local authorities
- c. Business well disposed
- d. Easy access to social services and the central business district
- e. Availability of work

A portion of the respondents (52%) indicated that they were stressed and worried that they would be evicted, with 38% of them pointing fingers towards national authorities who they suspected to spearhead any impending evictions.

### **5.3 Solutions suggested for the problems faced by informal settlement dwellers**

Respondents (27%) suggested that a great deal of emphasis be put on further developing disinfection which involves clean water and waste. Furthermore, several solutions were also suggested by the respondents in order to curb the problems they faced on a daily basis. The top four solutions included:

- i. Improving sanitation: 27% of the respondents suggested improving sanitation, with much emphasis on clean areas of habitation and drainage.
- ii. Job creation: Out of the 120 respondents interviewed from all the six areas, 15% suggested availing avenues for job creation to solve the problems they were facing.
- iii. Improving education services: 15% of the respondents suggested more effort towards improving education services in their areas of residence, with emphasis on affordable quality education for their children.
- iv. The other solution that was suggested by respondents was the construction of toilets (14%).

### **5.4 Improvement for Informal settlements framework**

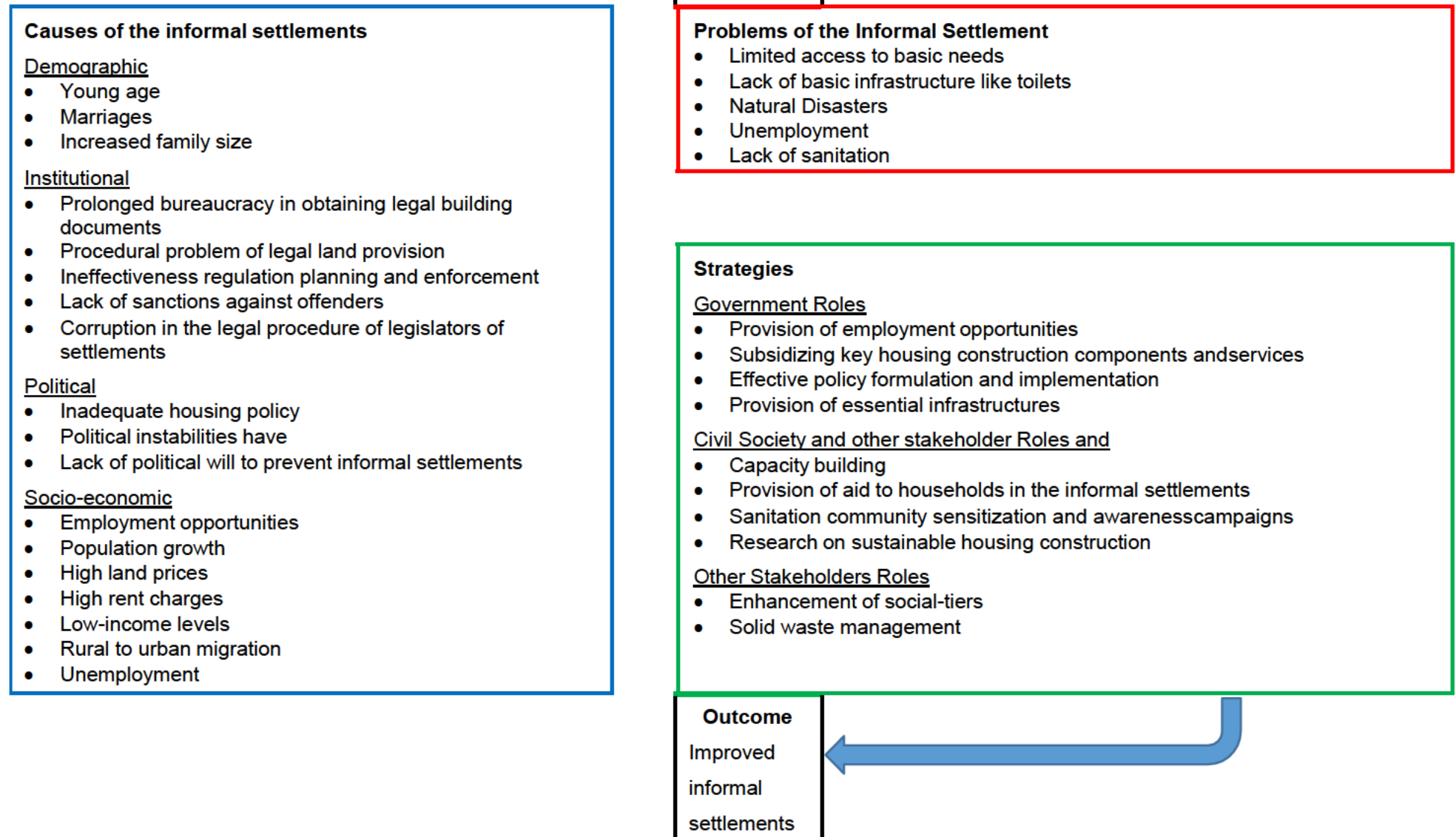
Based on the results of the literature and informal settlements surveys that were conducted for this study by the researcher, it was now possible for the researcher to design own relevant framework for the improvement of informal settlements in Kampala City, Uganda. Figure 5.1 exhibits the framework that has been developed for orderly improvement of informal settlements in Kampala City. As noted, the framework has three main components, namely: informal settlements, government and civil society together with development partners. Informal settlements are simply defined in this framework as illegal dwelling areas that were built by informal settlement dwellers in Kampala City, Uganda. Bwaise, Katanga, Naguru, Kamwokya, Namuwongo and Wabigalo are the six major informal settlements that were identified in Kampala City through this study.

Government as a component of this framework refers to government institutions that have an essential role to play in the provision of services in the informal settlements including national government, local government / authority and statutory bodies. At national level, the Ministries of Lands, Housing and Urban Development; and Ministry of Finance, Planning and Economic Development are the key Ministries responsible for policy and provision of services to informal settlements. Locally, Kampala Capital City Authority is responsible for implementation of policy and provision of services to the informal settlements. Finally, civil society organizations which include NGOs, CBOs, FBOs, independent research institutes and all development partners support government and informal settlement dwellers in the provision of essential services in the informal settlements.

Of significance, the framework shows clearly the underlying causes of informal settlements in Kampala City, Uganda. These causes include: demographic, institutional, political, and socio-economic as elaborated in Figure 5.1 below. The problems that are being experienced by the informal settlement dwellers are also highlighted in the framework of which the most important are: poor sanitation, unemployment, insecurity and lack of basic infrastructure like toilets. Solutions that can be introduced in the informal settlements by all parties responsible for the improvement of informal settlements in Kampala City that include government, civil society and other development partners are also given by the framework. The study noted that job creation, improved sanitation, effective housing policy, and provision of basic infrastructure as among the major solutions that can be introduced in order to make lives of informal settlement dwellers in Kampala City better off in the future.

To conclude, this framework was developed by the researcher as a tool that can be used by all parties involved with the processes of improvement of informal settlements in Kampala City. Furthermore, this framework will enormously contribute to knowledge in the tackling of related challenges in the other cities in Africa and globally.

Figure 5.1 Improvement of informal settlement framework



## **CHAPTER SIX: FRAMEWORK FOR IMPROVEMENT OF INFORMAL SETTLEMENTS**

### **6.0 Introduction**

This chapter provides a framework for developing informal settlements based on the study findings and the already existing literature. The framework provides critical insights to the government and its institutions such as the Ministry of Lands Housing and Urban Development (MLHUD) and the National Planning Authority (NPA) as well as stakeholders in the urban development and housing space in Uganda on how to develop the informal settlements in the urban areas. The framework adds to the knowledge base that supports the promotion of inclusive, productive and livable urban areas for socio-economic development. The framework acknowledges that Uganda has a National Urban Policy development process aligned to several Policy, Legal and Regulatory frameworks, nevertheless, it is relevant to have an effective framework developed based on field-based evidence to develop policies, strategies, and regulations to improve the informal settlements. The framework should be viewed as a potential solution to the improvement and establishment of the informal settlement.

### **6.1 Critical factors considered in the development of informal settlements**

A myriad of significant factors identified in this study form a comprehensive and systematic approach to the development of informal settlements in Uganda. These are discussed below.

#### **a) Solid waste management**

The informal settlement dwellers are challenges with waste management that are on the rise in Kampala due to the high rates of urbanization and population growth. The evidence from the Kampala Capital City Authority (KCCA), (2016) shows that over 350,000 tons of waste accounting for 70% of the total waste generated are collected from Kampala City annually. Unfortunately, waste generation has not been matched with proper waste management practices. This has resulted in the accumulation of waste that is exacerbating the socio-economic and environmental challenges including in the informal settlements. For instance, the poor waste management in Kampala has been reported to lead to blockage of drainage channels leading to floods that have caused death in the slum areas of Kampala (Uganda Red Cross, 2019).

To deal with this problem, effective waste management was noted to be a critical aspect. To enable this, a transition from a linear economy to a circular economy is required. The circular economy is a valuable and appropriate approach to systematic waste management strategy. It

establishes principles which align with a net-zero waste agenda, prompting a sustainable environment, society, and economy (Mapani et al., 2023). The approach stresses that informal settlement dwellers remove the end life on products thus shifting from the throw-away culture which leads to waste generation. This can be achieved through capacity building on the circular economy practices such as energy recovery practices like making briquettes from the wastes. This reduces waste as well as ensuring access to clean energy. Other practices include engaging in the plastic waste value chain to collect and bulk plastic wastes for recycling. This does not reduce the plastic waste in the environment only but also acts as a source of livelihood to the informal settlement dwellers.

#### **b) Provision of employment opportunities**

It is noted that the search for employment opportunities in the urban areas is one of the push factors to the informal settlements. At the same time, residents of informal settlements are disadvantaged in terms of access to regular employment opportunities. As a consequence of unemployment, informal settlement dwellers have limited access to financial resources that are important in accessing the basic needs for improved well-being. In addition, they are compelled to give up their hopes and aspirations. Thus, unemployment has detrimental effects on informal settlement dwellers.

To reduce unemployment and the associated consequences, there is a need to provide employment opportunities to enable the informal settlement dwellers to accumulate financial resources which is the reason for the acquisition of employment opportunities. These are key to meeting all needs and requirements, bringing about improvements in various aspects and appropriately sustaining one's living conditions. In this view, the government need to work with non-government organizations to improve the skill set of the informal settlement dweller and later provide information and possible job contacts. In addition, the government of Uganda could consider reducing barriers to investment such as ensuring access to credit and loans for the informal settlement dwellers to invest in local businesses such as selling charcoal, and fruits, among others.

#### **c) Subsidizing key housing construction components and services**

It is not a secret that Uganda is listed among the poorest countries in the world. With the high poverty level, it is common to find a large portion of its population living in informal settlements and much-depleted houses. This is due to the unaffordability of construction materials due to the ever-rising cost of living. The high costs of housing components and services not only make the formal settlement unfordable for the informal settlement dwellers but also limit access to better

housing in the informal settlements. Housing is a basic human need and addressing its challenge has a significant impact on those living in the informal settlements.

The need to subsidize the key housing construction components and services can be considered as an opportunity to acquire land and construction materials for the establishment of formal settlements as well as establishing proper houses in the informal settlements. To successfully move in this direction, the government needs to reduce taxes on construction materials to reduce the prices of construction materials. This will significantly lead to the acquisition of construction materials for the establishment of formal settlements and improved houses in informal settlements.

#### **d) Effective policy formulation and implementation**

The development of informal settlements is attributed to a range of interrelated factors among which include weak governance policies. The constitution of Uganda states that all Ugandans have a right to access decent shelter. This has been accompanied by policies and a government institution of the Ministry of Lands Housing and Urban Development to reduce the establishment of the informal settlements and slums, nevertheless, the situation of housing does not reflect the already existing policy frameworks in Uganda. The ineffective policies and their implementation halt efforts to curb the mushrooming informal settlements.

As shown above there is a need for the Government of Uganda to review its policies and align them to reduce and improve the already existing informal settlements. The government needs to set up the right regulatory environment to prevent the development of informal settlements. These can include reforming land rights to facilitate secure substantial housing investments as weak land administration paralyses formal housing development. Currently, unclear land rights and stringent land use regulations prevent ordinary residents from accessing formal land for housing. There is also a need for reforming construction regulations to ensure the development of standard housing. There is also a need for policy intervention to improve the already existing informal settlements. The government can dwell on informal settlement upgrading, resettlement, and land readjustment policies to increase the overall housing supply. However, it is important to note that policies do not succeed or fail on their own merits; rather their progress is dependent upon the process of implementation. Therefore, appropriate legal actions need to be taken against residents that refuse to comply with the reviewed and updated housing policies.

#### **e) Provision of essential infrastructures**

It is incontrovertible that informal settlements lack a formal supply of basic infrastructure and services in Uganda. The informal settlement in Uganda accommodates a significant proportion of people, nevertheless, their establishment outside the official planning mechanism tandem with a lack of adequate infrastructure and basic service provision.

To improve the informal settlement, there is a need to improve some of the already existing infrastructures in the informal settlements such as health facilities and roads. However, for sustainability, there is a need to reintegrate informal settlements with trunk infrastructure and basic services via integrative planning and design. On the other hand, the provision of essential infrastructures elsewhere more so in the rural areas reduces the appetite for coming into the informal settlements in the urban areas. Therefore, the government should provide even distribution of infrastructure both in the rural and the urban areas. This can be achieved through private and public partnerships as the government may not be able to have resources allocated for infrastructure development. When residents have access to the services essential for good health and flourishing home-based enterprises, a virtuous cycle ensues. With improved health and more profitable home-based enterprises, they can earn higher incomes, which in turn enhances their general well-being.

#### **f) Capacity building**

To improve the well-being of the informal settlement dwellers, there is a need for capacity building in skills. Training and skills acquisition have received widespread approval as one of the most important steps towards achieving human, organizational and national development. They are largely regarded as tools to fight poverty, inequality and unemployment. The study noted that the sector is playing an important role in equipping people with vocational, entrepreneurial and soft skills through informal on-the-job training, training workshops and self-training which they can use to improve their welfare (Magidi & Mahiya, 2021). To counter this, we call for the involvement of public training institutions or government departments to supervise, assess, and evaluate training in the sector and finally provide certification as a way of enhancing quality, setting standards and competitiveness of both the sector and its products. We end by suggesting that the government should come up with a national skill ranking framework that recognizes informally acquired skills and allow informal training graduates to upgrade their skills and get the formal qualification to end their discrimination and place them in a position where they can better enjoy the returns of their skills.

#### **g) Provision of aid to households in the informal settlements**

The informal settlements are characterized by poor living conditions, poverty, and significantly uncertain disasters such as floods. There is a need to address these challenges and the associated impacts through the provision of aid to households in informal settlements. The provision of aid can take the dimensions of the provision of vital services (such as food aid to prevent starvation) by aid agencies, and the provision of funding or in-kind services (like logistics or transport), usually through aid agencies or the government.

In Uganda, one of the practical examples is the extension of the Social Assistance Grant for Empowerment (SAGE) programme to informal settlements. In informal settlements, on-site facilities are generally not properly maintained and emptied because of high costs and difficulties in accessing cesspool trucks. However, the provision of aids such as SAGE can contribute to encouraging people to improve the conditions of their toilets.

#### **h) Sanitation community sensitization and awareness campaigns**

Access to safe sanitation is a challenge withstanding, the access to the available sanitation facilities among the informal settlement dwellers remains inequitable amongst residents. This is attributed to a lack of knowledge of proper sanitation practices, negative perceptions towards sanitation facilities, cultural beliefs that a child's stool should not be disposed of in the toilet facility to prevent failure to grow teeth, safety concerns, cleanliness and location of the facility, walking distance, high number of users, lack of privacy and comfort, and fear of contamination and lack of choice.

Since access to sanitation is recognized as a human right, all informal settlements are to ensure proper household sanitation practices. Campaigns raising awareness on sanitation increase knowledge on good sanitation practices that to a greater extent have been postulated to translate into good sanitation actions. An example is Tsinda et al. (2017) who showed raising the level of knowledge of both service providers and residents as one of the main drivers for improving sanitation. It is therefore critical for the government of Uganda under its Ministry of Health need to undertake periodical if not routine campaigns on proper sanitation practices in the informal settlements. The campaigns should tackle sanitation from a variety of angles including subsidies for household toilets. The campaigns can also be done through education on sanitation in schools and be implemented in the school curriculum so that these children can share the obtained information with their parents.



### **i) Enhancement of social-tiers**

Social networks are indispensable for livelihoods and mutual support in informal settlements. The study participants affirmed the need for enhanced social tiers for improved well-being in informal settlements. To decrease vulnerability in informal settlements, individuals living in settlements often depend on local networks to access resources, including food, labour, and childcare.

An increase in the frequency of social network activities is conducive to the establishment of a relational society, increasing the trust between members and promoting the emergence of a community based on geography and blood ties. Social network activities are conducive to the organization of public affairs by building the collective memory of rural areas and integrating factors such as culture, customs and emotions into the values of rural residents. Based on research results, the following suggestions are put forward: Firstly, social network activities in rural areas should be enriched. Rural managers can make full use of ritual communication activities, social organization activities and holiday activities to carry out social network activities in various forms and with rich content to increase the emotional connection among rural residents. Secondly, we should also make full use of internet technology to strengthen the connection with rural residents who have moved out of the rural areas. Thirdly, the role of the villagers meeting and assembling should be brought fully into play to collect opinions on the governance of the rural environment from rural residents to play their role as masters and enhance their sense of responsibility and participation.

### **6.2 Conclusion**

The study demonstrates how informal settlements can be improved by the upgrading of informal settlements through a process. Thus, it is important to think of it not from a development perspective, but transforming the informal settlements under conditions of minimum relocation and seeking to provide the basis for long-term planning in a structured, cohesive and replicable manner.

## **CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS**

### **7.0 Introduction**

The final conclusions are drawn based on the research findings from the previous chapter. Also, the chapter provides information on the practical implications of the research findings and recommendations for the improvement of informal settlements in Kampala City, Uganda.

### **7.1 Conclusions**

#### **7.1.1 Factors contributing to the development of informal settlements**

The study revealed that several factors foster the development of informal settlements in Kampala City. Flocking into Kampala city is attributed to the availability of job opportunities, availability of better social services, family issues, sufficient security and safety, social/peer pressure, and better living conditions. Despite the availability of formal settlements, the study revealed that core factors that push the flock to the informal settlements include family attachment, low costs of housing, proximity to the workplace, easy access to the central business district, access to education services, access to health services, and low income.

#### **7.1.2 Problems existing in the informal settlements**

Living in informal settlements is not a walk in the park. This is because there are problems that exist in the informal settlements. The predominant problems in the informal settlements include poor waste management, unemployment, insecurity, lack of toilet facilities, disease epidemics, natural disasters, unsafe drinking water, poor health facilities, limited road infrastructures, limited access to basic education, congestion/ overpopulation, and limited sources of energy. The good news is that there have been considerable efforts by the development stakeholders in the urban development space to address some of these challenges. Some of the challenges addressed include waste management, insecurity, lack of toilet facilities, unsafe drinking waters, and poor health facilities.

#### **7.1.3 Possible frameworks for improvement of informal settlements**

The problems faced in the informal settlements are not super wicked. As such, there are possible solutions that can be put in place to solve the challenges. The suggested interventions for addressing the problems included cleaning water drainage channels, job creation, improving education services, and construction of toilet facilities.

## **7.2 Recommendations**

The study confirmed that the different informal settlements face different challenges and therefore require different mediation methods to improve the settlements. It is important to address challenges on a need-based approach because one strategy applied to all informal settlements may not address problems across the board. This is why it is important to have constant communication between the informal settlement dwellers and the leaders so that strategies to improve informal settlements can be tailored to particular challenges being faced.

The study suggests that mediation approaches initiating further development of informal settlements begin by considering the issue of informal settlements at the city level where their acknowledgement is significant. About 67% of the respondents said they would recommend somebody to come and live with them in the informal settlements, this shows how significant these settlements are to the dwellers.

The investigation likewise suggests that the public authority pioneers should connect with informal settlement dwellers, before rolling out any extraordinary improvements concerning the settlements. This will avoid any future misunderstandings and fostering a relationship amongst all stakeholders that is mutually beneficial.

The national and local leaders should in any case be liable for framework improvement while private financial backers are urged to foster rental housing focusing on the low-income population. The statutory authorities, in conjunction with other stake holders like NGOs can foster low cost housing which is affordable by the informal settlement dwellers yet meeting the minimum acceptable housing standards like proper drainage and sewerage systems, safe drinking water and security.

Likewise, the issue of land residency should be investigated because the land is a central point of housing. It turns out to be undeniably challenging to give respectable housing and fundamental service delivery to the marginalized majority, where the title or the interest on the land is dubious. Moreover, in urban informal settlements, dwellers can be urged to further develop housing without the fear to be evicted by passing clear laws that seek to protect the inhabitant's right, but also maintaining proper urbanization and acceptable housing standards.

An improvement in the living conditions of the informal settlements will improve their physical and mental health, productivity, which will in turn increase their earnings over time. Improved earnings can be fostered by training informal settlement dwellers and equip them with skills that

make use of the challenges that they are facing. For example, the problem of garbage collection which was ranked as number one across all the informal settlements can be turned into waste to energy and waste to wealth initiatives by recycling plastics and manufacturing briquettes from the waste. Additionally, improvement in the security of housing and land residency is required to assist the poor with beating the issue of social rejection from urban life. Improving all these components will be a step toward improving the quality of life of informal settlements dwellers.

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## APPENDICES

### APPENDIX A: ETHICS CLEARANCE CERTIFICATE



**Institutional Research Ethics Committee**  
Research and Postgraduate Support Directorate  
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11 August 2022

Ms. H Kirabo  
Department of Construction Economics and Management  
Makerere University  
P.O. Box 7062  
Kampala  
Uganda

Dear Ms. Kirabo

#### **A Framework for Improvement of Informal Settlements in Kampala City, Uganda. Ethical Clearance number IREC 030/22**

The Institutional Research Ethics Committee acknowledges receipt of your final data collection tool for review.

We are pleased to inform you that the data collection tool has been approved. Kindly ensure that participants used for the pilot study are not part of the main study.

In addition, the IREC acknowledges receipt of your gatekeeper permission letter.

Please note that **FULL APPROVAL** is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely,

Prof J K Adam  
Chairperson: DUT -IREC

## APPENDIX B: QUESTIONNAIRE



### PARTICIPANT QUESTIONNAIRE

QUESTIONNAIRE NUMBER:

#### A FRAMEWORK FOR IMPROVEMENT OF INFORMAL SETTLEMENTS IN KAMPALA CITY, UGANDA – ENGLISH

Greetings, my name is .....a student at Durban University of Technology. I am conducting a research on how to develop a framework for improvement of Informal settlements in Kampala City.

You have been carefully selected to participate in this interview / survey to help us succeed in carrying out this research.

Your participation is voluntary, and you are free to stop this interview / survey any time you want.

Would you like to participate in this exercise?

1. Yes
2. No

#### IDENTIFICATION

INFORMAL SETTLEMENT:  
DISTRICT:  
DIVISION:  
PARISH:

HOUSEHOLD NUMBER:  
SAMPLE HOUSEHOLD NUMBER:  
NAME OF HOUSEHOLD HEAD:

#### INTERVIEWER VISIT

##### INTERVIEWER INITIALS

DD/MM/YYYY

INTERVIEWER

NUMBER:

LANGUAGE OF THE QUESTIONNAIRE:

LANGUAGE USED IN THE INTERVIEW:

SUPERVISOR:

FIELD EDITOR:

**Instruction: -Tick/circle the answer that is most appropriate for the respondent or specify their answers in the given spaces below)**

## DEMOGRAPHIC CHARACTERISTICS

**Q101.** Gender of Head of Household:

1. Male
2. Female

**Q102.** Age of respondent

1. 18-29
2. 30-49
3. 50 and above

**Q103:** a. What is the Overall total number of members of the Household (including interviewee)

a. b. What is the Number of children in the house

b. c. What is the Number of adults in the house

c. d. What is the Number of schools attending children

**Q104.** What is your marital status?

1.	Single	
2.	Married/Cohabiting	
3.	Widowed	
4.	Separated	
5.	Divorced	

**Q105.** What is the highest level of education you have attained?

1.	No education	
2.	Primary level education	
3.	Secondary level education	
4.	Higher education and above	

**Q106 a.** What is your employment status?

1.	Not employed ( <i>If not employed, skip to c</i> )	
2.	Self employed	
3.	Employed	

**Q106 b.** What is your nature of work?

1.	Casual labor	
2.	Full time job	
3.	Street vendor	
4.	Other (specify)	

**Q106 c.** What is your monthly income? (In Ushs)

1.	Less than 50,000	
2.	50,000-99,999	
3.	100,000-299,999	
4.	300,000-499,999	
5.	500,000 and above	

## MIGRATION

**Q201.** How long have you been living in this area?

1.	Less than 2 years	
2.	Between 2 - 10 years	
3.	Above 10 years	
4.	Since birth ( <i>If yes, skip and go to Q204</i> )	

**Q202.** Before moving to Kampala, where were you living?

1.	Western Region	
2.	Central Region	
3.	Northern Region	
4.	Eastern Region	
5.	Southern Region	
14.	Outside of Uganda _____	(Specify country)

**Q203.** If you moved to Kampala, what were the main reasons? (*Tick four (4) main reasons*)

1.	To find work	
2.	For services available in the City (school, health, urban life, electricity, etc.)	
3.	Social pressure	
4.	Security and safety reasons	
5.	To reunite with family in Kampala/family reasons	
6.	Better housing conditions	
7.	Other _____ / _____	(specify)

**Q204.** What made you settle in this area? (*Tick four (4) main reasons*)

1.	Low cost of housing	
2.	Family attachment	
3.	Access to Education services	
4.	Access to Health services	
5.	Proximity to workplace	
6.	Easy access to the central business district	
7.	Low income	
8.	Other _____ / _____	(specify)

**Q205 a.** Would you recommend your friends/family to stay in this area?

1. Yes	
2. No	

**Q205 b:** If yes to Q205 a, please provide us with reasons .....

.....

**Q205 c:** If no to Q205 a, please provide us with reasons .....

.....

**Q 206: Are you worried that you may be evicted from your residence?**

1.	Yes	
2.	+ No ( <i>Skip to next section</i> )	
3.	I Do not know/Refuse to answer	

If Yes, for what reasons? (*Tick four (4) main reasons*)

1.	Rent owed	
2.	Risk of eviction by the Local authorities	
3.	Risk of eviction by National authorities	
4.	Risk of eviction by landlord	
5.	The documents I have do not protect me (no contract, no identity documents)	
	Other _____	(specify)

## HOUSING

**Q301 a:** What is your housing status?

1. Owner
2. Tenant
3. Other \_\_\_\_\_ (specify)

**Q301 b.** How many rooms are in this house?

**Q302:** What dominant material are your home's wall made of?

1. Brick+Cement	
2. Brick+Mud	
3. Wood+Mud	
4. Mud	
5. Other _____ / _____	(specify)

**Q303:** What dominant material is your home's roof?

1. Iron sheets	
2. Thatch/Grass	
3. Tiles/Slates	
4. Other _____ / _____	(specify)

**Q304:** What dominant material is your home's floor?

1. Cement	
2. Mud	
3. Tiles	
4. Wood	
5. Other _____ / _____	(specify)

**Q305:** How would you describe your house? **(Tick three (3) of the factors below)**

1. Good condition	
2. Poor condition	
3. Too expensive	
4. Good location	
5. Bad location	
6. Other _____ / _____	(specify)

**Q306:** How often do you communicate to your area leaders concerning your housing problems?

1. Never	
2. Rarely	
3. Sometimes	
4. Often	

**Q307.** What problems are you facing in this locality and household? **(Tick five (5) major problems)**

1.	Lack of clean drinking water	
2.	Lack of toilets	
3.	Poor garbage dumping and collection systems	
4.	Poor or no health facilities in the locality	
5.	Spread of epidemic diseases	
6.	Poor access roads	
7.	Lack of employment	
8.	Insecurity	
9.	Floods during the rainy season	

10.	Lack of access to basic education	
11.	Congestion	
12.	Other _____ / _____	<i>(specify)</i>

## UNSTRUCTURED QUESTIONS

**Q401.** Of the problems mentioned in Q307above, which ones have been addressed in the one past year, and how?

.....

.....

.....

.....

.....

.....

**Q402** What other solutions do you think can be implemented to address the other problems?

.....

.....

.....

.....

.....

.....

**Q403.** For the solutions mentioned above, who do you think would implement them best?

1. LC.1 Chairman	
2. Religious leaders	
3. Ministry of Lands, Housing & Urban Development	
4. KCCA	
5. Other _____ / _____	

**THANK YOU VERY MUCH FOR YOUR TIME.**

## APPENDIX C: LETTER OF INFORMATION AND CONSENT



A Framework for improvement of informal settlements in Kampala City, Uganda.

<b>Principal Researcher:</b>	Hadijja Kirabo, BSc Quantity Surveying
<b>Supervisor:</b>	Dr. Samuel H P Chikafalamini, PhD (Real Estate)
<b>Co-supervisor 1</b>	Dr Nathan Kibwami, PhD (Construction Management)

The aim of this study is to confirm the reasons why informal settlements continue to emerge despite the challenges and inadequate standards of living encountered there. It seeks to develop a framework that will better facilitate the improvement of informal settlements and its dwellers in Kampala City, Uganda.

Good day, I hope this finds you well

I am Hadijja Kirabo, a 2<sup>nd</sup> year student at Durban University of Technology doing research for my master's degree in Built Environment (Construction).

As an informal settlement dweller, I would like to invite you to participate in the research study.

Kampala City, as is the case with other cities in the world, is viewed by those particularly living in rural areas of Uganda, as a place of hope to get employment and uplift the life quality. These rural-urban migrants to Kampala City have ended up developing informal settlements, which are illegal residential areas because most of them are poor and cannot afford decent housing in the city. To complicate matters, these informal settlements are unplanned and associated with poor infrastructure and social services. Therefore, the objective of this study is to develop a framework for the improvement of these informal settlements, which will offer solutions and guide the relevant authorities in the processes aimed at tackling challenges faced by the informal settlement dwellers effectively. In addition, the study will confirm scientifically existing problems in the informal settlements and reasons that led to the development of the informal settlements.

Questionnaires will be administered to the selected informal settlement dwellers, upon approval by the department. The researcher will seek permission before distributing the questionnaire and conducting any interview. The relevant explanation regarding confidentiality will be given prior to participation in this study. Participants will be encouraged to be anonymous throughout the research and it will take the participant maximum of 15 minutes to complete the questionnaire.

Research is a systematic search or enquiry for generalized new knowledge. You are expected to provide information that will help the researcher better understand the major reasons for rural- urban migration, challenges faced by the informal settlement dwellers, and how you think these challenges can be mitigated.

The findings of the study will be published in accredited journals and will also be presented at both local and international conferences. This will help in delivering knowledge transfer and sharing of solutions to poor maintenance of road infrastructure.



## **APPENDIX C: LETTER OF INFORMATION AND CONSENT (CONTINUED)**

Participants will include informal settlement dwellers above the age of 18 years and are household heads, while those to be excluded from participating in the research are those who will be mentally incapacitated to take part in the study. The recruitment of participants is not gender specific.

Neither risk nor discomfort is foreseen before, during or after the involvement in this research for all the participants.

The participants may decide to discontinue their involvement for any reason and at any time. There will be no negative consequences for any respondents should he or she choose to withdraw from the research.

There will be no payment or other types of remuneration to involved participants and will not be expected to incur any cost regarding the study.

The study will not collect any identifying information of the participants. Information will be collected anonymously to ensure concealment. The data provided will not be used for anything else other than the research.

The study will not expose participants to injury. Participant's personal information will be protected.

The hard paper copies of all answers and results from the questionnaires and interview guides will be kept safely in a secure lock-up cabinet and destroyed by shredding after 5 years if no longer required.

Please contact the researcher; Hadijja Kirabo, Tel no. +256 702 858 250, my supervisor; Dr SHP Chikafalimani, Tel no. +27 722098786 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Acting Director: Research and Postgraduate Support on 031 373 2577 or [researchdirector@dut.ac.za](mailto:researchdirector@dut.ac.za).

## APPENDIX C: LETTER OF INFORMATION AND CONSENT (CONTINUED)



### CONSENT

**Full Title of the Study:** A framework for improvement of informal settlements in Kampala City, Uganda.

**Names of Researcher/s:** Kirabo Hadijja

#### Statement of Agreement to Participate in the Research Study:

- ☐ I hereby confirm that I have been informed by the researcher, Kirabo Hadijja, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: \_\_\_\_\_,
- ☐ I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- ☐ I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- ☐ In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- ☐ I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- ☐ I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- ☐ I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<b>Full Name of Participant Thumbprint</b>	<b>Date</b>	<b>Time</b>	<b>Signature</b>	<b>/ Right</b>

I, Kirabo Hadijja herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

<hr/>		
<b>Full Name of Researcher</b>	<b>Date</b>	<b>Signature</b>
<hr/>		
<b>Full Name of Witness (If applicable)</b>	<b>Date</b>	<b>Signature</b>
<hr/>		
<b>Full Name of Legal Guardian (If applicable)</b>	<b>Date</b>	<b>Signature</b>
<hr/>		

## APPENDIX D: GATE KEEPER'S LETTER



### OFFICE OF THE DIRECTORATE OF PHYSICAL PLANNING

Our Ref: KCCA/DUT/07/2022/1864

25<sup>th</sup> July 2022

Chair of Research Ethics Review Committee  
Faculty of Engineering and the Built Environment  
Department of Construction Management and Quantity Surveying  
Durban University of Technology

Dear Sir/Madam,

**RE: LETTER OF SUPPORT FOR Ms. HADIJJA KIRABO'S REQUEST TO CARRY OUT HER RESEARCH STUDY IN THE INFORMAL SETTLEMENTS OF KAMPALA CITY, UGANDA.**

Kampala Capital City Authority (KCCA) is the governing body of the Capital City and administers all the five divisions of the City on behalf of the central government. Under KCCA is the Physical Planning Directorate which is responsible for planning, designing and managing City physical infrastructure including the zoning, land sub division and demarcating areas for development. The Directorate guides the Authority on the urban design, infrastructural improvement and land development in the City.

Reference is made to a letter from your institution dated 20th July 2022, introducing Ms. Hadijja Kirabo and requesting for approval to allow her carry out research in the informal settlements in Kampala City by working with our local council representatives to help her with mobilization of the informal settlement dwellers. This is only to aid her research study title: 'A framework for improvement of informal settlements in Kampala City, Uganda' in fulfilment for her Masters degree studies

We wish to inform you of our acceptance of this request and hereby assure the student of our utmost cooperation towards achieving her research goals, of which the outcome we believe will help KCCA and other government institutions in providing solutions to the challenges posed by the informal settlements in Kampala City. Information on our main informal settlements has been availed to Ms. Hadijja Kirabo as per the request. The student has as well been cautioned to observe the COVID-19 SOPs as guided by the Ministry of Health as she conducts the research.

We look forward to receiving a copy of the research report for the benefit of the informal settlements and Kampala City.

Yours Faithfully

Douglas Nsubuga  
Physical Planner, Directorate of Physical Planning



P.O. BOX 7010 Kampala-Uganda  
Plot 1-3, Apollo Kaggwa road  
Tel: 0204 660000 SMS code: 7010  
Toll free line 0800 99 00 00

## **APPENDIX E: STATISTICIAN CERTIFICATE**

### **STATISTICIAN CERTIFICATION**

I hereby declare that I served as consultant Statistician for the Masters' dissertation titled, "A Framework for Improvement of Informal Settlements in Kampala City, Uganda" by Hadijja Kirabo.

I provided services including data management and statistical support for the period 27<sup>th</sup> August to 31<sup>st</sup> October, 2022

The certification is issued to confirm that the university received quality research work.

For more information to contact me, my details may be found; <https://www.linkedin.com/in/rogers-nsubuga-1b4511b0/>

Signed by:

Rogers Nsubuga  
Statistician  
Email: [rnsbuga.k@gmail.com](mailto:rnsbuga.k@gmail.com)  
TEL: +256 752 261 868

31<sup>st</sup> October, 2022  
Date

## APPENDIX F: EDITOR'S CERTIFICATE

### EDITORIAL CERTIFICATE

Email: belabelamoses@gmail.com

Tel: +256 779 490 831

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31<sup>st</sup> October, 2022

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT  
DURBAN UNIVERSITY OF TECHNOLOGY

To whom it may concern

#### DECLARATION BY LANGUAGE EDITOR

I hereby declare that the research report '**A framework for improvement of informal settlements in Kampala City, Uganda**' was edited by an English-speaking professional.

We guarantee 100% language accuracy in the text, as edited and delivered to the student on the date above. We make no claim as to the substantive matter covered by the report and have not altered the intent or research content drafted by the student. The issues corrected were grammar, spelling, punctuation, sentence structure and phrasing

Should you have any questions or concerns, my details may be found above.

Sincerely

Moses Belabela

## APPENDIX G: TURN IT IN REPORT

### A framework for improvement of informal settlements in Kampala City, Uganda

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