

**SOCIO-ECONOMIC DETERMINANTS OF THE IMPLEMENTATION OF
URBAN SLUM INFRASTRUCTURE PROJECTS IN KENYA: A CASE OF
THE KIBERA SLUM-UPGRADING PROJECT, LANGATA
CONSTITUENCY, NAIROBI COUNTY**

BY

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DECLARATION

I hereby declare that this research project report is my original work and has not been presented for a degree in any other University.

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DEDICATION

This research project is dedicated to my beloved mother; Mrs Mbufung Theresia Nshung and in memory of my late father, Mr Mbufung Martin Changeh whose love, guidance and support made me what I am today. And to my lovely and caring husband, Dr. Tanga Mbi Chrysantus, who has stood by me amidst life's tough hurdles. I also dedicate it to my children Tanga Emely Febeng-Anong, Tanga Chrys Changeh-Apiah as well as to my brothers and sisters for their love and encouragement.

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ACRONYMS AND ABBREVIATIONS

ADB	-	African Development Bank
CBOs	-	Community Based Organizations
GIS	-	Geographical Information System
GoK	-	Government of Kenya
KNBS	-	Kenya National Bureau of Statistics
LAs	-	Local Authorities
MDGs	-	Millennium Development Goals
NCC	-	Nairobi City Council
NGOs	-	Non-Governmental Organizations
NHC	-	National Housing Corporation
PSUP	-	Participatory Slum Upgrading Programme
SUD	-	Slum Upgrading Department
SUF	-	Slum Upgrading Facility

ABSTRACT

The proliferation of huge slums in Kenya has become evident as the rate of urbanization increases, has increased in most of the slum dwellers and they live in degrading conditions. The Kibera Slum Upgrading Project was attempted by the Government of Kenya and different accomplices through the Kenya Slum Upgrading Program (KENSUP) and Kenya Informal Settlement Improvement Program (KISIP) went for giving better lodging and upgraded job to the general population as they were confronted with issues like poor water and sanitation, security of land tenure and vulnerability to evictions, low income generating activities, high rate of unemployment and ever-increasing level of marginalization of poor neighborhoods. Despite the progress made on slum improvement, this has not been enough to counter the growth of the slums as the absolute number of slums residents/problem have continuously increased despite the upgrading efforts. It is in this context, that this study seeks to establish the socio-economic determinants of the implementation of urban slum infrastructure projects in Kibera. The present study seeks to understand whether projects carried out in these areas are successful or not in terms of land tenure, community participation, profitability of slum business and economic status, based on the residents' satisfaction with the various socio-economic determinants. This study described experiences of 293 respondents with respect to their level of understanding on various issues influencing the implementation of slum upgrading project using a validated questionnaire. Data was analysed using the Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics and binary logistic regression were used to analyse the data and results presented in terms of frequencies and percentages. A correlation analysis was also conducted on the data to determine the extent of their relationship to implementation of slum upgrading projects. The study revealed that 85.1% and 73.1% of the respondents in Katwekera and Mashimoni wards, respectively, were extremely dissatisfied with the housing conditions. Despite the level of dissatisfaction, 96.6% and 91.7% of respondents in Katwekera and Mashimoni wards, respectively, were not willing to be relocated to improved housing with higher rents. In the two villages, all the respondents have never owned land or neither do they have a land title. Cumulatively, 73.6% and 62.1% of the respondents in Katwekera and Mashimoni wards, respectively, were extremely dissatisfied with land ownership issues. In Katwekera ward, 76.4% of the residents have never participated in any slum upgrading project, while in Mashimoni ward, 58.6% reported the same. The findings also revealed that 74.3% and 80.7% of the respondents in Katwekera and Mashimoni wards, respectively, were not willing to abandon their businesses to participate in slum upgrading projects. However, there was a positive correlation between income and satisfaction of slum upgrading project outcome. The findings demonstrated that slum upgrading activities in the two villages are still at their early phases of implementation with very little impact. The study recommends that the government and other partners should address the issue of land tenure, community involvement, profitability of slum business as well as economic status of the slum dwellers which are the major drivers fuelling resistance to the implementation of upgrading programs in the slums as this will improve on community satisfaction.

CHAPTER ONE: INTRODUCTION

1.0 Background to the study

One of the greatest difficulties confronting humankind in this era n are quick urbanization (Glaeser, 2011) and expanding urban neediness, which has ascribed to the world's yearly urban populace increment with more than 1 billion ghetto inhabitants (around 32% of the worldwide populace) (United Nations 2003). A significant number of Africa's urban communities have been ignored for a considerable length of time in a situation of fast urbanization. Close by fizzled approaches and regularly an absence of political will, this has brought about crumbling and late mushrooming of ghetto ranges where more than 60% of sub-Saharan Africa's urban occupants now live (UN-HABITAT, 2010a). While the representation of ghetto occupants shifts crosswise over locales, there is doubtlessly ghetto arrangement is an overwhelming issue. The best effect of this expansion is felt in the creating scene, particularly all through Sub-Saharan Africa with ghetto tenants representing 72% of the worldwide urban populaces. As per UN Habitat (2010b) the quantity of ghetto inhabitant overall keeps on developing at a rate of 10% consistently, subsequently expanding the issue. Therefore, future urban advancement will indicate promote development and sprawling of ghettos with uncontrolled spread of urban issues if no viable approaches are set up. The UN Secretary General cautions that "if no genuine therapeutic move is made in the coming years, the quantity of ghetto inhabitants worldwide is anticipated to twofold by 2020 achieving almost 400 million or 2 billion throughout the following 30 years (United Nations 2003; HABITAT, 2006, 2010b; UNFPA, 2007).

In Kenya, the urbanization growth rates from 1950 to 1970 ranged between 6.9% and 8% (United Nations Population Division, 2002) but there was an unprecedented increase over the past decades to reach some 900,000 people (34.5%) in 2011, insisting that one out of each three Kenyans as of now live in urban ranges (Republic of Kenya, 1999; Alan, 2011). This rate is required to increment to half by the year 2020. Nairobi is one of the quickest developing urban communities in Kenya and as far as arranging, just 30% of urban towns are arranged (Kenya Country Report to fourth World Urban Forum, 2008). The circumstance is far and away more terrible in casual settlements like Kibera with three out of each five or 71% of the populace restricted to a zone that is just under 5% of aggregate city private land in the city, exhibiting the

seriousness of ghetto clog (www.kibera.org.uk/Facts.html) (Kyobutungi et al. 2003; UN-Habitat, 2009).

The present presence of slums in Nairobi is a reality, which can't be disregarded. The extraordinary urban development rate and the failure of the urban economies to coordinate the pace have showed itself as far as the multiplication of a large group of urbanization-related issues like serious shortage and limited access to water supply; lack of durable housing (composed of up to 95% temporary structures); inadequate electricity supply; poor environmental conditions; poor sanitation; health hazards; insufficient living space and inequality (Amnesty International, 2011). Other problems including crime; domestic violence; juvenile delinquency; underestimation of poor neighborhoods; powerlessness of the urban poor to get to credits or moderate land for lodging; security of residency and helplessness to expulsions are likewise components of the group where the dominant part of family units are single-headed, frequently by ladies (Beatley, 2000; Scmith & Hansson, 2003). Unfortunately, the above problems are often due to inadequate governance systems, financial resource deficiencies, institutions and regulations (policy or political issues)

To address these urban slum problems requires a broad sense of action and the Government of Kenya in coordinated effort with different partners (World Bank, Swedish International Development Agency-SIDA and French Agency for Development-AFD), started two projects: the Kenya Slum Upgrading Program (KENSUP) in 2004 and the Kenya Informal Settlement Improvement Project (KISIP) in June 2011 aimed at enhancing the employments of individuals living and working in ghettos and casual settlements. This involves advancing, encouraging, and where important, giving security of residency, lodging change, pay era and physical and social foundation. The real target is to enhance the vocations of no less than 1.6 million families living in ghettos (5.3 million ghetto occupants) by the year 2020, (Republic of Kenya, 2006). Despite the importance of KENSUP, KISIP and many other projects, several factors such as overcrowding, conflicts between tenant and landlords (95% of slum dwellers are tenants)-slum business by landlords), lack of land tenure, profitability of slum business, competing interests of various stakeholders, lack of community involvement, lack of adequate land for space and relocation where necessary and varied religious, cultural and political inclinations (political issues) have created mistrust among inhabitants thus, hampering the implementation of the slum upgrading projects as well as slowing down decision making (WHO and UNICEF, 2000). These challenges form the basis of this research.

1.1 Statement of the Problem

More than 34% of Kenya's aggregate populace lives in urban places (UN-Habitatt, 2009; Mutiisya and Yariime, 2011; Ministry of housing, 2013). The number of informal settlements have increased from 49 in 1972 to almost 168 slum areas in Nairobi which house 60% of the city's urban poor (Njoroge, 1998). Kibera is the largest slum in Nairobi and the most populated, housing close to 600,000 people according to situational analysis conducted in 2001 (Syagga, Mitullah & Gitau, 2001). The land upon which Kibera stands is owned by the Kenyan government which has not officially recognized the settlement thus most basic services are not publicly provided (Cobbett, 2009).

As per UN-Habitat (2003), the involvement in Kibera ghettos demonstrates a solid connection that individuals living in neediness are caught in their present (World Economic and Social Survey, 2008) circumstance since they are rejected from whatever remains of the general public. Shockingly, they are not enabled to permit them to make any noteworthy commitment to group building (updating) (United Nations Population Division, 1998; Mutisya, 2010), in this manner, pushing Nairobi city to the skirt of sinking into pit as the heaviness of mushrooming ghettos inflicts significant damage. The issue of "squatters" and "casual" or individuals' settlements keeps on exhibiting a test for reasonable advancement and have shaped Kibera slums into its present state with far reaching consequences (Hamdi and Goethert 1997; UN-Habitat 2008; Gikonyo and Mwangi, 2015). The situation has further been hampered by lack of project management skills, lack of land tenure, poorly defined objectives, lack of community participation in project upgrading, poor economic status of the residents, profitability of slum business, inadequate assets, poor development, deficient power given to the venture implementers, no normal venture administration strategies received in the venture group, and absence of supporting arrangements for successful urban arranging and change to react to the situation of ghetto tenants in like manner (Mitullah, 2003). In that capacity the inhabitants of Kibera keep on living under lamentable conditions with absence of the most essential needs and social pleasantries (Munier, 2007) and confronted with multi-dimensional difficulties that require expansive feeling of intercessions (United Nations, 2006; Center) on Housing Rights and Evictions, development of ways to deal with ghettos, which perceives that compelling strategies and redesigning programs must go past tending to just issues identified with deficient lodging, framework or administrations, additionally incorporate the basic reasons for urban destitution (slum poverty). Therefore, this

study seeks to establish the socio-economic determinants of the implementation of urban slum infrastructure projects in Kibera slums upgrading project in Lang'ata Constituency, Nairobi, Kenya.

1.2 Purpose of the study

The purpose of this study was to examine how socio-economic determinants influence the implementation of urban slum infrastructure projects in Kibera, Lang'ata constituency, Nairobi, Kenya.

1.3 Objectives of the study

The objectives of this study were to:

1. To determine the influence of land tenure on the implementation of slum upgrading projects
2. To examine the influence of community involvement in the implementation of the slum upgrading projects.
3. To examine the influence of profitability of slum business on the implementation of the slum upgrading projects.
4. To establish the role economic status, play in the implementation of the slum upgrading projects.

1.4 Research Questions

The study was guided by the following research questions.

1. How does land tenure influence the implementation slum upgrading projects?
2. How does community involvement influence the implementation of slum upgrading projects?
3. How does profitability of slum business influence the implementation of slum upgrading projects?
4. How does the economic status of slum residents affect the implementation of slum upgrading projects?

1.5 Significance of the study

This study hoped to identify research gaps with respect to slum dwellers' knowledge of upgrading projects and their general attitudes, perceptions and involvement regarding different aspects of the upgrading projects. The intention in this study was to identify and contribute to filling the information gaps of key socio-economic determinants (land tenure, community involvement, economic status, political issues, profitability of slum business, stakeholders, Government policy etc) that influence the implementation of upgrading projects in the slums. It was also to address the benefits, negative effects, challenges and opportunities of slum upgrading projects contributing towards improving the livelihoods of the slum dwellers. Also, as with other vulnerable communities and marginalized populations, there is inadequate available geographic data and other public information about the Kibera slum.

The findings and recommendations hoped to provide information to government and other stakeholders to be able to design effective and sustainable implementation strategies to upgrading, which might impact positively on the livelihood of the people in the study areas. For purposes of further research, this study was to provide a baseline to the investigation of other parameters that could be crucial in the implementation of the slum upgrading programme.

1.6 Delimitation of study

The study only focused on the socio-economic determinants that influence the implementation of slum upgrading projects in Katwekera and Machimoni villages of Kibera with a population estimate of 55,425 persons (highly populated community) and 22,625 persons (sparsely populated community), respectively, according to Kenya population and housing census (2012), thus, the findings of this study was not generalized to the entire Kibera. Compared to the rest of the slum's population, these two villages were selected because they are located along the rail line and they are usually avoided from formal conveyance frameworks in three noteworthy areas: they do not have the formal access to land, lodging and administrations. The unequal access to these three assets is constitutive to the rise and industriousness of ghettos. The residents of these areas are generally poor and vulnerable, experiencing problems of job insecurity as well as low economic status and low social capital within the communities. These areas will also be selected

because of the recent upgrading activities along the railway as well as the continual upgrading of within-community housing and roads over the past decade.

1.7 Limitations of the study

One of the limitations faced during the study was access to the target population because most of the residents in the study areas are casual laborers hence they were not readily available, thus making it difficult to get responses from many participants. The study was also limited by inadequate financial resources therefore limiting the study coverage to only two villages. The researcher however overcome this limitation by using existing structure owned by NGOs and self-help groups working within the vicinity who are in contact with community-based organizations that are custodians to information needed for the study. This linkage helped in minimizing impact of cultural and communication barriers. Other challenges experienced were due to wrong interpretation of questions probably because most of the respondents were illiterate or did not understand English language very well. To overcome this, data collection was conducted by well-trained enumerators that guided the interview in a language that was better understood by the respondents in the study areas during individual interviews and focus group discussions.

1.8 Assumptions of the Study

This study assumed that all the residents of the two villages in Kibera and officials in the Ministry of Housing and KENSUP cooperated in collecting and responding to questions that were raised during the research. Community based organizations (CBOs) will provide basic information on housing relating to slum upgrading projects. This study also assumed that the respondents are knowledgeable on every aspect of the slum upgrading program and do understand the benefits of the program.

1.9 Definitions of Key Terms

Community - This is a group of people who live in one place with varied characteristics, interests and share a common view.

Community involvement –The participation of the community in a program from the conceptualization to the implementation stage and sustainability of slum upgrading projects because they are the main program beneficiaries of the program.

Economic status - It alludes to the creation, preparing, bundling, offering dispersion, buy and utilization of products and enterprises and additionally cash and riches with a view to satisfying a few needs/needs on business or confidence premise, to upgrade one's personal satisfaction.

Household - A household is gathering of people who co-live in, or involve the abode and additionally share no less than one feast a day or have a similar settlement

Infrastructure – It is the basic facilities and installations that help a government or community's economic development and prosperity. Transportation, schools' communication, sewage, water and electricity systems are all examples of infrastructure.

Policy - This is a plan or guideline that outlines guiding principles to be discussed and implemented by various institutions to achieve laid down goals and objectives.

Resident - A resident is defined as an individual who has spent at least 4 months continuously within a rentable housing unit in the study area and may or may not have slept in that unit the previous night before the date of interview

Socio-economic determinants - The social determinants are the conditions, in which individuals are conceived, develop, work, live, and age, and the more extensive arrangement of strengths and frameworks molding the states of their every day life. These powers and frameworks incorporate financial strategies and frameworks, advancement motivation, social standards, social arrangements and political frameworks.

Slum Upgrading- Slum upgrading is broadly defined as the physical, social, financial, hierarchical, and natural changes attempted helpfully among natives, group gatherings, organizations, and nearby powers to guarantee managed upgrades in the nature of live for ghetto tenants.

1.10 Organization of the study

This study will be organized in five chapters. Chapter one is the introduction which contains the background, history of Kibera slum, problem statement, purpose, objectives, research questions, significance, delimitation, limitations, and assumptions of the study. Chapter two covers a review of empirical literature on causes and effects of slum formation, land tenure, community involvement, role of stakeholders, profitability of slum business and economic status, in the implementation of urban slum upgrading projects. This chapter also contains the theoretical framework and conceptual framework- showing the relationship between the dependent and independent variables. Chapter three presents the research methodology detailing the research design used, target population, sample size and sampling procedure, methods of data collection, validity and reliability, data analysis techniques, ethical considerations and operational definition of variables. Chapter four includes data analysis, presentation and interpretation of results from collected data. Chapter five contains the study summary, conclusion, Discussions and recommendations made from the study.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter entails a detailed review of various literatures on the following subtopics: causes and effects of slum formation, challenges of slum upgrading, land tenure, community involvement, profitability of slum business, economic status and policy issues, in determining the implementation of urban slum infrastructure projects. It also provides a description of the role of stakeholders in slum upgrading programs, theoretical framework

2.1 Causes and Effects of Slum Formation

Since 1899, Nairobi city's population growth has accelerated significantly throughout the twentieth century. The population growth moved from 11,000 people in 1906 to 118,000 in 1948. Thereafter, over the last five decades, it has increased by approximately tenfold – from a quarter of a million people in the year of independence (1963) to 3.1 million people in 2009 (Ottichilo, 2011). The expansion of Nairobi's physical geo-political boundaries to accommodate for this population growth eventually shifted as well – from 18 square kilometers in 1906, to 78 square kilometers in 1948, to 690 square kilometers in 1973, which is where its boundaries are currently set (Ishani et al., 2002; Obudho, 1988). This expansion resulted in the number of slums within Nairobi's divisional boundaries rising from “50 to 134 between 1971 and 1995”.

There are numerous variables that add to the proceeded with arrangement and extension of ghettos. Ghettos are the results of fizzled strategies, awful administration, defilement, improper control, broken land markets, lethargic money related frameworks, expanding urban destitution, disparity and a major absence of political will. Each of these disappointments adds to the toll of individuals as of now profoundly troubled by neediness and in this manner compels the huge open door for human improvement that urban life offers (UN Habitat, 2003, World Bank Group 2011). While the convergence of individuals from rustic ranges to towns and urban communities have incredibly influenced settlement designs prompting to the rise of casual settlements (Navaro, 2008), urban territories are not extending enough, there are insufficient moderate houses, and regions are not having the capacity to give enough convenience. Subsequently, the in-transients are compelled to possess illicit settlements on negligible terrains at the urban fringe, along railroads

and riversides, or on different perilous regions that is not appropriate for advancement in this way prompting to the extension of ghettos (Onyango et al, 2005).

The consequence of absence of essential administrations and offices to support ghetto tenants has presented them to numerous wellbeing related issues (Alberti and Waddell, 2000). For example, water-borne infections, for example, intestinal sickness, cholera, typhoid, and lack of healthy sustenance, youngster mortality are basic in ghetto settlements. There are likewise extensive variety of social issues and mental weights on ghetto inhabitants which regularly prompts to vagrancy and social rejection. What's more, ghetto tenants are inclined to contaminated and dangerous regions, for instance, beside harmful plants, on ranges debilitated via avalanches or waste transfer territories, surge, and ecological issues and they are powerless against dangers. For the most part, the circumstances and end results of ghetto development are complex and as per Agnihotri (1994), spatial change in ghetto territories is the aftereffect of progress in financial state and residency status.

2.2 Land Tenure in Slum Settlements and Implementation of slum upgrading projects

Land tenure is a formal binding contract that gives rights to the land inhabitants and secures them from eviction and it is a precondition for interest in the lodging structures and improvement of group ties (Stryjak, 2009). Secure land tenure increase economic growth, addresses inequities and reduces poverty. Security of tenure gives a wellspring of character, status and political power and serves as a reason for the interest and procurement of different rights (Habitat for Humanity, 2008). Slum dwellers will invest in improving their housing if they have some security of tenure (Castillo & Stein, 2005), because land is a basic resource that is essential for low-income earners to mobilize other resources. Land in Africa is not only a financial decent; it is a profound resource which speaks to people groups' familial legacy (Coit, 2008). Land tenure should be clearly addressed to ensure that informal settlements are well regularized and formally integrated in the city planning framework (Ferguson & Navarrete, 2003). The tenure arrangements that our African communities are capable of negotiating might incorporate joint land possession under their group cooperatives, or agreeable rent gets that can be long, medium or short term (Boonyabancha, 2009). In spite of this, much evidence contesting the approach has emerged (Ochieng 2001).

Werlin (1999) mentioned in his report that although secure land tenure was recognized as an important component of the upgrading programesearlier World Bank's credits did not

completely incorporate it as a pre-condition for an intercession to be fruitful. Gong and van Soest (2002) watches that separated from lodging change, ghetto updating ought to likewise organize the financial change of poor people. Leckie (1995) noticed that ghetto redesigning ought to coordinate behavioral parts of ghetto inhabitants to upgrade manageability. Moser (1996) watches that safe residency is crucial in ghetto neediness mitigation. UNCHS (Habitat, 1996) perceived home proprietorship as an awesome open door towards advancement of personality and opportunity. Still on a similar viewpoint, De Soto (1989), noticed that organization was the best obstruction to procuring security of residency. The poor are subjected to long, costly and thorough methods before they can purchase a property or enlist a business. All the more as of late, redesigning programs have worried on De Soto's recognition to animate individuals' movement guaranteeing secure land residency first.

In Mumbai, distribution of land is done through the Slum Rehabilitation Scheme, where land is exchanged to a general public of the occupants, rather to individual people. The Favela Barrio Program, in Rio de Janeiro, Brazil, is a case of ghetto overhauling without full land residency authorization yet the program has set more noteworthy accentuation on infrastructural and living condition upgrades as opposed to on legitimization of land residency. By the by, the usage of the Favela Barrio Program likewise had the impact of expanding the security of residency of favela occupants (Handzic, 2010). Lack of secure land tenor ship in South Africa was also a major contributor of the establishment of Soweto informal settlements as people engaged into illegal acquisition of land and coupled with housing problems and risks associated with land ownership resorted to informal and unplanned settlements (Baker, 2008).

In Kenya, informal land occupation is characterized by the unlawful, exploitative and to a great degree beneficial casual and degenerate land designation, the estimated housing demand for urban areas is 150,000 units a year in Kenya and the country is struggling to provide basic housing for poor and modest income households (Mwangi, 1997). Thus, numerous nations have additionally embraced approach forms, huge numbers of them taking years and being amazingly consultative, for example, Kenya, South Africa, Tanzania, Mozambique and Namibia (African Union, 2009). For example, in Kenya the National Land Policy has been revised to recognize slum dwellers' land ownership rights and acknowledges that informal settlements arise due to lack of tenure and planning and the policy aims to provide an overall framework for land organization,

access to land, land utilize arranging, authentic treacheries and natural debasement (Ministry of Lands, 2010).

Payne (2001), stated that titling was a mainstream development approach when the World Bank began to run updated overhauling activities in the 1990s: 'World Bank Housing Policy Paper (1993) suggested creating market arranged frameworks of property rights and apportions need to redesigning frameworks of land titling and regularizing residency in squatter settlements'. These suggestions depended on obviously unmistakable benefits of the ghetto regularization which fortify ghetto occupants' interests in their "capital" and upgrade support of the urban poorest in principle. Be that as it may, the titling approach has as of now accomplished significant force, which late studies recommend should be tested' (Payne, 2001). On the off chance that the ghetto inhabitants understand the estimation of the land, the higher cost of a plot may pull in them to offer it and move to stay elsewhere. Payne (2005) takes after that 'such activities may in this manner really result in an expansion in casual settlements as opposed to a lessening' on the grounds that all of a sudden "authorized" ghetto tenants ought to take after 'new standards' and pay appropriate charges and administrations. Payne (2005) contends that 'exclusive expectations force higher expenses, and complex bureaucratic techniques force defers that require casual installments to encourage advances.

2.3 Influence of Community Involvement and implementation of slum upgrading projects.

Community involvement is an indispensable element in any squatter-settlement upgrading program because the target population is already on site, and it is necessary to involve them in the preparation of the regularization and upgrading plans because without active co-operation, the plans cannot be implemented. Connor (1997) explains that when stakeholders' input is incorporated early in the development of a project, controversial issues can be addressed before they become critical and eventually cause major conflicts. Moreover, in view of the magnitude of the housing problem of the urban poor, no government can finance, on its own, the regularization and upgrading of all informal settlements in urban areas, and communities, therefore, should pay all or most of the costs of upgrading programs (Lemma, 2010). Community involvement encourages the slum dwellers to have a deeper understanding of their socio-political status thus

allowing them take the lead in developing solutions. This improves program implementation and impact (Imparato & Ruster 2003).

The World Bank's experience has demonstrated that the achievement and manageability of overhauling projects is dependent upon group inclusion in basic leadership, execution and operation and support, and through money related and in-kind commitments. Community based upgrading is possible if slum dwellers are given the opportunity to come together to address specific issues that affect them. Cohen and Uphoff (1977) noted that the decisions and implementation activities that are to be monitored and evaluated should always be project specific, preferably determined in consultation with intended beneficiaries to be sure that these are meaningful decisions, activities and benefits. Unlike, in Ghana where the community expected that once upgrading programs commence improvements will start being felt within the first three months (Cropper & Bento, 2006), Kenya has had successful slum upgrading programs like the Huruma upgrading program in Kambi Moto which begun in 1999 under the initiative of Pamoja Trust, a non-governmental organization. The organization used a participatory approach that involved tenants, structure owners, Pamoja Trust, Muunganowa Wanaviji (a network of community savings group) and the Department of Planning in Nairobi City Council (NCC). Here, the community members took the lead in preparing and campaigning the legislature for land residency and administration arrangement, arranging the settlement and conceptualizing the overhauling procedure themselves, lastly financing and developing the houses with the assistance of investment funds and advance plans set up and keep running by group individuals (De Soto, 2000). This approach ensured equitable distribution of resources, community empowerment and sustainability of upgrading programs (UN-Habitat, 2008).

As indicated by UNCHS Habitat, (2001), successful ghetto redesigning requires dynamic association of the objective recipients. UN-HABITAT and KENSUP (2008) facilitate noticed that the point of KENSUP is comprehensive investment that recognizes the assorted qualities of performers and does not see the groups as involved homogenous premiums. The point of support is strengthening, limit building, fair dissemination of assets and maintainability. Rahman (2002) reported that limit building ought to organize ladies who shape the majority of casual economy. He repeated that home loan reimbursements ought to be reasonable. Then again, Appadurai (2001) communicated the need to advance neighborhood activities which address the communicated needs of ghetto inhabitants rather than the western models. In rundown, compelling ghetto overhauling ought to guarantee that the recipients' abilities are worked to improve autonomy, right

mindfulness and supportability of neighborhood activities. Mulcahy (2001) takes note of that throughout decades, ghetto occupants have built up a general doubt of government, to some extent on account of dissatisfaction over government guaranteed redesigning ventures that never appeared. Although, the role of beneficiaries' participation has always been recognized, mostly it has been much developed on paper rather than in reality, lacking donor and government eagerness (Werlin, 1999, Berner & Phillips, 2005). Governments show no real interest in involving slum dwellers in arrangement is executed. Ghetto inhabitant support has been more probable saw as an instrument to control them and to legitimize an administration strategy (Botes & Rensburg, 2000).

Community-based organizations (CBO) and NGOs are just minor players in the arrangement of fundamental administrations (Huchzermeyer, 2008). Cifuentes (2008) found that in the Korogocho ghetto just 3% of the inhabitants took an interest in administration conveyance based gatherings. The absence of group preparation in essential administration conveyance demonstrates aggregate activity issues among ghetto occupants.

2.3.1 Role of Stakeholders in the Slum Upgrading Projects.

Stakeholder participation is a process that brings together major actors in a program by way of communication, negotiation and decision making with the aim of designing, implementing and setting practical solutions. Major stakeholders that have supported slum upgrading programs include: Government, members of the community, private sector and development partners. The government's role is 'empowering', which suggests urging nearby group gatherings to wind up included or assume control over the generation or the restoration of lodging, while the administration supplies simple credit, residency of land, the crucial foundation, specialized help and the lawful support. Other stakeholders have complemented upgrading programs with income, labour, employment, credit markets and entrepreneurial skills (Minvu, 2004). For example, the Indonesian government encourages community development through institutional building and infrastructure improvement in an effort to strengthen community participation in the construction of houses. Most upgrading programs have been successful because program beneficiaries were actively involved (Hamdi, 1991). Thailand has implemented programs in collaboration with commercial and local banks under close supervision by government agencies to construct homes for low-income households from 2003 (Greene, 2010). In Kenya, Ministries involved in slum upgrading programs include; Housing, Office of the President, Lands, Local Government, Roads

and Public Works, Finance and Planning, Health, Water and Ministry of Information and Communication. The Kenyan government has set up national advancement approaches that concentrate on financial change. A community oriented activity between the administration of Kenya and UNCHS-Habitat led to the launch of a report entitled Nairobi Situation Analysis (Nairobi, 2001) aimed at reducing urban poverty and improving informal settlements in Nairobi. The report recommends that slum upgrading by the government should be done through integrated institutional framework that accommodates participatory approaches involving all key stakeholders (Syagga, 2001).

Most upgrading efforts are being undertaken by development agencies that aim at creating a sense of ownership, entitlement and investment in the area (Cohen, 2001; Ooi & Phua, 2006). Cities Alliance is a global partnership formed in 1999; this was joint effort between the World Bank Group and UN-Habitat. Cities Alliance focuses on shared development and planning strategies that enables the cities to reduce poverty levels and achieve proper urbanization. Slum Upgrading Facility (SUF) is a program established in 2004 within UN-Habitat, whose aim is to support developing states achieve Millennium Development Goals (Shea, 2008). SUF pilot programs have been established in Ghana, Indonesia, Tanzania and Sri Lanka, which led to the formation of Local Finance Facilities to address the challenges of financing hence provide financial mechanisms to support the implementation of slum settlement upgrading strategies (Painter, 2006). Since 1990 three major multilateral banks –the World Bank, International Development banks (IDB) and Asian Development Bank (ADB) have maintained consistent funding for the broad category of housing and slum upgrading. The European Commission also provides funding required for development. One of the slum upgrading programs that was jointly funded by the World Bank, government of Italy and Cities Alliance in Alagados Brazil is the Integrated Slum Upgrading Program in Salvador (Bahia) (Cobbett, 2009). External funding agency play an important role from the experiences with housing finance systems for the urban poor (Piran, 2000).

A few undertakings have requested that a specific number of seats are saved for ladies on occupants' boards of trustees or contract female staff especially for group assembly to acquire ladies' conclusions and propel ladies to take an interest (Schllyter 1998). Resettlement has been reported to be a difficult process because it disrupts already established social networks especially along ethnic lines with most ethnic groups conglomerating areas/sections of slums (UNCHS 2001). Therefore, moving diverse groups and settling them next to each other can lead to social conflict

(Cuervo and Hin 1998; Gulyan et al, 2002) because it perpetuates the exploitation of the poor (Briggs 1998; UNCHS Habitat 2001).

2.4 Profitability of slum business and implementation of slum upgrading projects

Slum redesigning does influence the remaining of open authorities as well as the power adjust amongst proprietors and occupants. Truth be told, mainstreaming ghetto sanctioning has engaged casual land subdivision to wind up an across the board marvel. Investigate from various nations demonstrated that the illicit leases in ghettos have expanded prominently for most recent two decades and more shockingly it is even much higher than in the formal market (Daviss, 2007). Informal rental housing in Nairobi is dominated by large-scale landlordism (Mamunji 1982: 12), who rather shape and mould the policies related to slums (AgeviITDG, 2002).

Amis (1993: 206), for example, found that in Kibera 6% of all landowners possess 25% of all rooms. This shows a high level of possession focus. Besides, expanding densities in Nairobi's ghettos propose that structure proprietors, bypassing official controls, boost their salary by developing an expanding number of low quality units on plots (Syagga et al. 2001: 96). Gulyani et al. (2006: 37) and Kiprotich (2011) found that ghetto family units pay all things considered a month to month lease of 790 Kshs (US\$ 11), representing 12% of the normal month to month salary. Syagga et al. (2002: 5) report that if the Kenyan Rent Restriction Act was connected adequately in Nairobi's ghettos, rents would diminish by 70%. This high cost low quality traps (Gulyani et al. 2006: 43) permits landowners to make a 100% tax exempt profit for rental venture (Huchzermeyer 2008: 30).

The formalization of ghetto likewise opens the route for the control of administrations, leases and building principles. This happens fundamentally through the regularization of tenure. A considerable lot of the vast scale landowners contend that the presentation of a residency framework which just assesses the necessities of inhabitants will be of an extraordinary impediment to them since they have put resources into the structure, soothed the lodging deficiency and in addition they lose their rental salary (Syagga et al. 2002: 29). Along these lines, huge scale proprietors normally restrict and meddle in updating ventures. On account of the KENSUP pilot extend in Soweto, Kibera (COHRE 2006: 115) and redesigning in Mathare 4A (Kusienya 2004: 4) landowners could campaign for a pay without which the procedure of the venture would have been unthinkable.

Adjacent to the landowners, the utilization of exclusive requirements with respect to densities, building materials or room measure expanded the rents in past redevelopment ventures (Huchzermeyer, 2008). Thusly, ghetto inhabitants could no longer manage the cost of lodging in the redesigned settlements and were valued out by higher pay bunches, particularly in the Kibera High Rise venture of the mid 1990s (Huchzermeyer, 2008: 21) and in Pumwani (Ochiengg 2007). There were additionally instances of occupants living in the brief lodging offering their "updating passes" and moving back to rustic zones or different ghettos (Namaale, 2011). Moreover, new inhabitants have moved into the territory that should have been cleared and into the shanties where individuals who moved into transitory lodging used to live with a significant number of them uninformed of the way that these shanties are planned to be annihilated (Namaale, 2011; Ombese, 2011). The above venture along these lines, neglected to meet its planned goals because of a blend of abnormal state political impedance and legitimate activity that postponed its encouraging (Wilson, 1998; Majale, 2008).

Mehrotraa (2005) found that large portions of the private water sellers in Kibera were proprietors, making occupants hesitant to challenge high costs or to change to option suppliers. BPD (2004: 1) reported that in a few occurrences public can offices essentially worked by CBOs in the ghettos were privatized via proprietors who utilize their intense position to propagate control awkward nature in the ghettos. The crevice left by open and non-business suppliers in Nairobi's ghettos has been filled by an assortment of private specialists (Huchzermeyer 2008). In kibera, for example 630 of the 650 water booths in operation are controlled by private operators (Mehrotraa 2005), who offer water that is regularly sullied at generally high costs. Water sellers report that no less than a fourth of their underlying speculation is as influences to encourage an association. The low scope of power and of a private rubbish accumulation framework shows that ghetto families are unwilling or not able to pay for business suppliers (Gulyaani et al. 2006; 51).

2.5 Economic status of slum residents and the implementation of slum upgrading projects

It is broadly realized that individuals living in the ghettos likewise get to data on the urban work advertise through different casual channels, and tend to encounter word related portability by either moving starting with one kind of occupation then onto the next or through securing a few abilities/encounter amid their stay in ghetto. Without expertise advancement, preparing openings and division of work market, ghetto occupants keep on remaining in the comparable word related

stepping stool with no word related portability in spite of the fact that they may have picked up experience. Individuals living in ghettos generally are impartial to upgrade their word related versatility or join better employments on the off chance that it involves long separation development in urban communities. They generally like to live close-by the wellsprings of business openings (Mitra, 2006). Because of absence of aptitudes and instructive capabilities exceptionally constrained open doors are accessible in the high profitability modern and administration part in the urban regions. So these transients look for work in less

2.6 Theoretical framework

The view of open residency is to some degree, a reaction to the apparent confinements of private proprietorship in empowering break even with access to land to all individuals from the general public. Also, inhabitation and utilize rights are types of residency which speak to a trade off between full, formal acknowledgment and real security as far as utilize and true semi-possession (Payne 1996). Level headed discussions and studies around land arrangement frequently concentrate on the neo-liberal plan of formalizing area as alienable property, most strikingly through land titling plans (Jacoby and Minten 2005). Hernando de Soto (1989) clarifies the significance of property rights in advancing advancement and thriving; most prominently, he recognizes the channels through which uncertain and ineffectively characterized property rights can step back and keep monetary improvement from occurring. He contends that the absence of titles implies that the advantages of poor people, which he calls 'dead capital' can't be passed on, partitioned up, or offered as insurance for an advance. In light of this thought, De Soto stresses how financial advantages got from expanded security of residency can possibly prompt to more prominent interest in individual property and neighborhoods (Woodruff, 2001:1218). Eventually, De Soto's thought highlights the requirement for the control of casualness, which has made his hypothesis one that is bolstered and also profoundly censured. As examined by Woodruff (2001:1217), while the poor may claim a large portion of the casual resources, the incongruity is that a great part of the arrive on which the casual houses are assembled "was in certainty acquired through intrusion; taken from its past proprietors without pay. Meaning; the present proprietors have these benefits simply because property rights have not been adequately upheld in the ghettos to keep them from being taken. In addition, as per Lombard (2012) while arrive regularization can enhance access to land, lodging and benefits, and may fortify administration arrangement in

territories where absence of residency is a snag, it doesn't generally animate speculation by proprietors. As indicated by this contention, arrive titling does not ensure access to credit or security from ousting or confiscation, as these occasions can happen notwithstanding, with the responsibility for title or without.

The framework is further developed and modified using Carney's description of livelihood assets (Rakodi, 2002: 11) and the comprehensive analysis of poverty aspects (Mitlin, Satterthwaite, 2004: 15). It starts from the assumption that the lack of various assets imposes increasing vulnerability of the poor. The 'assets vulnerability framework' shows how asset management affects the vulnerability of the urban low-income households. Based on a fivefold framework (labour, human and productive assets, household relations and social capital) it is argued that an asset or a capital presents a potential to be invested, developed or to stimulate for a long-term achievement.

2.7 Conceptual framework

According to Kothari (2004) a conceptual framework defines the interrelationships between variables deemed important in a study and this study in its interest in socio economic determinants influencing the implementation of urban infrastructure project shows the relationships indicated in **Figure 1**. The framework consists of 4 major independent variables, 1 intervening variable and 1 dependent variable. This study, therefore, will identify which factors influence the successful implementation of the upgrading projects, particularly in the Kenyan context. Being a conceptual paper, the framework is expected to be tested empirically using data from two villages (Mashimoni and Katwekera) in the informal settlement of Kibera, Nairobi, Kenya.

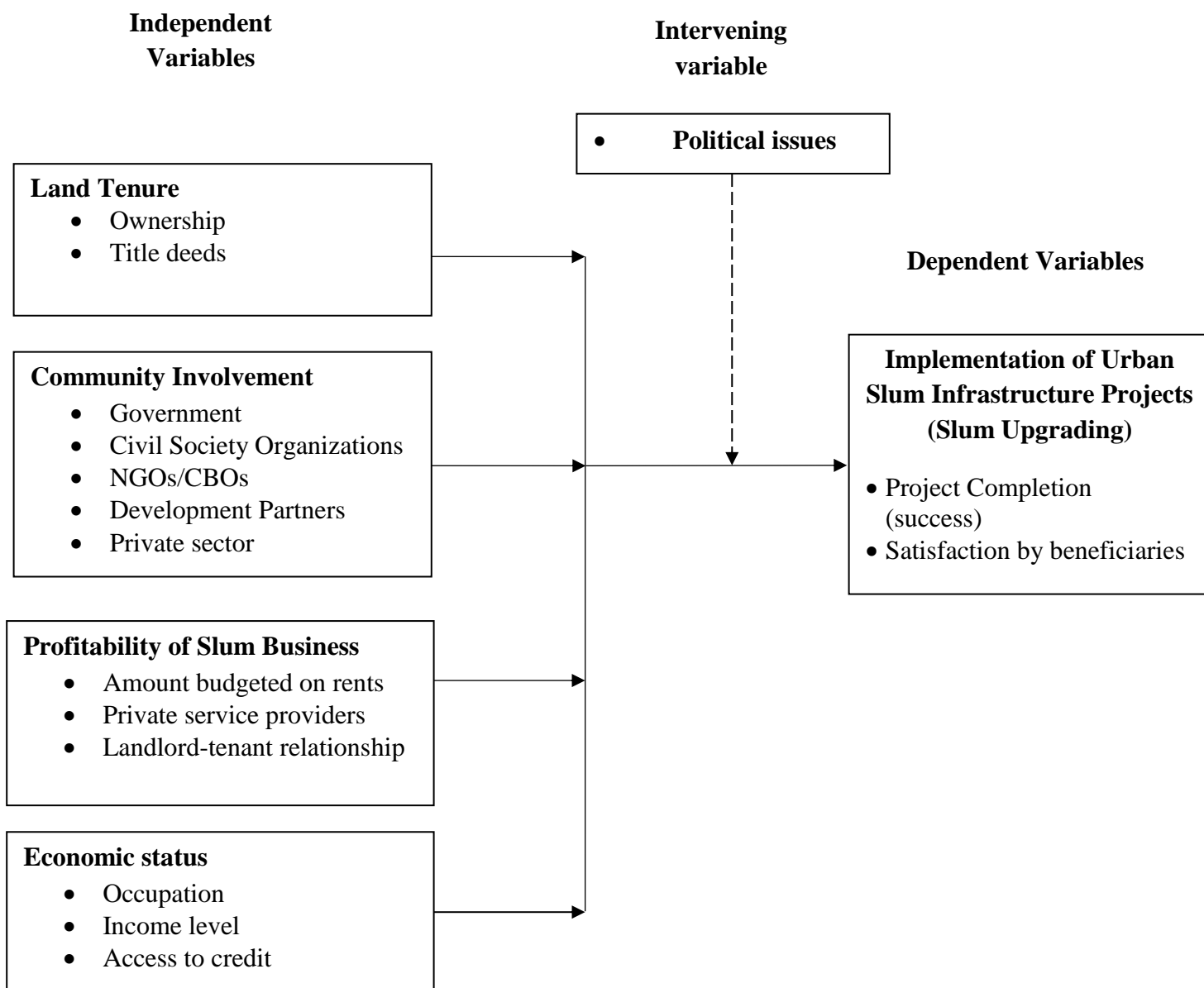


Figure 2. 1: Conceptual Framework Model

2.8 Knowledge gap

So many studies on slum upgrading activities have been carried out in Kibera. However, the status of Mashimoni and Katwekera villages in Kibera is pathetic and residents of these areas are generally poor and vulnerable, experiencing problems of poor shelter, joblessness, tenure insecurity; diseases; evictions as well as low economic status and low social capital within the

communities and so on. Compared to the rest of the slum's population, these two villages will be selected because they are located along the rail line. They lack the formal access to land, housing and services. These areas will also be selected because of the recent upgrading activities along the railway as well as the continual upgrading of within-community housing and roads over the past decade. However, very little has been done on the socioeconomic factors that affect implementation of slum upgrading projects in these areas. This leaves a wide learning crevice that the study looks to fill and it comes at the opportune time, to distinguish the fundamental variables that influences the execution of these updating ventures and will propose proper suggestions which will help the redesigning system to accomplish its goals. The suggestions of this study should be proposed to fill the crevices and recognize escape clauses that may have been neglected by different partners of the redesigning program in their methodologies and intercessions thus the significance of this study.

2.9 Summary of literature review

From the literature review, it can be concluded that several factors play a role in influencing the implementation of various slum upgrading programmes. While the National housing policy is in place, the tailored slum policy is critical in controlling the proliferation of more slums. The test is thus whether the existence of such policies will be able to influence the implementation of slum prevention and/or upgrading program. For implementation of slum upgrading programs to be successful, the local community ought to be fully involved because they are the ultimate beneficiaries. Therefore, the relationship between implementation of slum upgrading program and community participation is very crucial and should be established. Land tenure is also believed to influence implementation of slum upgrading program because where land is owned on freehold; it would be very difficult to relocate individuals in pursuit of implementing a given program. An examination of the achievements of the above stated objectives will help policy makers formulate effective designs for the implementation of similar programs in future. A representative sample of 300 respondents was interviewed from the two villages (150 from each village) to generalize about the entire population of the 2 villages in Kibera slum upgrading project. This study used primary data as its source of information. The findings of the research have helped to highlight areas of improvement for the replica projects of slum upgrading in the rest of the country.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter provides specific account on the research methodology entailing the research design; the target population, sample size and sampling procedure; sample selection; methods of data collection/research instruments, their validity and reliability; data analysis procedures; techniques; ethical considerations of the study; and, operational definition of variables.

3.1 Research Design

Research design can be defined as the conditions for data collection and analysis to help in the interpretation of a given phenomenon or question at hand (Flyvbjerg, 2000). This study was carried out using descriptive survey research design that employed the following steps: pre-field survey, field work, review of relevant documents (articles, official reports, books and other related information), data collection, data analysis and interpretation. The collected data has a mixture of variables, words and categories and the findings were analyzed and generalized to provide a better understanding of the research questions. Descriptive survey was used to assess the factors influencing implementation of slum upgrading programs. This enabled the researcher to generate statistical data that was used to analyze the relationship between variables on the factors that influence implementation of slum upgrading programs in Mashimoni and Katwekera villages in Kibera.

3.2 Target Population

Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions (Amin, 2005; Cooper and Schindler, 2000, 2001). The respondents in this study were selected from two villages namely Mashimoni and Katwekera in Kibera. The selected villages are densely populated (estimated population of 22,625 for Mashimoni and 55,425 persons for Katwekera) with 95% of the residents living below poverty line. Most of the houses are made of mud and roofed with either corrugated iron sheets or covered with polythene paper measuring approximately 10 feet by 10 feet. As per the Kenya Population and Housing Census Report (2010), Mashimoni and Katwekera villages registered a total of 905 and 2217 households, respectively.

3.3 Sample size and sampling procedure

This section shows the size of the sample that was used and the procedures by which the samples were obtained.

3.3.1 Sample size

According to KIM (2009) and Israel (1992), for one to get a sample size, three factors have to be put into consideration, these include: the level of precision, confidence levels and level of variability. The study adopted the formula described by Nassiumma (2000) as cited in Kenya

Institute of Management (2009) to determine the sample size from which to make inference on population: $\pm 5\%$ precision level and 95% confidence level.

The formula used to determine the sample size is given by:

$$n = \frac{NC_v^2}{(C_v^2 + (N-1)e^2)}$$

Where n = required sample size

N = population (22,625 for Mashimoni and 55,425 for Katwekera)

C_v = Coefficient of variation (take 0.5)

e = Tolerance of desired level of confidence, take 0.05% at 95% confidence level

Based on the above formula and the indicated variables, the sample size for Mashimoni was $n = 149.56$ rounded off to 150 while for Katwekera, $n = 150.12$ rounded off to 150. The study therefore gathered field data from these households, based on the criteria of housing typologies (informal houses and High rise flat residents).

3.3.2 Sampling procedure

For this study, systematic random sampling technique was used to select the subjects of the study in the two villages. This is because systematic random sampling gives each member of the target population an equal chance of being sampled and consequently reducing the researcher's biasness (Cooper and Schindler, 2001). Systematic random sampling technique is appropriate as it eliminates bias and involves a selection process in which each element in the population has an equal and independent chance of being selected and the sample selected is representative of the population. To cater for those subjects/respondents that would have decline to participate or dropped out during the process of investigation, the study proposed a sample size increase of 10% to account for non-response. Only one adult person per household, in any of the villages was interviewed.

Purposive sampling technique was used to select key informants among all the stakeholders, who were believed to be resourceful by possessing information crucial to the achievement of the study objectives. This method was employed in the identification of the various interest groups for instance private business owners and relevant institutions such as the staff of National Housing Corporation (NHC), Kenya Slum Upgrading Programme (KENSUP), Kenya

Informal Settlement Improvement Project (KISIP), UN-Habitat, NGOs, CBOs and Government sponsored programs that have existed for more than five years in the study area. Purposive sampling was more appropriate as it gave the researcher a chance to select typical and useful cases only and saved time and money.

3.4 Methods of Data Collection

Data collection is the process of gathering and measuring information on targeted variables in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes.

3.4.1 Questionnaires

Questionnaires were used to collect information from the household respondents in the two villages, staffs of NHC, NGOs, CBOs and the private service providers. The staffs could complete the questionnaires anonymously to give as much information as possible. To overcome the challenge of collecting uncompleted questionnaires, a two-week period was given and assurance given that the information gotten was strictly meant for academic work.

3.4.2 Focus Group Discussion (FGD)

FGDs was conducted with representatives of different Community Associations in the two villages and the staff of relevant government departments (KENSUP and KISIP staffs), staff of National Housing Corporation (NHC) as well as relevant stakeholders with key informants such as chiefs, village heads, religious leaders and teachers, representatives of the NGOs working in the neighborhoods, council officials and special group leaders such as the youths. The key informants were categorized as; Youth Leaders, Social Workers, Women Leaders, Church Leaders, Village Elders, Chiefs, Medical officers, Teachers and others with factors such as gender balance, age group representation in mind.

3.5 Validity

To further fine tune the instrument for greater accuracy, meaningfulness and technical soundness of the research, the instrument was discussed and reviewed by the supervisor. In this study questions were asked in sequence, clarified and paraphrased where necessary by focusing on research objectives and respondents understanding. The interview was relatively flexible; and

the researcher could probe when need aroused to get more information. The administration of the questionnaires was monitored daily, and the filled forms were checked for quality control. To improve validity of the instrument the researcher reconstructed the questions in the questionnaire in consultation with the supervisor to ensure that all areas of the study were addressed. This assisted in reducing biases before data collection. Opinion was sought from the lecturers in the department to examine the validity of the research instrument used.

3.6 Reliability

The researcher used the test-retest technique to ensure reliability of the questionnaires. The same questionnaires described above were re-administered to the same respondents after two weeks. The scores from both tests was correlated to determine the coefficient of reliability using the Karl Pearson's Product Moment Coefficient of Correlation (r). The items were scored individually and aggregated to get the total score on the whole instrument for both test and pre-test administrations.

3.7 Data Analysis Techniques

Data was analysed using both qualitative and quantitative data analysis techniques. Quantitative data on responses from questions in the questionnaire were coded for ease in systematic data entry. All collected data was edited to ensure compliance to accuracy, consistency and relevance to research questions. Editing was done to check, irrelevance, contextual mistakes, omissions and missing responses that should be filled or disregarded. The researcher organized the collected data through preparing summaries of findings from data in questionnaires and focused group discussions reports. This procedure involved tabulation of responses corresponding to each of the variables received from the research instruments. Preparation of a summary master questionnaire was made against which total number of responses were recorded; and, data entry conducted into Statistical Packages for Social Sciences (SPSS) version 20.0 computing program for analysis, for ease of presentation using means, frequencies, percentages and tables as well as cross tabulation to determine the relationship between independent and dependent variables.

Data from un-coded questionnaire items and document analysis were grouped under broad themes and converted into frequency counts. Data was compressed and displayed in the form of

tables, graphs and text formats. Qualitative data from interviews was further analyzed into simplified format that relevantly answered to the research questions. Pearsons correlation test is used to show the relationships between the independent and dependent variables.

3.8 Ethical Consideration

The researcher obtained permission from the National Council for Science and Technology and from the Department of Extra Mural Studies, University of Nairobi. The researcher asked for permission from the residents of Kibera, before administering the questionnaires. Before the interviews were conducted, the interviewer explained to the respondents the objectives and purpose of the study, how their participation was going to be important and how the study will be beneficial to them. Impartiality was observed on the part of the researcher throughout the exercise with utmost respect for views and culture to establish rapport. The researcher numbered the questionnaires to ensure confidentiality by ensuring that the respondents did not indicate their names on the questionnaires and interview guides. The researcher acknowledged all sources of information from other scholars. Individuals who were willing to participate in this exercise as respondents did so voluntarily. All participants were not entitled to any monetary gains but will be able to access the results of the study which will be made public. The study strived to get information from all kinds of respondents irrespective of their race, gender and position.

3.9 Operational definition of variables

This section identifies the indicators that were used to measure the dependent and independent variables. This study used qualitative and quantitative indicators to measure the relationship between the dependent and independent variables.

Table 3. 1: Operational definition of Variables

Objective	Variables			Indicators	Type of data	Sources of data	Data instrument
	Independent	Indicators	Dependent				
To determine the influence of land tenure on the implementation of slum upgrading projects.	Land tenure	<ul style="list-style-type: none"> • Ownership • Title deeds 	Implementation of urban slum infrastructure projects (slum upgrading)	<ul style="list-style-type: none"> • Project completion • Satisfaction by beneficiaries 	<p>Primary</p> <p>Secondary</p>	<p>Resource persons</p> <p>Document review</p> <p>Referred publications</p>	<p>Questionnaires</p> <p>Interview schedules</p>
To examine the influence of community involvement in the implementation of slum upgrading projects.	Community involvement	<ul style="list-style-type: none"> • Government. • Civil society organizations • NGOs/CBOs • Development partners • Private sector. 	Implementation of urban slum infrastructure projects (slum upgrading)	<ul style="list-style-type: none"> • Project completion • Satisfaction by beneficiaries 	<p>Primary</p> <p>Secondary</p>	<p>Households</p> <p>Resource persons</p> <p>Document review</p> <p>Referred publications</p>	<p>Questionnaire,</p> <p>interview guides</p>
To determine the influence of profitability of slum business on the implementation of slum upgrading projects.	Profitability of slum business	<ul style="list-style-type: none"> • Amount budgeted on rents • Private service providers • Landlord tenant relationship 	Implementation of urban slum infrastructure projects (slum upgrading)	<ul style="list-style-type: none"> • Project completion • Satisfaction by beneficiaries 	<p>Primary</p> <p>Secondary</p>	<p>Resource persons</p> <p>Document review</p> <p>Referred publications</p>	<p>Questionnaires</p> <p>Interview schedules</p>
To establish the role of economic status play in the implementation of the slum upgrading projects	Economic Status	<ul style="list-style-type: none"> • Occupation • Income level • Access to credit 	Implementation of urban slum infrastructure projects (slum upgrading)	<ul style="list-style-type: none"> • Project completion • Satisfaction by beneficiaries 	<p>Primary</p> <p>Secondary</p>	<p>Household</p>	<p>Questionnaires</p> <p>Interview schedules</p>

3.10. Summary

The security of tenure refers to the ownership or payment of rent within the housing estate; it is indicated by receipts of payment of rent or title deeds. The number of enterprises established by tenants indicates the availability of Income Generating Activities (GLTN, 2006). Human factors determine the willingness of individuals to be beneficiaries of the project; these are people's attitude and the area politics. Income level of the residents determines the viability of business because it will determine effective demand of goods and services in the estate (UNCHS, 2003). Government policy is meant to create fairness for all residents living in the slums; this is about eligibility for tenancy and ownership of the houses (Polak, 2009). All the above factors determine the level of satisfaction of slum upgrading projects which was measured by the number of respondents in the study.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The content in this chapter was derived from qualitative and quantitative data obtained by use of structured and semi-structured questionnaires administered to respondents from two villages in Kibera namely: Katwekera and Mashimoni. Reported findings in this chapter pertain to observed socio-economic determinants influencing the implementation of urban slum infrastructure projects. The study findings have been discussed in relation to the objectives, research questions and themes derived from literature reviewed. In this section the study highlights the results obtained from the data analyzed in terms of frequencies and percentages. The results of descriptive statistics are presented as analyzed in the Statistical Package for Social Sciences (SPSS version 20.0) which facilitated the efficiency in drawing conclusions that constitute the basis of final recommendations. Below is a summary of the findings from the study gathered using household questionnaires, focus group discussions, key informant interviews and observations. However, prior to the study objectives, the author has given a consideration for the social-demographic background of respondents from the two study areas.

4.2 Questionnaire response rate

During the field survey on socio-economic determinants influencing the implementation of urban slum infrastructure projects in Kibera, Lang'ata constituency, Nairobi, Kenya, a sample size of 300 respondents was targeted based on Nassiumma (2000) as cited in Kenya Institute of Management (2009). Katwekera and Mashimoni were selected with the purpose of having a valid and reliable data as information may vary markedly from source to source. From a total of 300 questionnaires administered, 293 (148 from Katwekera and 145 from Mashimoni) were filled following detailed instructions. This represented a gross response rate of 97.67% (98.67 for Katwekera and 96.67% for Mashimoni). Mugenda and Mugenda (2003) attest that more than 70% reaction rate is great, 60% rate is viewed as great and half is sufficient. In light of the proposal by the creator, the study presumed that the reaction rate of 97.67% for this exploration work was "great" and in this way a decent premise for analysis and reporting (table 4.1)

Table 4. 1:Response rate

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Responded	148	98.67	145	96.67
Incomplete response	2	1.33	5	3.33
Total	150	100	150	100

4.3 Socio-demographic profile of respondents

The general socio-demographic profile of respondents was based on individual and group attributes; with evaluation done along geographical spread, gender for respondents, age, marital status and educational background. The background information about the respondents indicated their suitability to participate in the census study pertaining to socio-economic factors influencing the implementation of urban slum infrastructure project in Katwekera and Mashimoni wards, Kibera.

4.3.1 Distribution of respondents by gender

The study recognised that majority (78.38%) of the respondents in Katwekera were male while 21.62% were female. In Mashimoni, majority (82.07%) were also males while 17.93% were females (table 4.2). This study was geared to slum upgrading issues that affect both men and women in the community. This means that men were mostly the household heads in this study, although a good number of women were also represented in both study sites.

Table 4. 2 Distribution of respondents by gender

Response	Study sites	
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	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Female	32	21.62	26	17.93
Male	116	78.38	119	82.07
Total	148	100	145	100

4.3.2 Distribution of respondents by age

The study wanted to establish whether there was a linkage between age of the respondents and their participation in slum upgrading projects. The knowledge of the age limit was important to provide a cast on which ages are most engaged. When asked to state their ages, respondents answered as indicated in table 4.3.

Table 4.3: Distribution of respondents by age

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Below 20 years	2	1.4	1	0.7
20 – 30 years	88	60.1	62	42.8
31 – 40 years	36	24.3	68	46.9
41 – 50 years	16	10.1	13	9.0
Above 51 years	6	4.1	1	0.7
Total	148	100	145	100

From the findings shown in table 4.3, majority (60.1%) of the respondents in Katwekera were aged between 20 – 30 years, followed by 31 – 40 years (24.3%), whereas in Mashimoni most (46.9%) of the respondents were within the age bracket of 31 – 40 years, followed by 42.8% for 20 – 30 years. The variation in age distribution indicates an over-representation, thus implies that most of the respondents were energetic and therefore could give reliable information. Secondly, these are mostly youths that are economically active and they can easily embrace change.

However, the fact that >60% of the respondents are in the working age means that their priorities might pose challenges in slum upgrading as they search for cheaper livelihood.

4.3.3 Distribution of respondents by level of education

Information on respondents' education background was cross-tabulated to facilitate analysis of their perceptions with respect to their possessed skills, knowledge and abilities needed in urban slum upgrading projects, which is a highly dynamic environment.

Table 4.4: Distribution of respondents by level of education

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
No education	88	59.5	74	51.0
Primary	37	25.0	39	26.9
Secondary	15	10.1	19	13.1
Tertiary	5	3.4	10	6.9
University	3	2.0	3	2.1
Total	148	100	145	100

The findings revealed that majority (59.5%) of the respondents in Katwekera and Mashimoni (51%) had no formal education (table 4.4). Less than 3% of the respondents in Katwekera and Mashimoni had University education. This infers that majority of the respondents were not well trained thus had poor information and knowledge on slum upgrading programmes, which undermined the importance of healthy environment. Therefore, it can be deduced that residents in Katwekera and Mashimoni should be living below the minimum environmental standards. Thus, most of the respondents end up staying in the slum where means of livelihood is believed to be cheaper as compared to other areas. However, those with tertiary and university education are likely to get a good job in the future and move their families out of the slum. It is assumed that when there are many uneducated people, it is difficult to comprehend the factors that influence slum upgrading in the informal settlements and therefore they will show less participation towards slum upgrading activities.

During the survey conducted in Katwekera and Mashimoni, the length of time spent in school by majority of the respondents ranged between 6 – 9 years (60.8%) and 10 – 13 years (42.8%), respectively (table 4.5).

Table 4.5: Length of time spent in school by the respondents

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
<1 year	7	4.7	16	11.0
2 – 5 years	24	16.2	28	19.3
6 – 9 years	90	60.8	36	24.8
10 – 13 years	19	12.8	62	42.8
>13 years	8	5.4	3	2.1
Total	148	100	145	100

4.3.4 Distribution of respondents with respect to length of stay in current location

The study obtained information on the respondents' duration of stay in the slum to understand their level of interaction with the stakeholders in slum upgrading programme (table 4.6).

Table 4. 6: The length of stay of respondents in their current locations

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Since birth	35	23.6	28	19.3
< 1 year	11	7.4	8	5.5
1 – 3 years	24	16.2	13	9.0
4 – 6 years	19	12.8	42	29.0
7 – 9 years	17	11.5	13	9.0
>10 years	42	28.4	41	28.3
Total	148	100	145	100

The proportion of those who have lived in the slum since birth was higher in Katwekera (23.6%) compared to Mashimoni (19.3%) but the overall results suggested that more individuals are staying longer in the slums from birth than previously observed (APHRC, 2014). In Katwekera, respondents who had lived in the slum for more than 10 years represented 28.4%, while in Mashimoni it was 28.3%. These findings showed that more than 80% of the respondents were not born in the slums, indicating a highly migratory and unstable population. Duration of stay is positively and significantly related to regular employment of the household head, household income, and having more household savings. Also, dwellers that can live for long periods in the same informal land are likely to attain high defector tenure security.

4.3.5 Distribution of respondents by marital status

The respondents were asked to state their marital status and the findings are illustrated in table 4.7.

Table 4.7: Distribution of respondents by marital status

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Married with spouse	39	26.4	87	60.0
Married without spouse	1	0.7	3	2.1
Divorced/separated	24	16.2	9	6.2
Widow/widower	33	22.3	12	8.3
Never married	29	19.6	8	5.5
Polygamous married	1	0.7	2	1.4
Cohabiting	21	14.2	24	16.6
Total	148	100	145	100

In terms of relationship status, 26.4% and 60.0% of the slum residents in Katwekera and Mashimoni, respectively, were married. In Katwekera the number of divorced individuals accounted for 16.2%, whereas in Mashimoni it was 6.2%. In Katwekera, 22.3% of the respondents were widow/widower and in Mashimoni it was 8.3%. Among those who had never been married, 19.6% were from Katwekera and 5.5% from Mashimoni. There was no significant difference in the proportion of respondents that were cohabiting in Katwekera (14.2%) and Mashimoni (16.6%) (table 4.7).

4.3.7 Tenancy of respondents

The respondents were interviewed to find out if they were renting or were owners of the houses that they lived in and the results are presented in table 4.8 below. Tenancy structure in Katwekera showed the predominance of rental housing as 98.6% of respondents living in rented housing units while 1.4% were owner – occupier. In Mashimoni the trend was similar with 94.5% of the respondents renting while 5.5% were owners.

Table 4.8: Distribution of respondents by tenancy

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Rental housing	146	98.6	137	94.5
Owner	2	1.4	8	5.5
Total	148	100	145	100

The finding from this study is in line with other studies (Olanjewaju, 1997; Ogunleve, 2011), who have demonstrated that, a significant proportion of low income people in the slums live in rental houses. The fact that more 90% of the respondents in both Katwekera and Mashimoni live in single rooms clearly justifies the exploitative large-scale landlordism in the slum

4.3.8 Distribution of respondents with respect to their housing conditions

Observation on the materials used for housing construction during the survey is showed in table 4.9 below.

Table 4.9: Material used for the construction of houses where respondents live

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Wood and mud	81	54.7	41	28.3
Corrugated iron sheets	48	32.4	94	64.8
Mud and stone	7	4.7	4	2.8
Cement bricks	4	2.7	3	2.1
Mud bricks	5	3.4	1	0.7
Reed and bamboo	3	2.0	2	1.4
Total	148	100	145	100

The findings revealed that majority of the people interviewed in Katwekera were mostly found living in multi-family (tenement) congested substandard buildings (54.7%) made of temporary material like mud, scrap wood and aluminum siding (figure 4.1).



Figure 4. 1: House made of temporary material like mud, scrap wood and aluminum siding

On the other hand, 32.4% of respondents lived in corrugated iron sheet houses (figure 4.2).



Figure 4. 2 Multi-family congested substandard buildings of ~ 115 rooms, made of corrugated iron sheet houses

In Mashimoni, majority of the houses were made of rusted corrugated iron sheets (64.8%), below any acceptable building standard (figure 4.3).



Figure 4. 3: House made of rusted corrugated iron sheets below any acceptable building standard

In Katwekera, 81.8% of the houses had cemented floor while 18.2% were made of earthen floor (table 4.10). In Mashimoni, houses with cemented floor accounted for 57.9% while houses with earthen floor represented 42.1%.

Table 4.10: Material used on the floor of houses where respondents occupy

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Earthen floor	27	18.2	61	42.1
Cemented floor	121	81.8	84	57.9
Total	148	100	145	100

The study also revealed that 85.1% and 73.1% of the respondents in Katwekera and Mashimoni, respectively, were extremely dissatisfied with the housing conditions in their current locations (table 4.11).

Table 4.11: Respondents' level of satisfaction with the current housing condition

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Extremely dissatisfied	126	85.1	106	73.1
Dissatisfied	12	8.1	33	22.8
Satisfied	2	1.4	2	1.4
Very satisfied	2	1.4	3	2.1
Indifferent	6	4.1	1	0.7
Total	148	100	145	100

Despite the level of dissatisfaction by the respondents with the housing conditions, 96.6% in Katwekera and 91.7% in Mashimoni were not willing to be relocated to improved housing conditions with higher rents. According to the respondents', infrastructure, commodities and services like water supply, solid and liquid waste disposal, surface drainage, access roads were almost non-existent. In like manner, considerable households did not have any toilet provision, as such, majority of the respondents were largely dependent on standard public toilets or washroom facilities, which were either flushed to opened sewage (figure 4.4) that runs down to the river.



Figure 4. 4: Standard public toilet facilities flushed directly to opened sewage.

Few of the toilets were pour flush toilets connected to either pipe sewerage or septic tanks, designed to reduce the amount of water used per flushing (figure 4.5).



Figure 4. 5: Standard public toilet facilities flushed to septic tanks

Some households could only manage with shallow pit latrines (Figure 4.6) that were considered substandard: uncovered latrine.



Figure 4. 6: Typical shallow household unimproved pit latrine with metal slab commonly found in the two study areas.

When the respondents were asked the reason for refusing to relocate, they indicated that their income wouldn't be sufficient to pay for accommodation (table 4.12). Therefore, the slum dwellers in the two wards are forced to stay because of economic constraint to inhabit houses that are substandard, which no one else wants.

Table 4.12: The respondents' willingness to relocate to improved housing conditions with higher rents

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Yes	5	3.4	12	8.3
No	143	96.6	133	91.7
Total	148	100	145	100

Majority of the residents indicated that the services provided by the landlords were very bad in Katwekera (66.2%) and Mashimoni (56.6%) (table 4.13). The respondents were not satisfied at all because majority of the households did not have any toilet, water, washroom, garbage collection provision. Only 7% in Katwekera and 3% in Mashimoni were provided with pit latrines that were considered substandard shallow uncovered latrine.

Table 4. 13: Respondents' level of satisfaction with services provided by the landlords

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Excellent	3	2.0	8	5.5
Very good	7	4.7	5	3.4
Good	10	6.8	21	14.5
Average	24	16.2	17	11.7
Very bad	98	66.2	82	56.6
Indifferent	6	4.1	12	8.3
Total	148	100	145	100

However, majority of the respondents were extremely satisfied with the electricity supply in their household. In Katwekera, 52.1% of the respondents had formal connection from Kenya Power and Lighting Corporation (KPLC), whereas 68.3% was recorded from Mashimoni (table 4.14). Other sources of lighting in the households included lantern lamp, solar panel, rechargeable

lamps and car battery. However, 35.1% of the respondents from Katwekera and 22.8% from Mashimoni had illegal connections.

Table 4. 14: Sources of lighting in the household of respondents

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Kenya Power (KPLC)	78	52.7	99	68.3
Illegal connections	52	35.1	33	22.8
Lantern lamp	13	8.8	10	6.9
Solar panel	3	2.0	3	2.1
Rechargeable lamps	2	1.4	0	0.0
Car battery	0	0.0	0	0.0
Total	148	100	145	100

These results also revealed that 70.9% and 84.1% of the respondents from Katwekera and Mashimoni, respectively were extremely satisfied with the electrical connection and service provided in the slums (table 4.15). The electricity bill was mostly paid by men and the monthly cost in Katwekera was averaged at 452.82 Kenyan shillings (Kshs), while in Mashimoni it was 371.29 Kshs.

Table 4. 15: Respondents level of satisfaction with the supply of electricity in the households

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Extremely satisfied	105	70.9	122	84.1
Satisfied	12	8.1	17	11.7
Dissatisfied	16	10.8	3	2.1
Very dissatisfied	8	5.4	1	0.7
indifferent	7	4.7	2	1.4
Total	148	100	145	100

Majority of the slum upgrading project dwellers who were extremely satisfied with the availability of electricity in their houses attributed this to the safety, reliability, and affordability. In fact, according to the respondents “It’s just as cheap as the illegal power, but it’s safe, so they embrace it.” As such many of the former vendors of illegal electricity are now in the (legal) business of selling Kenya Power pre-paid chits, which are available at any corner store.

The respondents also mentioned that electricity was a very crucial element needed in running most of their daily business operation. The respondents who were not satisfied with the availability of electricity mainly felt the rates were higher than they could easily afford. Secondly, the dissatisfied respondents also felt that, the rampant vandalism of electricity connections in slums discourages them to rely on the electricity for business operations.

4.4 Influence of land tenure on the implementation of slum upgrading projects

During the survey, land tenure was investigated as a possible factor that could affect slum upgrading programme. It was found that all the respondents in Katwekera (100%) and Mashimoni (100%) do not own land or neither do they have title deeds (table 4.16).

Table 4. 16: Distribution of respondents with land tenure

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Yes	0	0.0	0	0.0
No	148	100	145	100
Total	148	100	145	100

In Katwekera, 73.6% of the respondents mentioned that they were extremely dissatisfied with the land ownership/titling issues in the slums. In Mashimoni, 62.1% of the respondents were extremely dissatisfied, while 26.67% were dissatisfied. Less than 5% in both villages indicated that they were satisfied (table 4.17).

Table 4. 17: Respondents level of satisfaction with land ownership

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Extremely dissatisfied	109	73.6	90	62.1
Dissatisfied	22	14.9	39	26.9
Satisfied	4	2.7	7	4.8
Very satisfied	2	1.4	5	3.4
Indifferent	11	7.4	4	2.8
Total	148	100	145	100

Firstly, the lack of security of tenure discourages slum residents from implementing any upgrading activity like improving shelter conditions. Secondly, it undermines long haul arranging, and mutilates costs for land and administrations. Thirdly, the absence of any type of lawfully perceived residency renders squatter family units powerless against removal by both standard landowners and the state. Fourthly, it also discourages the governments from supplying communities with basic infrastructures.

4.5 The influence of community involvement in the implementation of the slum upgrading projects.

When respondents were asked how often they participated in the implementation of slum upgrading projects, it was found that in Katwekera, 76.4% of the respondents have never participated in the implementation any programme, while in Mashimoni, 58.6% indicated that they have never been involved (table 4.18). In Mashimoni, 21.4% of the respondents indicated that they have frequently participated.

Table 4. 18: Respondents' participation in the implementation of slum upgrading projects

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Never	113	76.4	85	58.6
Less frequent	17	11.5	27	18.6
Frequent	14	9.5	31	21.4
Very frequent	4	2.7	2	1.4
Total	148	100	145	100

This implies that the success of any upgrading project in these villages might be constraint, because relevant community members are supposed to be actively involved in the slum upgrading process.

4.6 The influence of profitability of slum business on the implementation of the slum upgrading projects

The nature of businesses operated in Katwekera and Mashimoni varied from Private Service providers to private companies (table 4.19). Majority of businesses operated in the two areas were owned by individuals residing in the same villages.

Table 4. 19: Business model operated by the respondents

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Private service providers	127	85.8	108	74.5
Partnership	2	1.4	28	19.3
Public company	4	2.7	6	4.1
Private company	15	10.1	3	2.1
Total	148	100	145	100

During the survey, it was found that, most businesses have been in operation for a period of 4 -5 years (52.7%) in Katwekera and 5 – 6 years (45.5%) in Mashimoni (table 4.20).

Table 4. 20: Lifespan of businesses operated in the study areas

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
<1 year	18	12.2	25	17.2
2 – 3 years	11	7.4	9	6.2
4 – 5 years	78	52.7	31	21.4
5 – 6 years	32	21.6	66	45.5
>7 years	9	6.1	14	9.7
Total	148	100	145	100

The findings showed that in Katwekera, 62.8% of the respondents who were business operators could afford rents for the premises where their businesses were established. In Mashimoni, 85.5% could afford the rents needed for the business premises (table 4.21)

Table 4. 21: Affordability of premises for business operation

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Yes	93	62.8	124	85.5
No	55	37.2	21	14.5
Total	148	100	145	100

The monthly business profits made by the respondents willing to abandon their businesses and participate in slum upgrading program was found to be significantly different in both Katwekera and Mashimoni. (table 4.22).

Table 4. 22: Comparison of mean monthly profits between business persons willing to close to participate in upgrading project and those not willing

Village	Mean monthly profits (KShs)		Difference
	Willing to abandon business	Not willing to abandon business	
Katwekera	5449.23	9582.43	4133.2*
Mashimoni	6463.63	15119.56	8655.93*

Level of significance 5%.

Assessment of the mean value assets owned by the business operator shows that in Katwekera the average asset was 43,097 Kshs per person (41,000 – 50,000 Kshs) and in Mashimoni it was 40,409 Kshs (table 4.23).

Table 4. 23: The value of asset in Kenyan shillings (Kshs) owned by the respondents' operating business in the study sites

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Below 20,000	46	31.1	34	23.4
21,000 – 30,000	7	4.7	20	13.8
31,000 – 40,000	22	14.9	6	4.1
41,000 – 50,000	69	46.6	74	51.0
Above 50,000	4	2.7	11	7.6
Total	148	100	145	100

The proportion of respondents willing to abandon business in Katwekera was 25.7%, while in Mashimoni it was 19.3%. This implies that 74.3% of the respondents in Katwekera and 80.7% in Mashimoni were not ready to abandon their business to participate in slum upgrading programmes (table 4.24).

Table 4. 24: Respondents’ willingness to abandon business and join upgrading programme

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Yes	38	25.7	28	19.3
No	110	74.3	117	80.7
Total	148	100	145	100

4.7 The role of economic status in the implementation of the slum upgrading projects

Larger part of the workers among the ghetto staying families were occupied with incompetent work with no altered place of business or filled in as independently employed assembling and administration based casual segment laborers. The ghetto staying populace in Katwekera and Mashimoni don't just win less wages than the normal per capita state wage, additionally most them live in intense type of neediness.

4.7.1 Distribution of respondents by occupation

The study looked at the occupation of respondents and the results are presented in table 4.25 below. The results showed that majority (95%) of the respondents in Katwekera and 80.4% in Mashimoni reported wage work as their principal means of livelihood in the slums. Only 4.1% in Katwekera and 19.3% in Mashimoni reported government services as their principal source of family earning. Households that reported government service as their principal source of earning in both villages were employed mostly in the category of jobs such as peons, messengers, sweepers, watchmen or as drivers.

Next to wage work 20.9% and 24.1% of the households in Katwekera and Mashimoni, respectively, earn their livelihood by pursuing self-employed occupations like small and petty business in the informal sector such as small grocery and stationery shops, vegetable vending, running tea stalls, sweet meat shops, eateries and the like.

Table 4. 25: Classification of the slum households on means of livelihood (occupation)

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Government services	6	4.1	28	19.3
Business	31	20.9	35	24.1
Driver	10	6.8	9	6.2
Casual labourer	47	31.8	26	17.9
Prostitution	5	3.4	2	1.4
Saloon	6	4.1	5	3.4
Welding	12	8.1	7	4.8
Tailoring	15	10.1	8	5.5
Carpenter	4	2.7	3	2.1
Building construction	2	1.4	10	6.9
Unemployed	6	4.1	9	6.2
Others (plumbers, electricians, painters, barbers etc)	4	2.7	3	2.1
Total	148	100	145	100

The occupational pattern of the households clearly shows that the earners are mostly lowly skilled people, thus there is a high risk of employment insecurity in the two localities.

4.7.2 Distribution of respondents by household income

The study showed that the monthly income of respondents ranged between 14,000 – 16,000 Kshs in Katwekera and Mashimoni (table 4.26). This represented 60.1% of respondents in the range described above in Katwekera and 70.3% in Mashimoni. The analysis revealed that the average monthly income of the respondents was estimated at an average of 14,340 Kenyan shillings in Katwekera and 16,425 Kenyan shillings in Mashimoni. This indicates that there is a huge gap between the level of per capita income in Katwekera and Mashimoni as compared to the national per capita level income.

Table 4. 26: Distribution of respondents by household income

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Below 7,000	24	16.2	1	0.7
8,000 – 10,000	9	6.1	32	22.1
11,000 – 13,000	12	8.1	3	2.1
14,000 – 16,000	89	60.1	102	70.3
17,000 – 19,000	14	9.5	5	3.4
Above 20,000	0	0.0	2	1.4
Total	148	100	145	100

With this low-income distribution, to afford good quality housing is difficult, if not impossible. This is of importance to this study because with higher income, there is more disposable income with which to procure decent housing or repairs or upgrading.

4.7.2 Distribution of respondents by access to credit

From the data shown in table 4.27 below, 85.1% of sampled households in Katwekera and 91.7% in Mashimoni were indebted at the time of the survey. This infers that the savings habit of the respondents developed due to formation of Self Help Groups (SHGs) by the government agencies and NGOs. It was found that people living in Katwekera and Mashimoni invariably borrow from informal sources as many of them suffer from employment insecurity problems coupled with inadequate level of earning.

Table 4. 27: Distribution of respondents according to those with credits from financial institutions

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Yes	126	85.1	133	91.7
No	22	14.9	12	8.3
Total	148	100	145	100

The study also found out that 85.1% of the respondents in Katwekera and 71.0% in Mashimoni operated a bank account (table 4.28). Only 2% in Katwekera and 3% in Mashimoni indicated that they have applied for mortgage. More than 80% of the respondents in either Katwekera and Mashimoni reported that the microfinance services provided to them were affordable.

Table 4. 28: Distribution of respondents operating a bank accounts

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Yes	126	85.1	103	71.0
No	22	14.9	42	29.0
Total	148	100	145	100

According to the respondents, most of them were highly indebted due to unforeseen health expenditure that compels them to knock at the door of money lenders (table 4.29).

Table 4. 29: List of financial institutions lending money to respondents during the survey

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Banks	9	6.1	6	4.1
Chama	11	7.4	65	44.8
Microfinance	85	57.4	51	35.2
M-shwari	16	10.8	18	12.4
Self Help Groups	19	12.8	2	1.4
Sacco	8	5.4	3	2.1
Total	148	100	145	100

Some of the micro-financial institutions listed were: FAULU, K-REP, Kenya-Women, Finance Track and SISBO. The banks listed were Cooperative Bank, Equity Banks and Kenya Commercial Bank.

4.8 Respondents' perception of slum upgrading projects outcome in the current location

The respondents were asked to assess the general outcome of slum upgrading projects in meeting the community's expectations and the results are presented in table 4.30 below. The results revealed that 90.5% of respondents in Katwekera and 85.5% in Mashimoni were dissatisfied with the outcome of upgrading projects. In Katwekera, and Mashimoni, only 3.4% and 5.5%, respectively, of the respondents said they were satisfied with the general outcome of the upgrading projects in their communities.

Table 4. 30: Level of satisfaction of respondents with regards to slum upgrading project outcome

Response	Study sites			
	Katwekera		Mashimoni	
	Frequency	Percentage	Frequency	Percentage
Satisfied	5	3.4	8	5.5
Very satisfied	8	5.4	4	2.8
Dissatisfied	134	90.5	126	85.5
Extremely dissatisfied	0	0.0	6	4.1
Indifferent	1	0.7	1	2.1
Total	148	100	145	100

According to the respondents, they resist upgrading activities because the implementers have never considered them as stakeholders. First, upgrading programmes must change the way it was conducting its activities and begin to adopt a group based approach in ghetto groups. This infers they ought to concentrate on listening to group individuals and pioneers, and advertising the advantages of every action to be done in the ghetto groups. In addition, the ghetto overhauling activity must meet a genuine need; individuals must need it and comprehend why it is essential. At last, there must be a solid political will in the interest of government and solid purchase in with respect to groups. There must likewise be a feeling of organization among all gatherings if redesigning execution projects ought to prevail in ghetto groups.

4.9 Regression Analysis

Each questionnaire was scrutinized for completeness, coded and entered into the computer. The statistical package for social sciences (SPSS V 20.0) was used in analyzing the data. Descriptive statistics (mean, standard deviation and proportions) were used to summarize estimates. In addition, binary logistic regression analysis was conducted to test relationship among variables (independent) on the influence of socio-economic determinants on the implementation of slum upgrading projects.

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (implementation of slum upgrading projects) that is explained by all the four

independent variables: (influence of land tenure on the implementation of slum upgrading projects, influence of community involvement in the implementation of the slum upgrading projects, influence of profitability of slum business on the implementation of the slum upgrading projects, and the role economic status, play in the implementation of the slum upgrading projects). All statistical tests were carried out at 95% level of significance.

Table 4. 31: Logistic regression results for factors influencing implementation of slum upgrading program

Variable	Coefficient	Standard error
Gender of household head	0.23*	0.13
Group membership	-0.29*	0.1
Household size	0.06*	0.04
Respondents' involvement in slum upgrading projects	-0.21*	0.11
Amount of rent paid per month	-0.35*	0.12
Operating a bank account	-0.35*	0.1
Access to credit	-0.19*	0.13
Monthly cost of power	0.02	0.1
Total household income	-0.13	0.11
Gender of business owner	-0.11	0.15
Age of business owner	-0.02*	0.09
Education of business owner	-0.05*	0.02
Cost of operating business	0.05	0.13
Willing to abandon business	0.2	0.15
Monthly business profit	-0.18	0.13

On table 4.31, their findings indicated that a unit increase in group membership, respondents' involvement in slum upgrading projects, amount of rent paid per month, operating a bank account, access to credit, total household income, gender of business owner, age of business owner, education of business owner and monthly business profit, reduces the probability of respondents' participation in slum upgrading projects by 29%, 21%, 35%, 35%, 19%, 13%, 11%, 2% and 5%, respectively. On the other hand, a unit increases of gender of household head, household size, monthly cost of power, cost of operating business and willing to abandon business,

increased the probability of respondents' participation in slum upgrading projects by 23%, 6%, 2%, 5% and 20%, respectively.

4.10 Correlation Analysis

Pearson correlation was used to test whether the independent variables had a relationship with dependent variable. Mathematically if performed correctly getting a result where the values perfectly fit -1, 1 or 0 is not possible however the results are defined by the manner through which they lie closer to each of the values. Values 0.5-1.0 or 0.5 to 1.0 would be indicative of a high correlation. For values between 0.3 to 0.5 or -0.3 to 0.5 would indicate a medium correlation, 0.1 to 0.3 or -0.1 to -0.3 would be indicative of a low correlation.

The results presented in table 4.32, showed that there is a negative relationship between land ownership, community participation, profitability of slum business and satisfactory outcome of slum upgrading projects. The magnitude of the relationship between land ownership and slum upgrading project is -0.472, while that of community participation and slum upgrading project was -0.392. The magnitude of the relationship between profitability of slum business and outcome of slum upgrading activities is -0.152.

The table below provides a summary of the explored relationships with regards to satisfaction of slum upgrading project outcome and further dependence over the four demographics captured. The findings also showed that the satisfaction of slum upgrading project outcome is influenced by presence of income generating activities. The Pearson correlation coefficient is 0.013. This shows that the two factors have a positive association. On testing the dependence relationship across gender, age, occupation and marital, the P value for gender was 0.649 while for age, occupation and marital status were also more than 0.005. This showed that the level of satisfaction of slum upgrading project outcome in relation to the presence of income generating activities was not affected by gender, marital status, occupation and age.

Table 4. 32: Correlation analysis between independent and dependent variables with respect to satisfaction of slum upgrading project outcome

Variable		Satisfaction of slum upgrading project outcome	
		R	P-Value
Socio-demographic factors	Age of the household head	0.11	0.139
	Sex of the household head	0.034	0.649
	Marital status	0.127	0.11
	Occupation	0.177	0.026
Land tenure	Land ownership issues	-0.472	0.0001
Community involvement	Community participation in slum upgrading projects	-0.397	0.0001
Profitability of slum business	Profitability of slum business	-0.152	0.249
	Willingness to abandon business for slum upgrading project	0.321	0.001
Economic status	Total household income	0.013	0.938
	Total value of household assets	0.184	0.179

4.11 Summary

During the survey, land tenure was investigated as a possible factor that could affect slum upgrading programme. It was found that all the respondents in Katwekera (100%) and Mashimoni (100%) do not own land or neither do they have title deeds.

When respondents were asked how often they participated in the implementation of slum upgrading projects, it was found that in Katwekera, 76.4% of the respondents have never participated in the implementation any programme, while in Mashimoni, 58.6% indicated that they have never been involved.

Majority of businesses operated in the two areas were owned by individuals residing in the same villages. The proportion of respondents willing to abandon business in Katwekera was 25.7%, while in Mashimoni it was 19.3%. This implies that 74.3% of the respondents in Katwekera and 80.7% in Mashimoni were not ready to abandon their business to participant in slum upgrading programmes.

In additional, studies showed that majority of the respondents in Katwekera (95%) and 80.4% in Mashimoni reported meager wage work as their principal means of livelihood in the slums. The analysis revealed that the average monthly income of the respondents was estimated at an average of 14,340 Kenyan shillings in Katwekera and 16,425 Kenyan shillings in Mashimoni. This indicates that there is a huge gap between the level of per capita income in Katwekera and Mashimoni as compared to the national per capita level income.

CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this section the study discusses the findings in Katwekera and Mashimoni slum upgrading projects while comparing and contrasting it with other studies carried out in the world on factors affecting the implementation of slum upgrading projects. This section also provides conclusions based on the research findings and previously reviewed literature. Recommendations on ways of improving project implementation are suggested as per the responses obtained from the interviews.

5.1 Summary of findings

The purpose of the study was to establish the socio-economic determinants of the implementation of urban slum infrastructure projects in Katwekera and Mashimoni, Kibera, Kenya with themes of discussions on findings presented along the four objectives of the study: to determine the influence of land tenure on the implementation of slum upgrading projects, to examine the influence of community involvement in the implementation of the slum upgrading projects, to examine the influence of profitability of slum business on the implementation of the slum upgrading projects, and to establish the role economic status, play in the implementation of the slum upgrading projects.

5.1.1 Land tenure in the Katwekera and Mashimoni slum upgrading project

During the survey, land tenure was investigated as a factor affecting slum upgrading but interestingly in Katwekera and Mashimoni, it was found that all the respondents have never own land or neither do they have a land title. Cumulatively, a good proportion of the residents in Katwekera (73.6%) and in Mashimoni (62.1%) were extremely dissatisfied with land ownership issues in the slum. Less than 5% of the residence in both areas indicated that they were satisfied with the land issue, although they lacked a legal title deed. The results presented also revealed a negative relationship between land ownership/title deeds and satisfaction of slum upgrading projects. The negative coefficient indicated that a unit increase of land ownership/title deeds would result in a reduction in the satisfaction of slum upgrading outcome in the slum communities. The magnitude of the relationship between land ownership/title deeds and slum upgrading project was

-0.472. This implies that the success of any slum upgrading project in both communities would largely depend on the availability of land ownership and title deeds.

5.1.2 Community involvement in the Katwekera and Mashimoni slum upgrading project

The findings showed that in Katwekera, 76.4% of the residents have never participated in any slum upgrading project, while in Mashimoni, 58.6% indicated that they have never been involved. In Mashimoni, 21.4% of the respondents indicated that they have frequently been participating in upgrading projects but in Katwekera only 9.5% have been committed to the development and implementation of slum upgrading programs. Less than 3% of the residences in Katwekera and Mashimoni have been very frequently involved. Therefore, lack of participation of community members in the slum upgrading programme remains a major challenge that requires urgent attention by the slum upgrading stakeholders.

5.1.3 Profitability of slum business and implementation of slum upgrading project in the Katwekera and Mashimoni.

The nature of businesses operated in Katwekera and Mashimoni varied from private service providers to private companies. Majority of businesses operated in the two areas were owned by individuals residing in the same villages. The monthly business profit made by the residence willing to abandon their business and participate in slum upgrading program was found to be smaller compared to those who refused to abandon their businesses in both Katwekera and Mashimoni. Assessment of the mean value assets owned by the business operator showed that in Katwekera the average asset was 43,097 Kshs per person (41,000 – 50,000 Kshs) and in Mashimoni it was 40,409 Kshs. Despite, the margin of profit made from the businesses, 25.7% of and 19.3% of the respondents were willing to abandon business in Katwekera and Mashimoni, if they find more profitable opportunity with the slum upgrading projects. This implies that 74.3% of the respondents in Katwekera and 80.7% in Mashimoni were not willing to abandon their business to participant in slum upgrading projects.

5.1.4 The role economic status in the implementation of slum upgrading project in the Katwekera and Mashimoni

In this section, the study looked at the occupation of respondents and found that majority of the respondents in Katwekera (95%) and Mashimoni (80.4%) reported meager wage work as their principal means of livelihood in the slums. Only 4.1% in Katwekera and 19.3% in Mashimoni reported government services as their principal source of family earning. Households that reported government service as their principal source of earning in both villages were employed mostly in the category of jobs such as peons, messengers, sweepers, watchmen or drivers. On the other hand, 20.9% and 24.1% of the households in Katwekera and Mashimoni, respectively, earn their livelihood by pursuing self-employed occupations like small and petty business in the informal sector such as small grocery and stationery shops, vegetable vending, running tea stalls, eateries and the like. As the earning of the principal earner of the households residing in any of the two villages was always inadequate to meet the family subsistence, in majority of the cases both the husband and wife do meager wage work notwithstanding nuclear set up of the households.

The study showed that the monthly income of majority of the respondents ranged between 14,000 – 16,000 Kshs in Katwekera (60.1%) and Mashimoni (70.3%). The analysis revealed that the average monthly income of the respondents was estimated at an average of 14,340 Kenyan shillings in Katwekera and 16,425 Kenyan shillings in Mashimoni. This indicates that there is a huge gap between the level of per capita income in Katwekera and Mashimoni compared to the national per capita level income.

At the time of the survey, the findings showed, 85.1% of sampled households in Katwekera and 91.7% in Mashimoni were indebted to one money lender or the other. Interestingly, 85.1% of the respondents in Katwekera and 71.0% in Mashimoni operated a bank account. This infers that the savings habit of the respondents as, of late, developed among the slum dwelling households due to formation of Self Help Groups (SHGs) by government agencies and NGOs. Cumulatively, more than 80% of the respondents in Katwekera or Mashimoni reported that the microfinance services provided to member of the slum community were affordable.

5.2 Discussions of the findings

5.2.1 Tenancy structure and implementation of slum upgrading project

The tenancy structure in Katwekera and Mashimoni showed the predominance of single room rental housing accounting for more than 90%. These houses are rented out by ‘slum lords’, majority of whom lived outside the slum area and had no occupation license/title deeds. The houses were built from temporary materials, corrugated iron sheets, below any acceptable building standard. Infrastructure, commodities and services like water supply, solid and liquid waste disposal, surface drainage, access roads were almost non-existent or on a hygienically unacceptable level. In like manner, majority of the respondents were largely dependent on standard public toilet or washroom facilities, which were either flush to opened sewage that runs down to the river or flushed to septic tanks. Considerable households did not have any toilet provision and only few houses were provided with pit latrines that were considered substandard: uncovered latrine. Some of the respondents pointed out that the lack of adequate land or overcrowding of houses was one of the challenges that significantly affected upgrading programme. This is credited to the way that inhabitants who are occupants of unlawful structure proprietors, expect that ghetto redesigning will prompt to their dislodging, due to the non-moderateness and degenerate unit allotment (COHRE 2005). This has brought the absence of cooperative attitude and doubt from ghetto tenants since they feel debilitate and overpowered by the redesigning procedure and coming about development occurring in different ranges of Kibera ghettos. These totally crush the reason in light of the fact that similar individuals can't bolster an updating program planning to oust them. Additionally, the structure owners have also been reported to oppose relocation without compensation given the scarcity of land for relocation.

5.2.2 Land tenure and implementation of slum upgrading project

The total neglect of Katwekera and Mashimoni as illegal settlements in the slums has further submerged them into even greater impoverishment due to lack of social services. Nobody in these areas had a land ownership/title deed. Security of land residency is crucial to overhaul the living conditions in the towns to permit occupants to catch resources, make home enhancements and look for credit (World Bank, 2001). Secure land residency ought to be considered as the privilege of all ghetto tenants as people and gatherings to compelling assurance by the state against unlawful expulsions, which gives the to a great degree poor inhabitants a superior shot of

acknowledging area showcase increases after neighborhood enhancements (Tebbal, 2003). The change of the living states of the poor ghetto inhabitants in the two study ranges would depend straightforwardly on having legitimate acknowledgment to the utilization of property; opportunity to exchange and collateralize land; and securing of infrastructural administrations with insignificant exchange costs. Regularizing land residency would likewise encourage more noteworthy private part association in the arrangement of administrations for the ghetto tenants, and an extensive variety of ventures and non-loaning instruments. Hence, arrive residency projects ought to be composed with watchful thought of the neighborhood setting in which they will be actualized, and ought to incorporate a scope of proper alternatives that will best suit the necessities of all ghetto occupants in Katwekera and Mashimoni. As indicated by Cordaid and the Institute for Housing and Urban Development Studies redesigning must put great administration as a need. Expanding on this statement, the UN Habitat watches that great administration ought to be founded on the standards of supportability; auxiliary; value; effectiveness; straightforwardness and responsibility; community engagement and citizenship; and security.

5.2.3 Community involvement and implementation of slum upgrading project

In the present study, majority of the residents indicated that they have never been involved in slum upgrading projects. This is understandable because there has not been any strong political will on behalf of government and strong buy-in on the part of slum communities like Katwekera, which is a stronghold of opposition, thus resist a lot of upgrading opportunities compared to Mashimoni. Hence, absence of ghetto group association in updating program remains a noteworthy test that should be tended to. The respondents ascribed this to obliviousness and absence of data with respect to the ghetto tenants. In this way, ghetto redesigning program must advise, fuse interest of the ghetto occupants in issues that are designed for mitigation of their work to encourage proprietorship and manageability. This is upheld by UNCHS (2001b), who reported that a compelling ghetto redesigning project would requires the dynamic support of the objective recipients as it is a key part of effective enduring improvement. Ghetto inhabitants could be welcome to take an interest in preparing Seminars, workshops and meetings with uncommon concentrate on the venture exercises to advance mindfulness on the rights, obligations, qualifications, and obligations through order of important strategies and laws. The overhauling project could liaise with the legitimate framework to guarantee that security of land residency is an essential arrangement for all ghetto tenants to encourage assurance and maintainability.

5.2.4 Profitability of slum business and implementation of slum upgrading project

The procedure of commercialization of water, asylum, deny gathering and to some degree sanitation (expenses regularly being charged for the utilization of the rare can offices, as they are given through casual benefit looking for and frequently exploitative undertakings have brought about a perplexing structure of monetary partners who gain a level of social authenticity to concentrate benefit out of the exchange of deficient fundamental necessities to the poor ghetto tenants. None of these casual popularized frameworks give administrations to satisfactory principles (Gulyani et al. 2006). For instance, in Katwekera and Mashimoni, water get to is deficient and frequently debased, reject accumulation is insufficient and its transfer unsanitary, and leased safe houses are of the most reduced quality because of insignificant venture by the unlawful structure proprietors (COHRE, 2005b). This is a reasonable sign that the nearby powers have lost the order to offer fundamental administrations to the poor at moderate rates. It is consequently an extraordinary requirement for the neighborhood government to reclaim the order of fair administration conveyance to ease the abuse of commoditized framework inside these two towns. Some respondents also indicated that the corrupt nature of the police and the local administration officers was also considered a limiting factor to upgrading. Besides, the casual work done by the slum dwellers, a large number of the slum residents were engaged in small businesses. Given that the police are poorly paid; it was reported by the respondents that the police took favorable position of the unlicensed ghetto organizations to coerce cash from the officially ruined ghetto occupants. The ghetto redesigning projects ought to consider legitimization, permitting and expulsion of all obstacles to casual asset assembly open doors as an imperative passage indicates in each movement be directed in the two ghettos. Likewise, the organizations required in business enlistment and property possession ought to likewise be evacuated. The police constrain ought to be changed and all around compensated to maintain a strategic distance from badgering and blackmails of the poor ghetto occupants.

5.2.5 The role of economic status in the implementation of slum upgrading project

The economic status of the respondents during the survey was found to be far belong standards, which is the major cause of conflict between tenants and landlords due to the high cost of house rent. In Katwekera and Mashimoni, most of the tenants paid their rents directly to the slum landlords, who lived with the respondents in the slum community and considered to be extremely poor as well. As such, resistance to the slum upgrading programme by the slumlords

was an important factor reported during the study. Most of the respondents testified that the slumlords generated their much-needed income from the sub-standard buildings, and therefore are against the programme that would see the demolition of those cheap and unsanitary structures which derives income for them. Similarly, Syagga et al. (2001), confirmed that “the non-resident structure owners also referred to as slumlords or absentee-landlords have persistently, vehemently and even violently resisted the slum upgrading programmes. They see any regularization or improvement of the slum environment as a threat resulting in loss of income, power and control over a society they are currently benefitting from. Thus, the slumlords operated secretly but forcefully behind the scenes, to oppose slum upgrading which is a threat to their lucrative business.

Amid the overview, it was likewise watched that greater part of the respondents from both territories were less instructed, which denies them level with circumstances in the formal work, subsequently sentencing the ghetto inhabitants to the ghetto casual segment. Also, Cuervo and Hin (1998) watch that ghetto inhabitants are described by deficient financial assets, considers that charm them to the casual work advertise. In the present concentrate, more than 90% of the ghetto inhabitants worked casual ventures, for example, building development, peddling, offering vegetables, fitting, carpentry, salons, drivers, easygoing worker at the businesses, welding, sustenance making, lager fermenting among others and so forth. Be that as it may, the vast majority of the ghetto inhabitants needed money to support or increment their organizations because of absence of insurance which would some way or another empower them to get to credits from budgetary establishments. In this way, the administration ought to establish approaches that give ghetto tenants equivalent open doors in formal work and training. This infers viable ghetto redesigning project ought to guarantee bolster for casual endeavors and relieve elements that prompt to the over abuse of the ghetto poor to encourage fitting intercession.

From the discoveries in this study, it was watched that the greater part of the elements influencing usage of ghetto overhauling ventures were comparable. In Katwekera and Mashimoni, ghetto overhauling program has not be fruitful because of inalienable variables. It is expected that, if the suggestions of this exploration are actualized, there is extraordinary trust that ghetto redesigning programs, in light of the rights approach will profit the proposed target gatherings and add to satisfactory lodging and enhanced expectations for everyday comforts. The most urgent issue is to effectively include the objective recipients and different partners in basic leadership forms and in recognizing the basic reasons for ghetto multiplications and together consolidate

suitable mediation systems in a comprehensive and comprehensive ghetto redesigning style to encourage responsibility for ventures, participation and supportability of the program. It is from these study findings that a conclusion and recommendations are based in chapter five.

5.3 Conclusions of the study

This study has possessed the capacity to address the exploration addresses as well as the examination destinations. This study has exhibited that the unsuccessful take-up of ghetto updating in Katwekera and Mashimoni has been because of the innate difficulties confronted in the usage. On the off chance that the suggestions of this examination are executed in light of partners' and participatory approach, there is incredible trust that ghetto redesigning program in the two towns will profit the planned target gatherings and add to satisfactory lodging and enhanced expectations for everyday comforts. The key issue is to effectively include the objective recipients and different partners in basic leadership forms and in recognizing the hidden reasons for unsuccessful take-up of ghetto overhauling and together join suitable mediation methodologies in a comprehensive way. This will encourage proprietorship, participation and manageability of the program

5.4 Recommendations

1. Land proprietorship debate emerging from complexities of ghetto settlements with respect to residency game plans in the casual settlement ought to be tackled through Slum Upgrading Department (SUD) to improve viable ghetto updating programs. It is likewise recommendable that the overhauling project ought to liaise with the legitimate framework to guarantee that security of land residency is a necessary arrangement for all ghetto inhabitants to encourage assurance and supportability.
2. To edify the group parts in the ghetto redesigning program as partners, it is crucial that Kenya Slum Upgrading Program (KENSUP) effectively includes every one of the partners in discourse and basic leadership forms. The administration ought to authorize an arrangement for the privilege to support, inclusion and data of the objective recipients in the ghetto overhauling program. The recipients must be effectively required at the conceptualization of the thoughts, improvement of intercession systems and at the execution and supportability levels.

3. "Slumlords" and truant landowners who see the ghetto settlements as wellspring of wage and in this way oppose the thought to redesign the ghetto ought to pay assesses on the lease they gather furthermore to be will undoubtedly give administrations.
4. Income era mediations ought to center in tending to neediness, unemployment, and absence of monetary chances to expand members' capacity to create salary and secure vocations as microcredit projects, which includes the arrangement of a more extensive scope of money related administrations, for example, access to reserve funds, credit, and protection to the poor ghetto occupants.
5. To catch goodwill and trust from the ghetto tenants, training ought to be an essential part of the redesigning program. Ghetto tenants ought to be welcome to take an interest in preparing courses, workshops and gatherings on ghetto overhauling. The legislature ought to advance mindfulness on ghetto updating, obligations, privileges, and obligations through authorization of applicable arrangements, laws and the utilization of media.
6. The ghetto overhauling projects ought to encourage political, social and religious changes to improve cooperation among the inhabitants and their pioneers to stay away from the making of doubt and question among the occupants that backs off basic leadership in the updating program.
7. There ought to be alleviation or expulsion of ecological risks other than a coordination of natural restoration and supportability as a center mediation in house change.

5.5 Areas for Further Research

The purpose of this study was focused on socio-economic determinants of the implementation of urban slum infrastructure projects in two selected wards in Kibera. It was deemed important that the following study areas be furthered to expose more knowledge as pertains to factors affecting implementation of slum upgrading projects.

1. There is need to conduct advanced study to assess the long-term implications of the informal land tenure systems to slum upgrading.

2. Additional research to explore community participation as a contributor in affordable housing for low-income slum dwellers in Katwekera and Mashimoni wards is warranted

REFERENCES

- African Union, African Development Bank, United Nations Economic Commission for Africa (2009). *Land Policy Initiative: A Framework to Strengthen Land Rights, Enhance Productivity and Secure Livelihoods*, Addis Ababa.
- Agnihotri, P. (1994) *Poverty Amidst Prosperity: Survey of Slums by Pushpa Agnihotri* - Business & Economics.
- Alberti, M., & Waddell, P. (2000) *An integrated urban development and ecological simulation model*. *Integrated Assessment*, 1(3), 215 – 227.
- Amin, M. (2005). *Social science research: Conception, methodology and analysis*. Kampala: Makerere University Printers.
- Amis, P & C Rakodi (1995) 'urban poverty: Concepts, characteristics and policies' *Habitat International*, 400–406
- Amis, P. (1984). *Squatters or Tenants: The Commercialization of Unauthorized Housing in Nairobi*, *World Development*, 12 (1): 87-96.
- Amnesty International (2011) Kenya, *The Unseen Majority: Nairobi's 2 Million Slum Dwellers*. Amnesty International Press. London, UK. 1-39.
- Appadurai, A (2001) *Environment and Urbanization Deep democracy: Urban governmentality and the horizon of politics*, 15–45.
- Baker, J.L. & McClain, K. (2008) *Private sector involvement in slum upgrading*, *Global Urban Development*, Vol. 4, No. 2, pp 01-19
- Banerjee & Manjistha (2005) *Review of basic services in the slums and resettlement colonies of Delhi*. Internet.
- Banerjee, Biswajit (1986): 'Rural to Urban Migration and the Urban Labour Market', Himalaya Publishing House, Delhi.
- Barrett-Connor E (1997). Sex differences in coronary heart disease: why are women so superior? The 1995 Ancel Keys lecture. *Circulation*. 95: 252 – 264 PMID: 8994444
- Beatley T. (2000). *Green Urbanism*. Island: Washington, DC.

- Berner, E. & Phillips B. (2005) *Left to their own devices: Community self-help between alternative development and neoliberalism*. Community Development Journal, 40, 17 - 29.
- Boonyabancha, S. (2009). “*Land for Housing the Poor -By the Poor: Experiences from the BaanMankong Nationwide Slum Upgrading Programme in Thailand.*” Environment and Urbanization 21(2): 309–29.
- Botes, L. & Rensburg, D.V. (2000) *Community participation in development: Nine plagues and twelve commandments*. Community Development Journal, 35, 41 - 58.
- Briggs, X.D.S (1998) *Housing Policy Debate Brown kids in white suburbs: Housing mobility and the many faces of social capital*, pp170-178.
- Castillo L. & Stein, A. (2005). ‘*Innovating Financing for Low-income Housing Improvement: Lessons from Programmes in Central America*’. Environment and Urbanization, 17(1): 47–66.
- Cifuentes, M. (2008) *Better services for all? Assessing the impact of LASDAP in an informal settlement of Nairobi. Working paper. Nairobi: Institute of policy analysis and research (IPAR)*
- Cobbett, W. (2009). *Cities Alliance: Highlighting Challenges for Decision-Makers. Cairo's Informal Areas. Between Urban Challenges and Hidden Potentials*. Facts. Voices. Visions. R. Kipper and M. Fischer. Cairo.
- Cohen, J.M. & Uphoff, N.T. (1977). *Rural development participation: concepts and measures for project design, implementation and evaluation*. Cornell university, center for international studies. Ithaca, New York.
- Cohen, M. (2001). *Urban assistance and the material world: Learning by doing at the World Bank*. Environment and Urbanization, 13(1), 37-60.
- Coit, K. (1998). *Housing Policy and Slum Upgrading in Ho-Chi-Minh City*. Habitat International.
- Cooper, D. R. & Schindler, P. S. (2001). *Business research methods*. New York: McGraw-Hill Companies.
- Cooper, D.R. & Schindler, P.S. (2000). *Business Research Methods* (7th Ed.). New York: McGraw Hill Company. Earthscan: London

- Cuervo, J.C & Hin D.H.O.K (1998) *Todaro migration and primacy models: Relevance to the urbanization of the Philippines' Cities*, 235–255.
- Davis (2006) *Planet of Slums*. Verso, London
- De Soto, H (1989) *The other Path: The Invisible Revolution in the Third World*. IB Taurus, London.
- De Soto, H. (2000). *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, Basic Books.
- Ferguson, B. & Navarrete, J. (2003). *A financial framework for reducing slums: Lessons from experience in Latin America*. *Environment and Urbanization*, 75(2), 201-216.
- Flyvbjerg, B. (2002). 'Bringing Power to Planning Research. *One Researchers Praxis Story*: *Journal of Planning Education and Research*. 21, pp. 353–366.
- Gikonyo James Mwangi (2012) *An investigation into the challenges facing implementation of slum upgrading programmes in Kenya: a case study of Manyatta*. MSc thesis, University of Nairobi.
- Glaeser, E. (2011). *Triumph of the city: How our greatest invention makes us richer, smarter, greener, healthier and happier*. New York, NY: Pan Macmillan.
- Gong, X & van SoestA (2002) *Labour Economics Wage differentials and mobility in the urban labor market: A panel data analysis for Mexico*, 510–528.
- Greene, M. (2010). *Literature Review: Main Policy and Programmatic Approaches for Slum Upgrading. Desk Review of National Policy Reforms and Programmatic Approaches to Slum Upgrading and Prevention and Case Study Template for In-Country Work*.
- Gulyani, S., Talukdar, D., & Potter, C. (2006). *Inside informality: Poverty, jobs, housing and services in Nairobi's slums*. Report No. KE-36347, Water and Urban 1, Africa Region. Washington, DC: The World Bank.
- Gulyani, S. & Bassett, E. (2006). *Retrieving the Baby from the Bathwater: Slum Upgrading in Sub-Saharan Africa*. *Journal of Environment and Planning C: Government and Policy*. 25, 486-515.

- Habitat for Humanity International (2008) – How Can Microfinance for Housing, Land, and Infrastructure Catalyze Slum Improvement and New Settlements?
- Hamdi, N. & Goethert, R. (1997). *'Action Planning for Cities - A guide to Community Practice'*: John Wiley & Sons Ltd. London.
- Hamdi. 1991. *Housing Without Houses: Participation, Flexibility, Enablement*. Van Nostrand Reinhold, New York.
- Handzic, K. (2010). *Is land tenure legalization necessary in slum upgrading? Learning from Rio's land tenure policies in the Favela Bairro Program*. Habitat International, 34, 1e17.
- Huchzermeyer, M. (2008). *Slum upgrading in Nairobi within the housing and basic services market. A housing right concern*. Journal of Asian and African studies 43(1): 19-39.
- Imparato, Ivo & Jeff Ruster (2003). *"Slum upgrading and participation: Lessons from Latin America."* *Directions in Development Series*. Washington, D.C.: World Bank.
- Ishani, Z.; Gathuru, P.K. & Lamba, D. (2002) *Scoping study of Urban and Peri-urban poor livestock keepers in Nairobi*. Mazingira Institute, Nairobi, Kenya.
- Israel, A. (1992) *Issues for infrastructure management in the 1990s*. – The World Bank. – Washington D.C.
- ITDG (2002) *Land, Rights and Innovation*. London.
- Jacoby H. & B. Minten (2005) *Is Land Titling in Sub-Saharan Africa Cost-Effective? Evidence from Madagascar*, mimeo.
- Johnson Alan G. (2011) *Urbanization and Youth in Kenya: A Demographic Overview*, pp. 6-9.
- Kenya country report (2008) *The fourth session of the World Urban Forum Harmonious Urbanization: The Challenge of Balanced Territorial Development*, 3 - 6 November 2008 at the Nanjing International Expo Centre.
- Kenya Population & Housing Census report (2010) *"Counting Our People for the Implementation of Vision 2030"*.
- Kim, S. (2009). *'Spatial Inequality and Economic Development: Theories, Facts and Policies.'* Working Paper No. 16, Commission on Growth and Development

- Kiprotich, A. (2011). *It's back to the slums for Kibera residents*. Retrieved February 6, 2014, from *The Standard Online Newspaper*: Available Online at Internet Site on URL Link. <http://www.standardmedia.co.ke/InsidePage.php?id=2000036025&catid=4&a=1>. Accessed on 15th March 2014.1800 HRS.
- Kothari, C. (2004). *Research Methodology, Methods and Techniques*. New Delphi: International
- Kusienya, C. (2004) *The Mathare 4A Experience and the Kenya Slum Upgrading Programme. Paper presented at the workshop on "The Perpetuating Challenge of Informal Settlements"*. 8-10th November University of Witwatersrand, Johannesburg. Available at:<http://web.wits.ac.za/NR/rdonlyres/2352A9D9-BB85-4204-9C38-EF71A67CC755/0/CassiusKusienya.pdf> (Accessed 17th April 2016)
- Kyobutungi C, Ziraba AK, Ezeh A & Ye Y (2008) *The Burden of disease profile of residents of Nairobi's slums: results from a demographic surveillance*. Population Health Metric 6, 1.
- Leckie, S. (1995). *When Push Comes to Shove. Forced Evictions and Human Rights*. Habitat International Coalition, Geneva.
- Lombard M, (2012) '*Citizen participation in urban governance in the context of democratization: Evidence from low-income neighbourhoods in Mexico*', International Journal of Urban and Regional Research DOI: 10.1111/j.1468-2427.2012. 01175.x
- Majale, M. (2008). *Employment Creation through Participatory Urban Planning and Slum Upgrading: The case of Kitale, Kenya*. Habitat International 32 (2), 270-282.
- Mamunji, A.K (1982) *Squatter Settlement Upgrading: A study in Kenya*. Housing Research Development Unit, University of Nairobi.
- Mathews J., N., S., Berry G & Armitage, P. (2002). *Statistical methods in medical research Blackwell science: Massachusetts*.
- Mehrotra, S. (2005). *Rogues No More? Water Kiosk Operators Achieve Credibility in Kibera. WSP Field Note. Nairobi: World Bank*. Available at: http://www.wsp.org/UserFiles/file/3282007104808_afRoguesNoMore.pdf (access 25 April 2016).

- Michelle Mulcahy & Ming-ru chu (2007) *Kibera Soweto East, a case study in slum upgrading*. Nairobi Kenya
- Ministerio de Vivienda y Urbanismo (MINVU) (2004), *El deficit habitacional en Chile: medicion de requerimientos de vivienda y su distribucion espacial*, MINVU, Santiago de Chile.
- Mitlin, D. (2004). *Understanding urban poverty: What the Poverty Reduction Strategy Papers tell us*. Poverty Reduction in Urban Areas Working Paper 13, London: IIED.
- Mitlin, Hardoy J. D & Satterthwaite D, (2004). *Environmental Problems in Third World Cities*.
- Mitra and Gupta (2002); “*Rural Migrants and labor Segmentation; Micro level Evidence from Delhi Slums*”. Economic and Political weekly, vol (37), no-2.
- Mitra Arup (1994) *Urbanization, slums, Informal sector employment and poverty*, B.R. Publishing Corporation: New Delhi.
- Mitra Arup (2006) ‘*Labour Market Mobility of Low Income Households*’, Economic and Political Weekly, January 12. Vol 41, No. 21.
- Mitullah, W. (2003) *Understanding Slums: Case Studies for the Global Report on Human Settlements, the Case of Nairobi, Kenya*.
- Moser, C. (1996). *Confronting crisis: A summary of household responses to poverty and vulnerability in four poor urban communities*, *Environmentally Sustainable Development Studies and Monographs Series*, No 7. World Bank, Washington, DC.
- Mugenda, O. M & Mugenda, A. (2003), *Research Methods Quantitative and Qualitative Approaches Nairobi act press*.
- Munier, N. (2007). *Characteristics and Analysis of Urban Sustainable Systems*. In N. Munier (Ed.), *Handbook on Urban Sustainability* (pp. 35-88). Springer: The Netherlands.
- Mutisya, E., & Yarime, M. (2011). *Understanding the grassroots dynamics of slums in Nairobi: The dilemma of Kibera informal settlements*. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologie*, 2(2).
- Mutisya, E.M. (2010) *The Sustainability of Downscaling of Microfinance in Africa: Empirical Evidence from Kenya*, VDM Verlag, Germany

- Mwangi, I. (1997) *The nature of rental housing in Kenya*. Environment and Urbanisation, 9(2), 141-159.
- Namale, M. (2011). *Developing Participatory Planning Practices in Kitale, Kenya. Case Study Prepared for Planning Sustainable Cities: Global Report on Human Settlements*. Available Online on the Internet from the following URL Website: <http://www.unhabitat.org/downloads/docs/GRHS2009CaseStudyChapter04Kitale.pdf>. Accessed on 27th, March 2016.2100 HRS.
- Nassiuma D. K. (2000). *Survey sampling: Theory and methods*. Njoro, Kenya:Egerton University Press.
- Navaro, V., (2004). *Commentary: is capital the solution or the problem?* InternationalJournal of Epidemiology 33, 672e674.<http://dx.doi.org/10.1093/ije/dyh179>(28July 2016).
- Njoroge, A.K. (1998). *An assessment of community participation in neighbourhood development*. Un published program paper, Department of land Economics, University of Nairobi.
- Obhudho, R.A. & Mhlanga, C.C. (1988) “*Planning Strategies for Slum and Squatter Settlements in Sub-Saharan Africa*”, in O budho, R.A. and Mhlanga, C. (eds.) *Slum and Squatter Settlements in Sub-Saharan Africa: Toward a Planning Strategy*, Praeger, New York.
- Ochieng, C.C. (2007) *Affordability of low-income housing in Pumwani, Nairobi, Kenya*. Archnet-IJAR 1(2): 35-44.
- Ochieng, E. (2011) *Factors influencing the implementation of Kenya Slums upgrading Programme: a case of Kibera Slums in Nairobi County*”.
- Ogunleye M B (2011). *Spatial Distribution Pattern of Residential Property Values in Akure, Nigeria* (Unpublished Phd. Dissertation, Federal University of Technology, Akure.
- Olanrewaju DO (1997). *Spatial Distribution of Urban Deprivation in Akure, Ondo State* (Doctoral Dissertation, University of Sheffield, U.K.
- Onyango, G., Wasonga, G., Asamba, I., Teyie, P., Abuya, J., Odera, B. & Ooko, E. (2005). *Situation analysis of informal settlements in Kisumu. Cities Without Slums Sub-regional Programme for Eastern and Southern Africa; Kenyan Slum Upgrading Programme*.

- Ooi, G.L., & Phua, K.H. (2006). *Urbanization and slum formation*. Journal of urban Health, 84 (0), 27-34.
- Ottichilo, W. (2011) “*Tracking Regional Growth and Development: The Nairobi Case*”, 167-171 in: Global Urbanization. Philadelphia, Pennsylvania.
- Painter. D. L (2006), "*Engaging Slum Dwellers and the Private Sector to Finance a Better Future*", World Urban ForumIII, Vancouver, Canada June 19 – 26, 2006, Working paper series no.6. UNDP/UNCHS/World Bank.
- Pamoja Trust, (2009) *An Inventory of the Slums in Nairobi*, Matrix Consultants, 1998.
- Payne, G. (1997) *Urban Land Tenure and Property Rights: In Developing Countries, Intermediate Technology Publications*. A Review of the Literature ‘, IT Publications/ODA, London.
- Payne, G. (2001). *Urban land tenure policy options: titles or rights?* ‘Habitat International, Volume 25, Issue 3, pages 415-429.
- Payne, G. (2005). ‘*Getting Ahead of the Game: A Twin-track Approach to Improving Existing Slums and Reducing the Need for Future Slums*’. Environment & Urbanization, 17: 135–45.
- Piran P., (2000). *Poverty Alleviation in Sistan & Baluchestan*, Allameh Tabatabaai University, United Nations Development Program in the Islamic Republic of Iran (UNDP).
- Rahman, M. M (2002) *Problems of the NGOs in housing the urban poor in Bangladesh* Habitat International, 430–450.
- Rakodi & Lloyd-Jones (2002) *Urban Livelihoods: a People-Centred Approach to Reducing Poverty*. Earthscan, London P Ltd.
- Republic of Kenya (1999) *Population and Housing Census: Analytical report on population projections*, VII. Nairobi: CBS, MFP.
- Republic of Kenya, (2006) *National Land Policy Formulation process*, Ministry of Lands.
- Schlyter, A. (1998) *Housing Policy in Zambia: Retrospect and Prospect*“. Habitat International 22 (3), 259-271.

- Shea, M (2008). *Multilateral and Bilateral Funding of Housing and Slum Upgrading Development in Developing Countries*. International Housing Coalition, Washington DC, The United States.
- Smith, L., Hanson, S. (2003). *Access to water for the urban poor in Cape Town: where equity meets cost recovery*. *Urban Studies* 40(8): 1517–1548.
- Stryjak, J. (2009). *A Newcomer's Impressions: Interview with Dr. Roland F. Steurer. Cairo's Informal Areas. Between Urban Challenges and Hidden Potentials*. Facts. Voices. Visions. R. Kipper and M. Fischer. Cairo, GTZ.
- Syagga, P., Mitullah, W. & Karirah-Gitau, S. (2002). *Nairobi situational analysis supplementary study: A rapid economic appraisal of rents in slum and informal settlements*. Prepared for the government of Kenya and UN-HABITAT, Nairobi: Collaborative Nairobi slum upgrading initiative, Government of Kenya and United Nations centre for human settlements (Habitat)
- Syagga, P., Mitullah, W., & Karira-Gitau, S. (2001) *Nairobi Slums Upgrading Initiatives: Nairobi Situation Analysis Nairobi: GoK/UNCHS (Habitat)*.
- Syagga, P. Winnie, V., Mitullah, W., & Gitau, S. K. (2001) *Nairobi Situation Analysis. Joint Project Planning Team Organising Secretariat, GoK and UN-Habitat*. Nairobi. 100 pp:
- Takeuchi, A., Cropper, M., & Bento, A. (2006). *The welfare effects of slum improvement programs: The case of Mumbai (World Bank Policy Research Working Paper Number 3852)*. Washington, DC. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=922978.
- Tebbal, F. (2003). *Security of Land Tenure Today*. UN-HABITAT, Nairobi, Kenya
- The United Nations Habitat (2006). *A shared vision for hygiene, sanitation and water supply and a framework for mobilization of action*.
- UNCHS (Habitat) (2001a) *Cities in a Globalizing World: Global Report on Human Settlements*. UNCHS (Habitat)/Earthscan, London.
- UNCHS-Habitat (1996) *Global Conference on Access to Land and Security of Tenure as a Condition for Sustainable Shelter and Urban Development*^o.

- UNFPA (2007) *State of World Population*:
www.unfpa.org/swp/2007/presskit/pdf/sowp2007_eng.pdf
- UN-Habitat (2003): *The Challenge of Slums - Global Report on Human Settlements United Nations*
- UN-Habitat (2006) *The State of the World's Cities 2006/2007: The Millennium Development Goals and Urban Sustainability – 30 Years of Shaping the Habitat Agenda* (London: Earthscan)
- UN-HABITAT (2008) *UN-HABITAT and the Kenya Slum Upgrading Strategy Document, United Nations Human Settlements Programme*.
- UN-Habitat (2010a) *State of the World's Cities 2010/2011: Bridging the Urban Divide* (London: Earthscan). UN-Habitat, Nairobi, Kenya. Retrieved from <http://www.unhabitat.org/content.asp?cid=8891&catid=643&typeid=46&subMenuId=0&AllContent=1>.
- UN-Habitat (2010b) *Gender Equality for Smarter Cities: Challenges and Progress* (Nairobi: UN-Habitat). <http://unhabitat.org/wp-content/uploads/2014/07/Gender-Equality-for-Smarter-Cities-Challenges-and-Progress.jpg>
- UN-Habitat (2008) *UN-Habitat and the Kenya slum upgrading programme strategy document*".
- United Nations (2003) *The Challenge of Slums: Global Report on Human Settlements*. UN HABITAT, Nairobi.
- Werlin, Herbert. 1999. "The Slum Upgrading Myth." *Urban Studies* 36(9): 1523 – 34.
- WHO & UNICEF (2000), *Global Water Supply and Sanitation Assessment 2000 Report, World Health Organization, UNICEF and Water Supply and Sanitation*. Collaborative Council, Geneva, 80 pages.
- Wilson, G. A & Bryant, R L (1998) "Rethinking Political Ecology", *Progress in Human Geography*, 22: 321-343.
- Woodruff, Christopher (2001) "Review of de Soto's *The Mystery of Capital*." *Journal of Economic Literature* 39(4): 1215 –23.
- World Bank (1993) *Housing: Enabling Markets to Work*. Washington, DC: World Bank.

World Bank (2001) "Uruguay: Maintaining Social Equity in a Changing Economy." Economic Report No. 2162, The World Bank, Washington, D.C.

APPENDICES

Appendix 1: Map of study sites

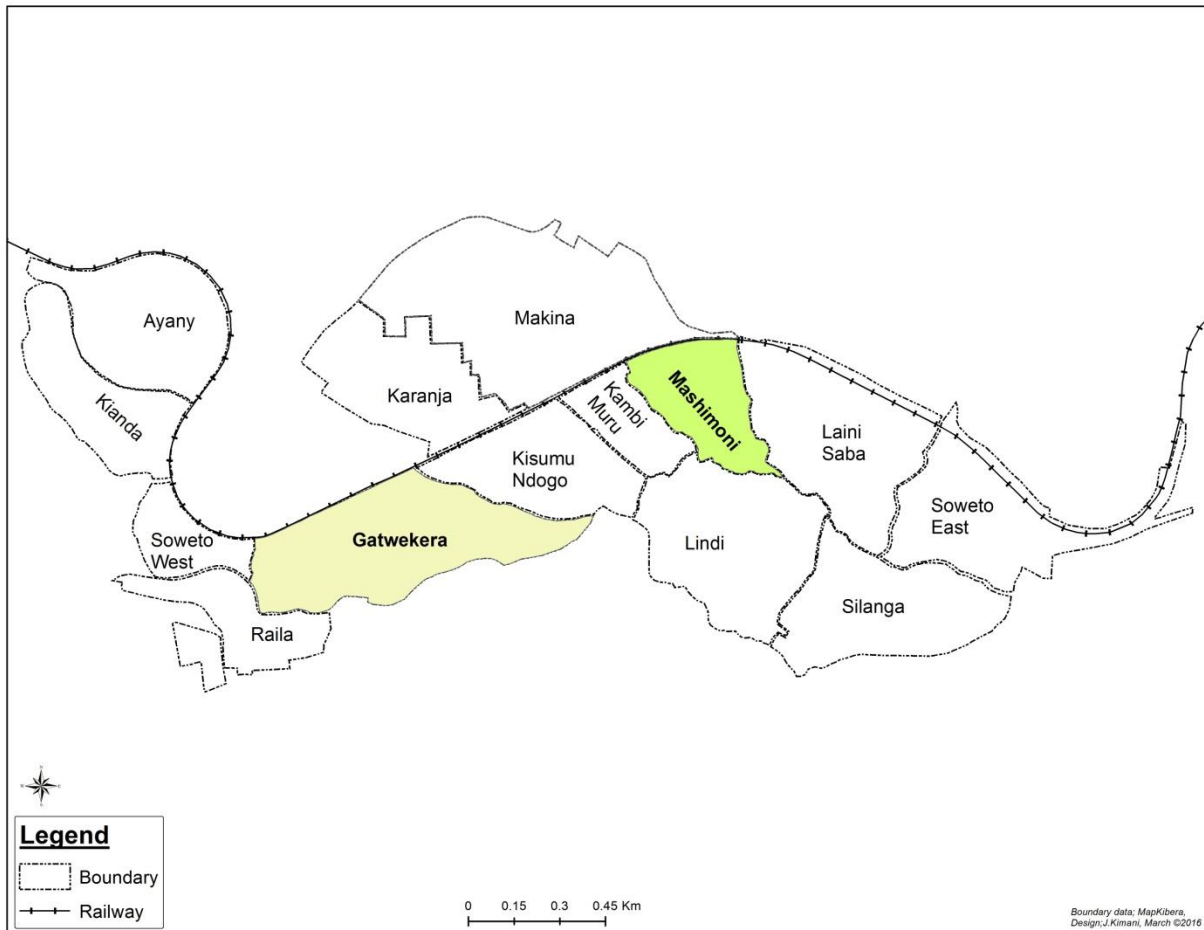


Figure 3.1: Kibera informal settlements illustrating the two study areas.

Appendix 2

Socio-economic Determinants of the Implementation of Urban Slum Infrastructure Projects in Kenya: A Case of the Kibera Slum-Upgrading Project, Langata Constituency, Nairobi

HOUSEHOLD QUESTIONNAIRE

Introductory statement:

“Dear Sir/Madam, I am a student at the University of Nairobi and I am conducting a study on the socio-economic determinants of the implementation of urban slum upgrading projects in kibera, Langata, Constituency, Nairobi. Your response to these questions will remain anonymous. Taking part in this study is voluntary. If you choose not to take part, you have the right not to participate and there will be no consequences. Thank you for your kind co-operation”

HOUSEHOLD IDENTIFICATION

Household Identification	Code	Interview details	Code
1. Region:		13. Date of interview (dd/mm/yyyy):	<input type="text"/> / <input type="text"/> / 2016
2. County:		14. Time started (24 HR)	
3. Sub-county:		15. Name of enumerator	
4. Ward:		16. Name of supervisor:	
5. Village:		17. Name of data entry clerk	

HHID: _____

6. Name of household head:	1=Male	
7. Sex of household head		<input type="checkbox"/>
8. Name of the respondent (include sir name):		
9. Age of the respondents	1=below 20 years 2=25 - 30 years 3=31 – 40 years 4=41 – 50 years 5=51 and above	
10. Sex of respondent	1=Male: 0=Female	<input type="checkbox"/>
11. Name of respondent's spouse		
12. Cell phone number:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	

GPS reading of homestead	
18. Way point number	
19. Latitude (North/South)	
20. Longitude(East)	
21. Altitude (meter above sea level)	

PART A: HOUSEHOLD COMPOSITION AND CHARACTERISTICS

A “household” includes all members of a common decision making unit (usually within one residence) that are sharing income and other resources. Include workers or servants as members of the household. Ask the following questions about a person who was part of the household at least one month in the last 12 months.

ID CODE	Name of household member [Start with respondent]	Sex 1 = M 0 = F	Relationship to the household head CODE 1	Age (complete years)	Marital status? CODE 2	Highest education level attained CODE 3	Education (years)	Religion	Primary occupation CODE 4	How many hours per week do you work?	How many months in the past year was [NAME] present in the household?
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

CODE 1		CODE 2		CODE 3	CODE 4
1. Household head	7. Other relative	1. Married living with spouse	6=Monogamously married	0. No schooling	1. Gov't service (formal)
2. Spouse	8. Non-relative	2. Married living without spouse	7=Polygamous married	1. Primary education	2. Business/petty trading
3. Son/daughter	9. Hired worker	3. Divorced/separated	8=Cohabiting	2. Secondary education	3. Transport driver
4. Parent	10. Other, specify.....	4. Widow/widower		3. College level	4. Causal work
5. Son/daughter-in-law		5. Never married/single		4. University education	5. Housewife
6. Grandson/granddaughter				5. Vocational training	6. Salonist/beautician
				6. Adult education	7. Welding
					8. Tailoring
					9. Industry
					10. Building construction
					11. Unemployed (None)
					12. Other specify

A12. Is the household head or any household member a member of any community based organisation? 0=No /..... / 1=Yes /...../

A13. If yes, what does the community based organisation do?

/...../

A14. How much do you make from all your income sources on average in a month?

a) Household head Ksh /...../

b) Spouse Ksh /...../

A15. Are your income sources both formal and informal? 0=No /...../ 1=Yes /...../

A16 How much do you generate from incomesources given above?

Income source (formal and non-formal)	Amount from income source in Kenya Shillings per month
a)	
b)	
c)	
d)	
e)	

A17. Has any household member been involved in any non-formal education or workshop organized in the slum within the last 5 years? 0=No /...../

1=Yes /...../

Name of household member	Workshop/ non-formal course	Duration

--	--	--

	Questions	Code	Response
	B1	B2	B3
A18	Does the household own the main house they stay in?	0=No 1=Yes	
A19	Do you pay rents for this house?	1= Yes (how much in Ksh/month.....) 0 = No	
A20	Do you pay to the landlord directly?	0=No 1=Yes, if no specify.....	
A26	How long have you lived in this village?	1) Born here 2) < 1 year 3) 1 – 3 years 4) 4 – 6 years 5) 7 – 9 years 6) 10 years or more	
A27	Have you incurred any costs over the years in upgrading your dwelling?	If 1=Yes, how much in Ksh (.....) If 0=No, why.....	
A28	If yes, what was the source of funds/materials used in upgrading your dwelling?	1) Own savings 2) Credit/loan from groups or bank	

		3) Donor initiative 4) Slum upgrading programme	
A29	In your own assessment, how satisfied are you with your current housing conditions	1. Very satisfied 2. satisfied 3. Indifferent 4. Unsatisfied 5. Very unsatisfied	

Questions	Code	Response
A30. Have you ever heard of the urban slum upgrading programme in this village?	0=No 1=Yes	
A30. If yes , which services and facilities of upgrading are you aware of?	1= Water 2= Electricity 3= Toilets 4= Schools 5= Hospitals 6= Housing 7=Others (specify) _____	

Questions	Code		Response
A31. How did you get to know about the slum upgrading programme?	1= Audio and visual media; Tv/ Radio 2=Print media: Newspaper, magazines, leaflet 3=Neighbours 4=Others (specify)		
A32. Are you aware of any slum upgrading intervention that has taken place in this village? (<i>Compulsory question for all</i>)	0=No 1=Yes		/...../
A33. <i>IF Yes</i> , fill the table	In which year was it completed?	Is this service/facility working? 0=No 1=Yes 2= Don't know	As compared with the situation before intervention, how is the situation today? 1=Improved 2= Deteriorated 3= About the same
	YEAR	CODE	Response
A34. School building or service			
A35. Hospital, health clinic or service			
A36. Water supply, points, connections			
A37. Electricity			
A38. Street lights			
A39. Formalization of tenure			
A40. Building of market sheds			

Questions	Code				Response
A41. Provision of solid waste management systems;					
A42. Provision of drainage systems					
A43. Provision of entertainment sites					
A44. Construction of churches or mosques					
A45. Paved streets					
A46. Other (specify _____)					
In your opinion, how would you rank the benefits of the slum upgrading project in order of importance (1= Very poor to 5 Excellent)					
	1= Very poor	2=Poor	3=Neutral	4=Good	5= Excellent
A47. Improved literacy rates.....					
A48. Reduced cost of services.....					
A49. Improved earning prospect.....					
A50. Given access to better services.....					
A51. Improved overall living standard.....					
A52. Reducing health related expenditures.....					

A53. In your opinion, were there challenges in the implementation of the slum upgrading programme?

0=No /...../ 1=Yes /...../

A58. If yes, what are the challenges? (Give at least three challenges)

.....

A59. In your opinion, how can they be addressed?

.....

A54. What transport medium do you use as a parent to go to work or to acquire merchandise for sale if you are a trader?

- a) Matatu /...../
- b) Bodaboda/ Tuktuk /...../
- c) Train /...../
- d) Walk /...../
- e) Bicycle /...../
- e) Other /...../

A55. How much do you spend on transport/ commuting per week? Ksh /
/...../

A56. How much time do you spent to go to work on average in a day in hours?
/...../

A57. In your own assessment, how would you rank the general outcome of the slum upgrading implementation programme in meeting the community's expectations? (Tick accordingly)

1. Very satisfied
2. satisfied
3. Indifferent
4. Unsatisfied
5. Very unsatisfied

A60. Have you ever been employed by any of the stakeholders (Government, NGOs etc) working in slum upgrading programme? 0=No /...../ 1=Yes /...../

A61. How often do you have contact with these stakeholders (Government, NGOs etc) working in the community? /...../

0=Never /...../ 1=Less frequent /...../ 2= Frequent /...../ 3= Very Frequent /...../

A62. Which of the following slum upgrading interventions need to be prioritized in your village? (<i>Compulsory question for all</i>)	<i>List at least five in terms of priority needs</i>
1) School building or service	
2) Hospital, health clinic or service	
3) Water supply, points, connections	
4) Electricity	
5) Street lights	
6) Formalization of tenure	
7) Building of market sheds	
8) Provision of solid waste management systems;	
9) Provision of drainage systems	
10) Provision of entertainment sites	
11) Construction of churches or mosques	
12) Other (specify _____ _)	

A62. Does any member of this household have a bank account or saving account with a Sacco or financial institution? 0=No /...../ 1=Yes /...../

A63. If No, What has limited your use of banks, Sacco's or financial institutions?

.....
.....

A64. Has any member of your household acquired a loan from any financial institution?

0=No /...../ 1=Yes /...../

A65. If Yes, how much was acquired in Kshs /...../

A66. What was the lending institution?

/...../

A67. Has any member of this household ever applied for a mortgage loan? 0=No /...../ 1=Yes /...../

A68. If yes, are there instances you have been unable to repay the mortgage?

0=No /...../Yes /...../

A69. What was the lending institution?

/...../

A70. Has the mortgage been cleared?

/...../

A71. Have you ever used any of your asset or property as collateral for a bank loan?

0=No /...../ 1=Yes /...../

A72. If yes, did the bank ask for documents of your property 0=No /...../

1=Yes /...../

A73. What was the interest rate of the loan? /...../

A74. Are microfinance services available in this area? 0=No /...../ 1=Yes

/...../

A75. If yes, are their services accessible? 0=No /...../ 1=Yes

/...../

A76. If yes, are their services affordable? 0=No /...../ 1=Yes

/...../

A77. Have you ever acquired any loan from microfinance? 0=No /...../
1=Yes /...../

PART B: LAND OWNERSHIP

B1	Do you own land in Kibera?	0=No 1=Yes	
B2	If yes, how big is it?	In Acres (.....) of feet (.....)	
B3	Do you have a title for the piece of land?	0=No 1=Yes	
B4	What type of land title do you hold?	1) Individual title 2) Communal title 3) Other title (Please specify.....)	
B5	How much does it cost to obtain the title?	Ksh (.....)	
B6	How much does it cost to keep it with a bank, or other agent for safe keeping?	Ksh (.....)	
B7	If no title for the parcel of land, what documents prove ownership?	1) Allotment letter 2) Lease letter/ agreement 3) Other (Please specify.....)	
B8	In your own assessment, how satisfied are you with land ownership issues in Kibera?	1. Very satisfied 2. satisfied 3. Indifferent 4. Unsatisfied 5. Very unsatisfied	Code or Answer

Part C-1: BUSINESS QUESTIONNAIRE**Introductory statement:**

“Dear Sir/Madam, I am a student at the University of Nairobi and I am conducting a study on the socio-economic determinants of the implementation of urban slum upgrading projects in kibera, Langata, Constituency, Nairobi. Your response to these questions will remain anonymous. Taking part in this study is voluntary. If you choose not to take part, you have the right not to participate and there will be no consequences. Thank you for your kind co-operation”

PART C-2: Business Characteristics

22. What is the current total number of employees in the business?	# of Females _____ # of Males _____ _____
23. How long has the business been in operation? /(Yrs)...../	
24. Nature of the business entity _____ [1 = Sole proprietor; 2 = Partnership; 3 = Public company; 4 = Private company 5 = Other (specify)]	
25. Do you own the building/structure that your business is operating in? Yes [] 0.No [] If no , what is the average monthly rental cost? _Ksh _____	
26. Do you find the above rental rate affordable? 1. Yes [] 0.No []	
27. On average, what is the monthly turnover or profits made by the business? _Ksh _____	
28. As the business proprietor, are you a member of any business association, social network such as Merry Go Rounds? 2. Yes [] 0.No []	
29. What informed you to choose your current location?	

PART C-3: Business & urban slum upgrading project resources

Questions	Code	Response			
30. Have you ever heard of the urban slum upgrading programme	0=No 1=Yes				
31.If yes, which services and facilities are you aware of?	1= Water 2= Electricity 3= Toilets 4= Schools 5= Hospitals 6= Housing 6=Others (specify) _____				
32. In your opinion, has a slum upgrading intervention affected your business? <i>(Compulsory question for all)</i>	0=No 1=Yes	/...../			
33. Explain your answer,(At least three reasons) 1..... 2..... 3.....					
34. How has the business trended since commencement of slum upgrading intervention? (1=increased; 2=decreased; 3= no change) /...../					
35 What are the benefits of the slum upgrading project to businesses in order of importance (1= Very poor to 5 Excellent)					
Improved investment opportunities Reduced cost of services/ doing business Improved business earning prospect.....	1= Very poor	2=Poor	3=Neutr al	4=Goo d	5= Excellent

Questions	Code			Response	
Gained access to better services..... Improved overall living standard..... Others (specify)					
<p>36. In your opinion, what was the level of involvement of the business community in the slum upgrading intervention?</p> <ol style="list-style-type: none"> 1. No involvement/participation 2. Involved through consultation 3. Participatory involvement 4. Other (specify) /..... 					
<p>37. Would you be willing to leave/abandon your business and engage in slum upgrading project activities?</p> <p style="text-align: center;">0=No /...../ 1=Yes /...../</p> <p>38. Give at least three reasons for your answer?</p> <ol style="list-style-type: none"> 1..... 2..... 3..... 					

39. What challenges have you encountered or do businesses operating in this village encounter in accessing services and amenities provided through the slum upgrading program? (List at least three)

- 1.....
- 2.....
- 3.....

40. In your opinion, what can be done to address the challenges stated/ experienced through the slum upgrading program?

- 1.....

2.....

3.....

41. In your opinion, what are some of the factors that lead to the failure of the implementation of slum upgrading projects in Kibera?

1.....

2.....

3.....

4.....

42. In your opinion what are some of the factors that leads to the success of the implementation of slum upgrading projects in Kibera?

1.....

2.....

3.....

4.....

THANK YOU FOR YOUR COOPERATION IN THIS INTERVIEW