

**FACTORS INFLUENCING SUSTAINABILITY OF SLUM UPGRADING PROGRAMS,
KIBERA-SOWETO EAST UPGRADING PROGRAM, LANGATA COUNTY, NAIROBI,
KENYA**

**BY
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DECLARATION

This research report is my original work and has not been submitted for the award of a degree or any other award in any university or any other institution of higher learning.

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This research report has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicated this research to my beloved husband Dennis Omondi Koweru, my parents Mr & Mrs Khalai, daughter Maya Makomondi and sons Jordan Ochieng and Myles Agero for their love, support and source of encouragement throughout the research work. May God bless you abundantly.

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ABBREVIATIONS AND ACRONYMS

ADB	African Development Bank
CBO	Community Based Organization
GDP	Gross Domestic Product
GoK	Government of Kenya
HIV/AIDS	Human Immunodeficiency Virus
IDB	International Development Bank
KENSUP	Kenya Slum Upgrading Program
MDGs	Millennium Development Goals
NGO	Non-governmental organization
NHC	National Housing Cooperation
NCC	Nairobi City Council
SUF	Slum Upgrading Facility
SD	Sustainable Development
UN-Habitat	United Nations Commission for Human Settlements
UNDP	United Nations Development Program
USAID	United States Agency for International Development

ABSTRACT

Urbanization has played a major role in the development of informal settlements. Kibera slum is as a result of low incomes and inadequate housing provision system for the urban poor. Housing shelters in Kibera are of low quality characterized by open sewers, contaminated water pipes and there is no formal waste management system. The Kenyan government is concerned in upgrading slum settlements to improve the supply and quality of affordable housing for low-income earners, thus the establishment of Kenya Slum Upgrading Programme in 2000 involved in the upgrading process. The study examined factors influencing sustainability of slum upgrading programs in Kibera-Soweto East upgrading program. The study assessed how policy, community involvement, role of stakeholders and importance of records management influenced sustainability of upgrading program in Kibera-Soweto East upgrading program. Literature reviewed shows that urbanization has played a major role in the development of informal settlements in developing countries after the colonial period. The emergence of slums is as a result of poor housing policies and failure of the land markets that can be addressed by the land policy. National housing policies have shown little sign of deviating from the set objectives of conferring ownership rights thus the low income earners are denied access to affordable and decent rental market. Lack of secure land tenor ship is a major contributor to the establishment of informal settlements. The World Bank's experience shows that success of upgrading programs is contingent upon community involvement in the project cycle. Participatory approaches involving all key stakeholders is key to setting practical solutions and to ensure proper succession planning and information proper record management systems should be put in place. The study used descriptive survey design to collect data. Systematic sampling and purposive sampling techniques was used to select respondents. Three groups were sampled for data collection two KENSUP program officers at the programmes offices in Nairobi, two staff members in the Ministry of Housing and occupants of the Kibera Soweto-East upgraded units. Research instruments used were; interview schedules and questionnaires. Data was analysed using descriptive statistics to generate frequency tables, mean and percentages. The findings were used to draw conclusions, suggestions and recommendations. Findings from the study revealed that housing policies formulated to address provision of low-cost housing to the urban poor have not been effective and majority of the residents noted that the issue of secure land tenure had not been addressed. The study further revealed that some of the upgraded units have been occupied by non-community members. Overall community involvement throughout the program cycle was minimal with a score of 61% and the record management system in place was not efficient. There was awareness of donor commitment and support in terms of funding but the level of support received from the government was poor. The study recommended that the government should regularize and have reforms in the land ownership structure and have demand driven housing policies to promote provision of low cost housing to the urban poor. The community should be actively involved in all program phases to enhance cooperation, ownership and sustainability. The government needs to have a budget allocation for slum upgrading programs and proper mechanisms and regulations that promote social housing. Efficient and effective information and record systems to support upgrading programs that can be used by individuals or counties seeking to promote equal housing for all its citizens or residents need to be put in place.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

It is estimated that over a billion people live in slums and informal settlements in the cities of the world, urbanization is happening at a very fast rate and an estimated urban population of almost five billion projected by 2030 and much of the increasing urbanization will take place in developing countries focusing on Asia and Africa where one-third of all urban residents are estimated to fall below the poverty level. Slums are disadvantaged in comparison to other areas within the city this is due to the relative poverty of their inhabitants and lack of land security. These settlements are characterized by substandard housing, inadequate water, sewage and sanitation facilities, lack of educational and health facilities and wide spread socio-cultural conflicts (Desai and Pillai, 1972).

Housing sector plays a key role in the economic growth of a country as well as in wealth creation and employment. According to Maslow's theory of needs, shelter is one of the basic human requirements and as such decent and proper housing leads to the fulfillment of human needs at the bottom of the pyramid. This means that decent housing and settlement programs are a major boost in the realization of human needs. The importance of housing is further emphasized in the millennium development goals particularly with number 7 which explicitly advocates for better housing for more than 100 million slum dwellers across the world. The UN-Habitat has been spearheading the implementation of this goal. The gap between the supply and demand of essential services such as housing is growing at an alarming rate and it is an issue that needs to be addressed because unplanned growth of settlements complicates the provision of these services within the urban settings (United Nations, 2006; Centre on Housing Rights and Evictions, 2008).

Urban development in developing countries is accompanied by the creation of slums and growth of old slums in cities. In the developing world over 300 million urban poor live in informal settlements, this population is made over 200 million in Asia, 50 million in Latin America and over 60 million in other African cities which are experiencing high population growth (Sandhu, 1989). Developing countries are experiencing high urban growth which has resulted to an increase in slums and squatter settlements growing at an alarming rate this has been witnessed since independence. More than 34% of Kenya's total population lives in urban areas, the number of informal settlements has increased from 49 in 1972 to almost 168 slum areas in Nairobi which house 60% of the city's urban poor which constitutes around 2.5 million people (Njoroge, 1998).

An estimated 5.4 million Kenyans live in slums and informal settlements in Kenya. A detailed analysis carried out in 1993 indicated that the urban population will continue to increase due to a strong rural-urban migration trend thus by the year 2010 almost 30% of Kenyans will be living in the urban centre. The housing sector in Kenya has had a combination of challenges, factors which include unprecedented urbanization coupled with high population growth rates, corruption, land grabbing by the political elite, ineffective land policies and debt burdens have had negative impact on development policies and strategies. Urban centers have increased from 34 to 277 between 1962 and 1999 (GoK& UN-Habitat, 2003).

The Kenyan government has made deliberate efforts to strengthen the institutions responsible for housing. Experience from slum upgrading programs done earlier has not been encouraging because several schemes had to be abandoned due to land allocation issues, lack of community participation, and proper planning. In 1975 the first urban development program was approved but it had no upgrading component and the second one to be approved in 1978 had 19% of the program cost apportioned to upgrading. One of the programs was the Migosi slum upgrading

program in Kisumu County that was funded by the World Bank and the government of Kenya, this program did not benefit the intended beneficiaries. Other upgrading programs implemented earlier to improve the living conditions of the urban poor in Kisumu, Eldoret, Kitale, Nakuru and Thika had challenges and the communities were not involved in the program management thus they could not afford the rent of the units constructed. Program management is viewed as a discipline of planning, organizing, securing and managing resources to achieve specific goals (Mitullah, 1984).

A National Housing Policy was adopted in 2004 which aims to enable the poor and homeless access decent housing, basic services and infrastructure important for healthy living and encourage participatory approaches to upgrading programs for informal settlements. Through Vision 2030 the government seeks to elevate Kenya to a middle income economy by 2030 and has emphasized on better housing for safety and security. Kenya is a developing country and tremendous effort is being made in implementing the MDGs. Kenya Vision 2030 is the country's development blueprint and it is based on three foundations namely; the economic, social and political pillars. Through the social pillar the country aims at improving the quality of life for all Kenyans and one of the key social sectors is housing and urbanization which aims at having a sustainable environment that will provide the nation with decent and high quality urban neighborhoods. One of the flagship programs in this sector is the installation of Physical and Social Infrastructure in Slums in 20 urban areas thereby addressing the issue of decent housing which is the main problem facing people living in the slums. According to the 2005 Economic Survey the housing sector has grown tremendously and a GDP growth of 3.5 per cent in 2004 compared to 1.7 per cent in 2003 (Rand, 2006).

The Kenya Slum Upgrading Program is a program aimed at addressing the challenges of housing problems facing the majority of low income earners living informal settlements in all urban areas in Kenya. The program also seeks to address the problem of infrastructural services, land tenure, employment issues and the impact of HIV/AIDS in slum settlement. This program aims to eradicate poverty and achieve Millennium Development Goal 7 of improving the lives of 100 million slum dwellers across the world. The grant agreement to finance the program was signed jointly by the Government of Kenya and the UN-HABITAT /World Bank Cities Alliance on July 2002. The KENSUP program was initiated in 2000 between the UN-Habitat and the previous Government of Kenya (under President Moi). The program was renewed in the year 2003 by the government under President Kibaki. Kibera slum is a well documented and studied informal settlement in sub-Saharan Africa. It will therefore represent a perfect example of how many African countries could go about the problem of housing as envisaged in the millennium development goals and according to the vision of UN-Habitat.

To solve the problems of slum areas, an integrated, participatory and inclusive approach to slum upgrading programs planning and management should be adopted at all levels and countries within the region that are able to do so must be called upon to assist countries that do not have adequate resources in strengthening capacities for slum upgrading programs planning as well as management. This study assessed the roles played by different stakeholders with a view of identifying their responsibility in dealing with some of the challenges, it also assessed the extent to which Kibera residents participated in different levels of the program with an aim of improving their housing and socio-economic status.

1.2 Statement of the Problem

Slum dwellers live primarily in the cities of Africa, Asia, Latin America and Pacific and a smaller number live in cities in the developed world who account for 6% of the population. Rapid urban population growth in developing countries has affected settlement patterns in developing countries and a number of urban dwellers have been forced to live slums where living conditions are deplorable. These settlements have formed mainly because of the inability of governments to plan and provide affordable housing for the low income earners of the urban population leading to a crisis in urbanization process (Amnesty International, 2009).

Urban poverty is one of the major factors in the expansion of slums whose growth is also influenced by; failed policies, bad urban governance, social exclusion, migration, inappropriate legal and regulatory frameworks, unresponsive financial systems, environmental challenges and lack of political will. There has been a high growth rate of informal housing in Kenya from 1960s due to the large deficit of formal housing. Slums in Nairobi have existed since the cities inception, the government has failed to respond to the flight of slums dwellers accordingly even after being classified as illegal. 71% of Kenya's total population is confined in informal settlements. Kenya's declining economic performance is reflected in increasing poverty levels the rates increased from 45% to 56% from 1992 to date. The Welfare Monitoring Survey indicates that Kisumu, Nairobi, Nakuru and Mombasa have poverty rates of 63 percent, 50 percent, 41 percent and 38 percent (UN-Habitat, 2003).

Kibera is the largest slum in Nairobi and the most populated place on earth housing over 600,000 people according to situational analysis done 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 yet these services serve as the foundation for survival (Cobbett, 2009).

This is an indicator that there is need to have sustainable slum upgrading programs in the country and improve the supply and quality of social housing to low-income earners in an effort to match the rapid population growth. The study is set out to help us assess the actors that affect sustainability of slum upgrading programs.

1.3 Purpose of Study

This study seeks to investigate factors that influence sustainability of upgrading programs in KENSUP'S pilot program of Kibera Soweto East in Nairobi, Kenya.

1.4 Objectives of the Study

The study has been guided by the following objectives:

1. To assess how policies influence sustainability of slum upgrading programs, Kibera Soweto-East.
2. To establish how community involvement influences sustainability of slum upgrading programs, Kibera Soweto-East.
3. To examine the role of stakeholders in sustainability of slum upgrading programs, Kibera Soweto-East.
4. To assess the influence of records management on sustainability of slum upgrading programs, Kibera Soweto Village.

1.5 Research Questions

The study has been guided by the following research questions:

1. How do policies influence sustainability of slum upgrading programs in KENSUP Pilot Program, Kibera Soweto-East.?
2. How does community involvement influence sustainability of slum upgrading programs in KENSUP Pilot Program, Kibera Soweto-East.?
3. What is the role of stakeholders in sustainability of slum upgrading programs in KENSUP Pilot Program, Kibera Soweto-East.?
4. To what extent records management influence sustainability of slum upgrading programs in KENSUP Pilot Program, Kibera Soweto-East?

1.6 Significance of the Study

The findings from this study will provide suggestions that will lead to more successful improvements in Kenya's slum settlements. The findings from this study will provide suggestions that may lead to more successful improvements in the slum settlements. It also seeks to contribute to the existing knowledge and literature on slum upgrading in relation to sustainability of upgrading programs and provide suggestions that may lead to more successful improvements in Kenya's slum settlements. This information can be used by the government in identifying gaps in slum upgrading programs and adopt effective approaches to slum upgrading and respond to the needs of the urban poor.

1.7 Limitations of the Study

One of the limitations of the study is access to the target population in the study area because the road network is poor and accessing them will be a challenge to the researcher. Most of the residents in the study area are casual labourers hence they are not readily available thus the researcher may not get responses from all the respondents to participate in the study. The findings of this study will be restricted to the dynamics of Kibera slums and not the entire country.

1.8 Scope of the Study

The study will be carried out in Kibera-Soweto-East in Langata County which is the pilot program area of Kenyan Slum Upgrading Program (KENSUP). The research will target the occupants of the upgrading units since they are the program beneficiaries.

1.9 Assumptions of the Study

This study assumes that the residents of Kibera Soweto-East and officials from the Ministry of Housing and KENUP will cooperate in collection and responding to questions that will arise in the course of the research. Community based organizations will provide basic information on housing relating to informal settlements in the country. This study also assumes the respondents have knowledge of the slum upgrading program and they understand the benefits of the program.

1.10 Definition of Significant Terms

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

Community Participation: The involvement of the community in a program from the conceptualization to the implementation stage and its sustainability because they are the main program beneficiaries of the program.

Informal Settlements: These are settlements where a group of housing units are constructed on land to which the occupants have no legal claim and it is characterized by substandard housing, inadequate water, sewage and sanitation facilities.

Participation: This is the active involvement of all stakeholders in the program cycle to achieve ownership.

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

Slum Upgrading Programs: The process of improving the social and physical environment of the slum settlement by setting up decent affordable housing units, improve the infrastructure and basic services.

Sustainability: The ability of program beneficiaries to maintain and sustain program activities and services initiated by the program so as to last long after the expiring of the implementation stage.

Stakeholder: These include individuals and organizations actively involved in a program and whose interests positively or negatively affect the program outcome.

Urbanization: Rapid influx of people from rural to the urban areas leading to an increase in population in the urban centers.

1.11 Organization of the Study

This research proposal has been organized into three chapters namely; introduction, literature review and research methodology. Chapter One consist of background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations , basic assumptions and definitions of key terms. Chapter two provides an overview of the key issues related to the sustainability of slum upgrading and informal housing and has made use of past research, case studies and real life experiences. Chapter three comprises of the research design, study area, target population, sampling design, sample size, data collection, data analysis and ethical issues in this research. Chapter Four presents analysis and interpretation of the data collected from the field both Quantitative and Qualitative methods were used in the analysis of the collected data. Summary of the key findings from the study as per the set objectives and discussion of the findings and recommendations developed thereof, including suggestions for further research, are provided in Chapter Five.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews available literature on factors that influence sustainability of slum upgrading programs giving analysis with a global, regional and local perspective. This chapter also presents the conceptual framework showing the relationship between the independent and dependent variables.

2.2 Historical Development of Informal Settlements

Urbanization has played a major role in the development of informal settlements. Over a billion people throughout the world live in informal settlements, on global scale informal settlements are a significant problem in third world countries. After the colonial period cities in developing countries grew rapidly during 1960s and 1970s. The influx of people from rural to urban areas has greatly affected settlement patterns leading to the emergence of informal settlements (Navarro, 2008).

It is evident that rapid urban population growth has put pressure on available job opportunities, social amenities and other important human needs hence the governments especially in African and Asian nations have to deal with a bigger problem emanating from urbanization. Urbanization has also affected planning by governments and has outpaced the ability of city authorities to provide for housing, environmental and health infrastructure. The rate of creation of formal sector urban jobs is below the expected growth rate of the urban labour force thus majority of these residents live in slums because millions of people in developing countries cannot meet their basic needs for shelter, water, food, health and education. Urban towns in Egypt experienced a high rate of rural-urban migration the population of people in towns increased compromising the

provision of affordable housing facilities. This resulted to the emergence of informal settlements with 70 percent of the slum dwellers being concentrated in Cairo and Alexandria (Ooi & Phua, 2007). Informal settlements in cities sprout from government land which remains unused for long period hence easy targets for the homeless since there is a substantial number of citizens who do not have a place to call home (Onyango, Wasonga, Asamba, Teyie, Abuya, Obera et al, 2005).

The inability of governments to plan and provide affordable housing for low income earners of the urban population has also contributed to the formation of informal settlements. Most of the increasing urbanization takes place in developing countries which has been predominantly rural but is quickly becoming urban, with the main focus being Africa and Asia where one-third of the population fall below the poverty level of their country. A small number of slum dwellers live in the cities of the developed world, but most live primarily in the cities of Africa, Asia, Latin America and Pacific (UN-HABITAT, 2009).

Asia accounts for approximately 60 percent of urban slum dwellers, in Brazil close to 10 million people live in slums in the case of Sao Paulo there are close to 1,600 favelas and in Africa, West, Central and East Africa are the most rapidly urbanizing countries in the continent. Ronald Mears in his book “historical developments of informal settlements in Johannesburg since 1886” clearly demonstrates the social and political intrigues that led to emergence of Soweto which one of the biggest slums in the world. The author blames poor political decisions on the development of Soweto informal settlements as the government of the day segmented its citizens into classes and undermining the poor (Wilson, 1998).

2.3 Housing Policy on Slum Settlements Upgrading Programs

Urban poverty is one of the major factors in the expansion of slums whose growth is also influenced by; failed policies, bad urban governance, social exclusion, migration, inappropriate legal and regulatory frameworks, unresponsive financial systems, environmental challenges and lack of political will (Coit, 1998).

Public policies have in the past responded in rather irrational ways to the challenge of slum proliferation – with demolitions and evictions, which often not simply displace problems, but compound them. Efforts to tackle crime, violence and insecurity have long been excluded from interventions to improve living conditions in slums and housing infrastructures .Since the 1960s and early 1970s, urban policies in many countries were characterized by a non-acceptance of slums. National approaches to slum settlements have shifted from negative policies such as forced evictions, involuntary resettlement to more positive policies such in situ upgrading, enabling and right based policies. There are various policies that have been put in with respect to the approach to informal settlements and their upgrading (Brinkerhoff & Crosby, 2002).

Existing policy approach to informal settlements has been largely informed by national and provincial housing policies and programmes. There is need to adopt proactive policies and programmes to prevent the growth of slums and informal settlements. Slum upgrading requires a comprehensive approach to develop a more comprehensive development process to integrate living conditions, aspects of infrastructure, land ownership, service systems, economic activities and community development (Solares, 1999).

Policies are interrelated and it not easy to identify main policy areas for slum upgrading hence policies put in place need to be clear. To ensure they are not changed whenever the city leadership of the country changes to ensure slum upgrading and other programs that aim to reduce poverty among the poor does not suffer setbacks. Pro-poor reforms can be undertaken to improve the tenure status of slum dwellers, their access to basic services and better housing (Woodruff, 2001).

The emergence of slums is as a result of poor housing polices and failure of the land markets that can be addressed with land policy. Provision of affordable housing is an effective strategy for preventing slum formation; informal settlement policy is characterized by a combination of tolerance and eviction followed by regularization. National housing policies have shown little sign of deviating from the set objectives of conferring ownership rights thus the poor are denied access to rental market (Kumar, 2001).

Generation of opportunities is the current approach to social housing meaning it focuses on measures that enable individuals, households and different social groups to access different housing solutions. National Housing Authority in Thailand conducted research on the urban poor and the findings prompted them develop low-income housing program with an aim of upgrading the slum settlements which they have managed to reduce the proportion of slum dwellers from 20 per to less than 1 percent in 2005 (Ferguson &Navarrete, 2003). Demand driven housing policies have been implemented by the Egyptian government which recognized the presence of deteriorated and undeserved informal settlements. The Philippine government revised its housing policies based on the lessons learnt from costly slum clearance and forced eviction programs (Payne, 1997).

In Brazil the government did not act on time thus more costly programs have been undertaken due to the exponential growth of slum. In Kenya housing policies favour house ownership and little is said on what can be done to improve rental housing. The main objectives of the current National Housing Policy (Sessional Paper No. 3) is "to promote the development and ownership of housing that is functional, healthy, aesthetically pleasant and environmentally-friendly". Nowhere in its objectives does the current housing policy mention rental housing. This is the reason why private developers hardly put up rental housing development (Nordin, 2004).

Slums in Nairobi have existed since the cities inception, the government has failed to respond to the plight of slums dwellers accordingly even after being classified as illegal. 71% of Kenya's total population is confined in informal settlements (UN-Habitat, 2009). This number will continue to increase unless a serious and concerted action by all relevant stakeholders is undertaken. Kenya's declining economic performance is reflected in increasing poverty levels the rates increased from 45% to 56% from 1992 to date (World Bank, 2007). The Welfare Monitoring Survey indicates that Kisumu, Nairobi, Nakuru and Mombasa have poverty rates of 63 percent, 50 percent, 41 percent and 38 percent respectively (Mitullah, 2003).

In Kenya policies on housing and poverty reduction mention very little about how the government intends to address the needs of the category of low-income groups who are unlikely to afford land in urban areas, and also in whose concern increasing the housing stock for rental should be a major priority. Hence the rate of urbanization will continue and as long as urban land is scarce and expensive, few will afford to be homeowners. Rental housing should be a key aspect of the housing policies because Kenya's real estate market consists of different client profiles and market segments.

A National Informal Settlements Development Policy should be formulated by the Ministry of Housing that will contain all the requirements that slum dwellers should have access to and how they should be resettled. This policy should be accepted by other central governments (Maseland & Kayani, 2010).

2.3.1 Secure Land Tenure in Slum Settlements

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 investment in the housing structures and development of community ties (Stryjak, 2009). Secure land tenure increase economic growth, addresses inequities and reduce poverty. Security of tenure provides a source of identity, status and political power and serves as a basis for the pursuit and acquisition of other rights (Habitat for Humanity, 2008). Slum dwellers will invest in improving their housing if they have some security of tenure (Castillo & Stein, 2005).

Most slum settlements are on public land which are either held by the central government or on leasehold. Land is a basic resource that is essential for low-income earners to mobilize other resources. Land in Africa is not just an economic good, it is a spiritual asset which represents peoples' ancestral heritage (Coit, 2008). Land management is fundamental to the provision of affordable and decent housing to the urban poor hence there is need to address land issues through comprehensive policies and revise existing land governance and administration systems.. 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).

In Thailand and India there are different forms of land tenure, the strategy of collective land tenure has been adopted to ensure that poor people keep the land, secure their housing and

sustain themselves as a community. In the Baan Mankong Program in Thailand, the tenure solutions that communities work take many forms; for example, purchasing the land that they already occupy, buying other land nearby, negotiating to buy or lease a portion of the land they already occupy through a land-sharing agreement, or getting long-term leases to existing or nearby land from a variety of public landowning agencies. The tenure arrangements that these communities are able to negotiate might include joint land ownership under their community cooperatives, or cooperative lease contracts that can be long, medium or short term (Boonyabanha, 2009).

In Mumbai, a house is given in property, but the land in community, land is a scarce resource in the city and the government is extremely strict in allocating land to residents. Allocation of land is done through the Slum Rehabilitation Scheme, where land is transferred to a society of the residents, instead of to individual persons. The Favela Barrio Program, in Rio de Janeiro, Brazil, is an example of slum upgrading without full land tenure legalization and for its use of state of exception the concession of right to use but not full ownership of land to allow the program to take place. The program has placed greater emphasis on infrastructural and living condition improvements rather than on legalization of land tenure; nevertheless, as a result, the implementation of the Favela Barrio Program also has the effect of increasing the security of tenure of favela residents (Handzic, 2010).

In 1988 the Brazilian constitution was amended and a legal provision was introduced that transfers ownership rights of to informal occupants of private land after a period of peaceful and uncontested occupation of five years. In Philippines the government put in place incentives where land owners get a reprieve in the payment of taxes when they donate property to community associations thus allowing free transfer of land titles to community groups. In

Namibia, the Shack Dwellers Federation and its supporting NGO, the Namibia Housing Action Group, have developed a model that includes regulatory reform, land purchase from local authorities, the extension of infrastructure provision and dwelling construction (Fernandes and Rolnik, 1998).

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 illegal, exploitative and extremely profitable informal and corrupt land allocation, 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).

Sixty percent of many African countries are composed of slums and much of it is on informal land. This is attributed to inappropriate and inadequate urban land policy, land administration, land management and poor governance framework. Most of the traditional land regulation standards and procedures have proven ineffective in preventing unwanted land. Many African countries (Algeria, Botswana, Burkina Faso, Egypt, Ethiopia, Ghana, Guinea, Kenya, Madagascar, Malawi, Sierra Leone, South Africa, Southern Sudan, Tanzania, Tunisia, Uganda and Zimbabwe), are engaging in land policy reform processes. The Land Policy Initiative has created a renewed interest in policy development and implementation in Africa and some of these are more consultative than others, which means that some will deliver better results than others. The success of Baan Mankong Program in Thailand secure housing is contributed mainly to the security provided from the dreaded evictions (Booyabanha, 2007).

Over 14 countries in Africa have introduced formal tenure types which are not based on individual freehold titling including Benin, Tanzania, Mozambique, Ethiopia and Zambia. Some countries have brought customary tenure into the statutory environment, such as Lesotho. Some countries have strengthened their laws to prevent the eviction of people in occupation of the land, such as South Africa. Some of these countries have also introduced forms of group rights such as Mozambique, Uganda, Ghana and South Africa. Other countries have introduced forms of co-ownership or co-tenancy so that women have equal rights to land, such as Tanzania. Numerous countries have also undertaken policy processes, many of them taking years and being extremely consultative such as Kenya, South Africa, Tanzania, Mozambique and Namibia (African Union, 2009).

Experience shows that although land titling can be the clearest and strongest instrument to provide security of tenure, it does not have to be individual property rights. In Kenya the government has adopted the National Land-Use Policy and the National Spatial Plan to be used to guide and control slum growth in future with an aim of improving the livelihoods of those in informal settlements. 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 administration, access to land, land use planning, historical injustices and environmental degradation (Ministry of Lands, 2010).

2.4 Influence of Community Involvement in Upgrading of Slums

Community involvement is an indispensable element in any squatter-settlement upgrading program if the community which originally developed the settlement is now to have the responsibility for improving the houses in the settlement. In a squatter-settlement upgrading

program, unlike a conventional housing scheme or a sites-and-services program, the target population is already on site, and it is necessary to involve the community in the preparation of the regularization and upgrading plans. 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 is in a position to finance, on its own, the regularization and upgrading of all squatter settlements in urban areas, and communities, therefore, have to pay all or most of the costs of upgrading programs (Lemma, 2010).

Community participation improves program implementation and impact hence throughout the program cycle the role of the program managers is to facilitate the processes technically and ask the right questions to the community members so as to encourage them towards a deeper understanding of their socio-political status and find the right balance for working with the community members thus allowing them take the lead in developing solutions (Imparato & Ruster 2003).

The World Bank's experience has shown that the success and sustainability of upgrading programs is contingent upon community involvement in decision-making, implementation and operation and maintenance, and through financial and in-kind contributions. 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.

In Brazil the upgrading approach of the Favelas was focused on ensuring community involvement throughout the entire program cycle and the Municipal Secretariat of Housing establishes contact with the selected communities with an aim of bringing the city government and community to work together. Neighbourhood associations and community groups are allowed to participate in preparatory meetings during the planning phase. During the implementation phase government officials encourage community members to establish working groups to support the construction of new infrastructure. Involving the community strongly is also not recommended because it affects the planning and design of programs thus a balance should be sought. In Ghana the community expected that once upgrading programs commence improvements will start being felt within the first three months (Cropper & Bento, 2006).

In Kenya there have been successful slum upgrading programs like the Huruma upgrading program in Kambi Moto which begun in 1999 under the initiative of Pamoja Trust which is 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). The community members take the lead in mobilizing and lobbying the government for land tenure and service provision, planning the settlement and conceptualizing the upgrading process themselves, and finally financing and constructing the houses with the help of savings and loan schemes set up and run by community members (De Soto, 2000).

Community's self-organization was key to success of the upgrading process. The residents organized, financed and contributed labor to all phases of site, construction and materials preparation. The residents were able to work with the Nairobi City Council to gain communal title to the land. The community cultivated a savings culture through a well organized and

managed daily savings scheme that allowed the residents to access outside capital loans that helped finance construction of new upgrading units. The organization trained the community on participatory planning, and acted as a liaison between the community and the NCC. They also acted as technical advisor during construction and they also helped develop a savings scheme model. This approach ensures equitable distribution of resources, community empowerment and sustainability of upgrading programs (UN-Habitat, 2008).

2.5 Role of Stakeholders in Upgrading of Slums

The design and implementation of programs involves the participation of stakeholders. 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 setting practical solutions. The process should be transparent to improve program outcomes and various interest groups. In this study the major stakeholders who have supported slum upgrading programs include: Government, members of the community, private sector and development partners. These stakeholders have complemented upgrading programs with income, labour, employment, credit markets and entrepreneurial skills.

2.5.1 Role of Government in Sustaining Upgrading Programs

The government's role is 'enabling', this implies encouraging local community groups to become involved or take over the production or the rehabilitation of housing, while the government supplies easy credit, tenure of land, the essential infrastructure, technical assistance and the legal support. Governments have to support and complement the system the local government is the link between national government and the community. Their task is to deal with the poorest of the poor, it is vital to have strong and committed local authorities that understand the real needs of the people, and with the ability to integrate those needs into their local policy making. The

lack of an adequate institutional capacity at the sub-national level is one of the most important obstacles to the realization of the benefits of government decentralization (Hasan, 2005).

In Chile direct demand housing subsidy program has worked well to incorporate moderate and middle-income households into formal systems, it has failed to stimulate formal sector financial institutions and developers to serve low-income households. Despite its neo-liberal economic agenda, the government continued the Chilean tradition of subsidizing housing for the poor, and the Ministry through its executing arm, the SERVIU, had to build and finance directly the houses for the poor. Governments therefore occupy a unique position in safeguarding and managing this resource. This means that the role of government goes beyond the classical public administration function. Due to this, the lead actor in land policy processes is government. It cannot outsource or delegate it to a non-public entity (Minvu, 2004).

The Indonesian government encourages community development through institutional building and infrastructure improvement in an effort to strengthen community participation in the construction of houses because most upgrading programs have been successful because program beneficiaries were actively involved (Hamdi Nabeel, 1991). In Mumbai the authorities carried out grand scale evictions and slum demolitions on the one hand, and on the other, they worked on a range of participatory programs to improve the housing conditions of the poorest households. In the case of Ho-Chi-Minh City, where the expected results were not achieved mainly due to a poor selection of the local actors who inhibited the implementation of the program.

The government of Chad has spent over \$14 million in the year 2004 to upgrade housing units for poor families in the capital city of N'Djamena. This program offered job opportunities for the people in the construction site and leading to a decrease in poverty levels. Major resources have

been devoted by the Indian government and municipalities to slum upgrading. 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 the case of Egypt the government put in place demand driven upgrading policies that has helped curb the geo-politics of land tenure and ownership thus protecting public land and the quality of life improved because the people had access to basic commodities and the infrastructure was also improved hence improved housing conditions in several towns. The government has worked with various stakeholders and formed the Integrated Slum Upgrading Program which meant that any upgrading or regularization-undertaken in a particular settlement follows a particular area development plan of the settlement considering all needed layout changes, relocation and resettlement needs.

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 put in place national development policies that focus on social economic transformation. A collaborative initiative between the government 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).

2.5.2 Role of Development Partners in Sustaining Upgrading Programs

With an aim of creating dynamism among the urban poor in the cities upgrading efforts are being undertaken by development agencies that aim to turn around downward trends in the area and address the world community's poverty reduction mission to improve the quality of life of the urban poor while assisting them realize their human potential because the people living in the slums have the potential to produce a significant share of domestic capital formation through self built housing thereby creating a sense of ownership, entitlement and investment in the area (Ooi & Phua, 2006). The challenge for urban assistance is no longer simply to provide circumscribed packages of physical aid as might have been understood in the past but, rather, to ask how the capacity of local institutions can be strengthened in order to manage these increasingly complicated urban problems in environments of diversity and change (Cohen, 2001).

UNDP and the UN-Habitat have been engaged in programs with an aim of providing adequate infrastructure, services; achieve secure and sustainable improvement of slum settlements which is one of the Millennium development goals. UN-HABITAT focuses on slum upgrading programs that involve surveying social economic conditions and mapping physical housing conditions for slum households. 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, established in 2004 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 and these 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 in Central America where they offered technical and financial assistance, especially where there are clearly identified national organizations to execute the programs, and when national policies in the sector are not already well defined and functioning (Piran, 2000). Development partners involved with the Kenyan Government in the execution of its core business include; UN-HABITAT, UNEP and DFID.

2.6 Influence of Record Management

Record keeping is important in programs because demonstrates accountability and transparency in the program cycle. Effective information and record management of programs all through the program cycle is important because this will ensure that there is proper succession planning and information flow to enable the target beneficiaries of the programs and stakeholders be prepared to effectively manage the programs after completion. There is need to recognize the poor living in informal settlements as having a potential to invest, manage and maintain the built environment and services Information is the basis for awareness and for the design of any

intervention program, and as such it is a vital policy issue hence proper information systems need to be developed to support upgrading programs (Global Urban Observatory, 2003).

A continuous gathering of information regarding the growth of the city, and specially its poorer areas to be able to anticipate future tendencies, should be the basis of any Slum Upgrading Program. Several reports underline the importance of having proper information on the existing informal settlements. It is impossible to design or provide appropriate infrastructure and services if proper information is lacking (Sabry, 2009).

The success of the Alagados slum upgrading program in the state of Bahia which is one of Brazil's poorest states is attributed to the fact that the steering committee involved in the Technical and Social Support Program documented the experience of working in Alagados and produced useful publication to be used by other individuals or countries that seek to solve similar slum upgrading issues. Alagados and Bahia successful slum upgrading is attributed to the fact that there was collaborative partnership and consistency and the political maturity displayed by all parties. The slum dwellers and the local organizations were the real actors and were the key drivers to the success of the program in addition to the skills and flexibility displayed by the local authorities and support by the government of Italy that the slum dwellers needed (Fernandes & Rolnik, 1998).

In Nepal the Nepalese government initiated the computerization of land records from 1993 and the Department of Land Information and Archiving was established in 2000 thus it was given permanent institutional capacity to maintain and update information available to all interested parties. India government started the National Land Records Modernization Programme (NLRMP) in 2008 to build its data infrastructure for the whole country in an effort to improve

connectivity amongst the registration offices, land records and land records management centers (Banerjee, 2002).

Most developing countries have poor land information records hence poor implementation of programs aimed at improving the country's economic status where most economies are still agrarian. In Kenya land information system is characterized by much paper processing which is slow, inefficient and most data is exposed to permanent loss. Another constraint in the achieving good land information management systems is the non-integrated approach where the surveyors, planners and quantity surveyors follow a "go it alone" approach yet there is need to exchange information generated. This makes access and exchange of land information a challenge hence there is no good understanding of the physical, economic, social and legal components of informal settlements. In addition there is a lot of duplication, data redundancy and this is frustrating to land owners and developers hence informal settlements sprout on government land that remain unused for a long time. Land ownership in Kenya is still informal though the formalization of land ownership begins with land registration where data and information of land is recorded (Mulaku, 1995).

Population patterns in Kenya clearly indicate that informal settlements will continue to sprout with urbanization and there is need to provide proper housing with appropriate infrastructure. There is need to have information on the existing settlement patterns and infrastructure and the information that exists is not accurate and not easily accessible, because Kenya does not have a comprehensive catalogue on informal settlements (Augustinus, 2005). Land Information for Informal settlements (LIIS) was a program initiated by the Kenyan government to improve land information for better management of informal settlements. LIIS program failed to address the main issue of using the information and knowledge to formulate policies on how informal

settlements will be developed or upgrading. In addition it did not link information obtained with specific concrete slum upgrading process. The Ministry of Lands is developing a National Land Information Management System which will include information of Kenya’s informal settlements in the system. A policy commitment has also been made by the government to establish a comprehensive, computer based, user friendly, and efficient, accessible, transparent and affordable land information system (Sessional Paper No 3 of 2009).

Having proper land information system is a necessary prerequisite to formulating realistic, meaningful, and effective plans, budgets, and policies towards more effective decision making about land. Proper records information management allows for the efficient flow of information between different users. Records management systems put in place should allow for continuous evaluation and updating of the information system.

2.7 Conceptual Framework

Independent Variables

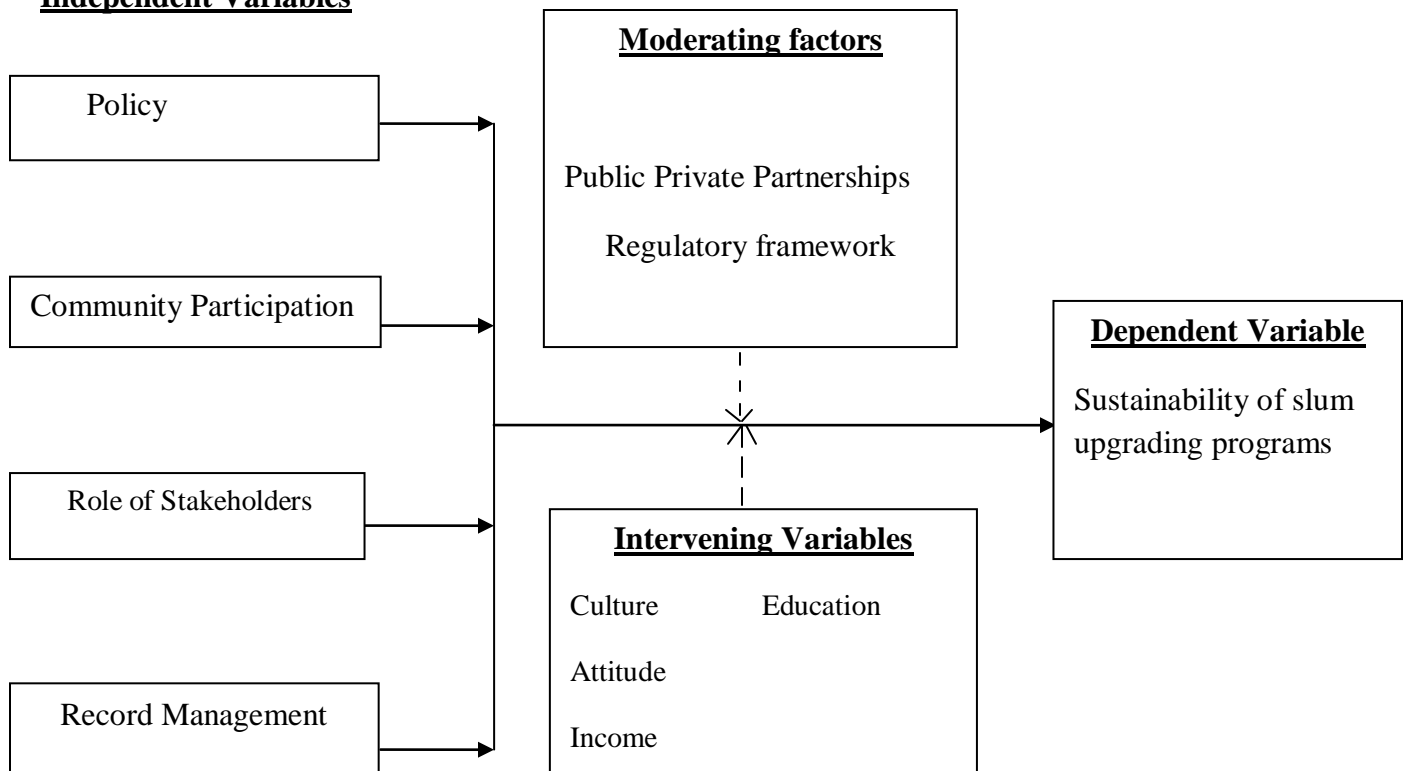


Figure 1: Diagrammatic Illustration of the Relationship among Variables

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter comprises of the research design, target population and the samples under consideration, the research tools and instruments, data collection methods and data analysis. Combinations of all these components lead to the results upon which conclusions were made. Research methodology therefore provides a framework under which the study is conducted.

3.2 Research Design

This study used both quantitative and qualitative research paradigms. This assisted the researcher collect both quantitative and qualitative data from the questionnaires to be given to the residents of the Kibera-Soweto East upgrading units and interview guides to be given to the officials in the Ministry of Housing and KENSUP respectively. The data collected had 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 sustainability of slum upgrading programs in Kibera-Soweto East. Descriptive survey enabled the researcher to generate statistical data that was used to analyze the relationship between variables on the factors that influence sustainability of slum upgrading programs in Kibera-Soweto East.

3.3 Target Population

The target population of approximately 600,000 residents of Kibera Soweto–East who are the key beneficiaries of the first phase of upgrading units; it is from this population that the study sample will be drawn.

3.4 Sample Size and Sampling Procedure

3.4.1 Sample Size

The sample size was calculated as shown below through the approach based on precision rate and confidence level to determine the sample size according to Kothari (2003). According to this method the precision rate and confidence level was specified to estimate the proportion of the occupants living in the upgrading units and the formula below was used:

$$n = (z^2 / e^2) * p * q$$

Where n = size of sample

$p\%$ = Proportion belonging to the specified category with positive responses

$q\%$ = Proportion not belonging to the specified category; ($q = 1 - p$)

z = Value of the standard variate at a given confidence level

$e\%$ = Margin of error

Given $p = 0.5$, $q = 0.5$

$z = 1.96$ and $e = 0.05$

$$n = (1.96)^2 / (0.05)^2 * 0.5 * 0.5 = 384$$

Therefore, sample size (n) = **384**

3.4.2 Sampling Procedure

For this study both non-probability and probability sampling techniques were used to identify respondents of the study. Systematic sampling is a probability sampling technique and it was used to select the subjects of the study in Kibera-Soweto East upgrading units to ensure that all the occupants in the upgrading units were evenly sampled to eliminate bias.

According to Kerlinger (1986) systematic sampling is achieved when the elements of the population are put into a list and then every k^{th} element in the list is chosen (systematically) for inclusion in the sample. The first phase of the program comprises of 600 housing units thus there are approximately 600 occupants living in Kibera-Soweto East upgrading units. The researcher needs a sample size of 384 occupants hence a systematic pattern was used to select the study participants. The study assigned a number to each unit from numbers 1 to 384. The researcher randomly selected the first occupant and then choose the sampling interval (k) which was $600/384 = 2$. To select the samples the researcher started with the 1st unit in the list and took every k^{th} unit which is equal to 2. Hence the subjects that participated in the study were occupants living in the units numbered 1, 3, 5, 7..... 383.

Purposive sampling is a non-probability sampling technique that the researcher used to select officials from the Ministry of Housing and KENSUP in the slum upgrading unit who have the expertise and information on slum upgrading programs in Kenya.

3.7 Research Instruments

This study used the following research instruments:

3.7.1 Questionnaires

Quantitative data was gathered through open and close ended questionnaires to be completed by the occupants of Kibera Soweto-East upgrading units and the data obtained was used to assess the factors that influence sustainability of slum upgrading programs in Kibera Soweto East.

3.7.2 Interview Guide

Qualitative data was collected using interview guides which were administered to selected officials in the Ministry of Housing and KENSUP to find out if the program objectives in Kibera Soweto East upgrading program have been achieved. The officials were interviewed to understand how the challenges encountered in the program have been tackled. The study used secondary sources of data which include review of published books, journals, papers, periodicals and Government policy documents, Sessional Papers and media sources.

3.8 Pilot Study

The researcher carried out a pilot study before data collection is done. A sample of 30 questionnaires was administered to a population with similar characteristics with the participants and who did not participate in the study. The questionnaires was adjusted by reframing the questions to make them better understood, giving the necessary instructions and simplifying the language to ensure the correct interpretations were made.

3.8.1 Validity of Instrument

In order 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 are 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.

3.8.1 Reliability of Instrument

The researcher used the test-retest technique to ensure reliability of the questionnaires. First a sample of 15 questionnaires will be administered to a population with similar characteristics with the occupants of Kibera-Soweto East but they did not participate in the study. The same questionnaires were re-administered to the same respondents after two weeks. The scores from both tests were 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.

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{\{n\sum x^2 - (\sum x)^2\} \{n\sum y^2 - (\sum y)^2\}}}$$

Where r= Reliability coefficient

$\sum xy$ = Sum of the products of paired scores

$\sum y$ = Sum of y Scores

$\sum y^2$ = Sum of squared y Scores

n = Number of respondents

$\sum x$ = Sum of x Scores

$\sum x^2$ = Sum of squared x Scores

$$r = \frac{3633675 - 145347}{\sqrt{\{(35350505 * 41402)\} \{3738325 * 149533\}}} = 0.83$$

A coefficient of 0.83 was obtained this shows that the instrument has a high degree of reliability (Mugenda, 2003).

3.9 Data Collection Procedure

Questionnaires and interviews schedules were used to collect primary data from the occupants of the upgrading units and officials from the ministry of housing and KENSUP. The research assistants administered the questionnaires to the study participants. The selected personnel in the Ministry of Housing and KENSUP were contacted by the researcher via telephone for them to confirm the time and date the interview will be conducted. All data collected was assembled and stored in both hard copies and soft copies for analysis. The data collection process took approximately two weeks.

3.10 Data Analysis

After field work the researcher edited and counter checked completion of questions in order to identify items which were not appropriately responded to. Quantitative data collected from the questionnaires was coded, organized, and analyzed using descriptive statistics to generate percentages, mean and frequency tables. Qualitative data collected from the interview guide was organized into themes, categories and patterns pertinent to the study and integrated with quantitative data to facilitate the discussion of key findings. Analysis of data enabled the researcher to interpret, summarize and draw conclusions and recommendation of the study.

3.11 Operationalisation of Variables

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

Table 3.1: Operationalisation of Variables

Objective	Variables		Indicator(s)	Measurement	Scale	Data Collection Method	Data Analysis
	Independent	Dependent					
To assess the extent to which policies influence sustainability of slum upgrading programs	Policy	Sustainability of slum upgrading programs	<ul style="list-style-type: none"> ▪ Housing policies ▪ Land tenure system ▪ Tenancy 	<ul style="list-style-type: none"> ▪ Number of residents aware of the of government policies in promoting low cost housing ▪ Number of non-community members renting the units 	Ordinal	Questionnaire , interview guides	Descriptive
To establish how community involvement influence sustainability of slum upgrading	Community Involvement	Sustainability of slum upgrading programs	<ul style="list-style-type: none"> ▪ Program cycle 	<ul style="list-style-type: none"> ▪ Number of community members participating in program activities. 	Ordinal	Questionnaire, interview guides	Descriptive

programs							
To examine how the role of stakeholders influence in sustainability of slum upgrading programs.	Role of stakeholders	Sustainability of slum upgrading programs	<ul style="list-style-type: none"> ▪ Awareness level ▪ Funding 	<ul style="list-style-type: none"> ▪ Relationship with program beneficiaries ▪ Stakeholders ability to influence program success 	Nominal	Questionnaire, interview guides	Descriptive
To assess the importance of records management on sustainability of slum upgrading programs.	Records management	Sustainability of slum upgrading programs	<ul style="list-style-type: none"> ▪ Availability of information and records ▪ Availability of data management system 	<ul style="list-style-type: none"> ▪ Number of programs with adequate records ▪ Quality of records distribution system 	Ordinal	Questionnaire, interview guides	Descriptive

3.12 Ethical Issues

The researcher will obtain permission from the National Council for Science and Technology and from the Department of Extra Mural Studies, University of Nairobi. The researcher will ask for permission from the care taker and residents of Kibera Soweto-East upgrading units before administering the questionnaires. The respondents will be informed on the objective of the study, how their participation is important and how it will be beneficial to them. The researcher will number the questionnaires to ensure confidentiality by ensuring that the respondents do not indicate their names on the questionnaires and interview guides. The researcher will acknowledge all sources of information from other scholars. Individuals willing to participate in this exercise as respondents will do so voluntarily and will volunteer to provide information to the best of their knowledge. All participants will not be entitled to any monetary gains but will be able to access the results of the study which will be made public. The study will strive to get information from all kinds of respondents irrespective of their race, gender and position.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the results of the findings of the data collected from the residents staying in Kibera Soweto-East slum upgrading units, officials from the ministry of housing and KENSUP on factors influencing sustainability of slum upgrading programs, Kibera Soweto-East. The data was interpreted according to the research objectives which include; i) To assess how policies influence sustainability of slum upgrading programs in Kibera Soweto-East, ii) To establish how community involvement influenced sustainability of slum upgrading program in Kibera Soweto-East, iii) To examine how the role of stakeholders influenced sustainability of slum upgrading programs in Kibera Soweto-East, iv) To assess the importance of records management on sustainability of slum upgrading programs in Kibera Soweto East. Analysis of the data was done was done through descriptive statistics and the findings of the study has been presented using frequency tables, mean and percentages.

4.2 Questionnaire Response Rate

The study received responses from 360 respondents from the targeted 384 respondents, 24 respondents did not participate in the study because they were not present at the time the study was being conducted. This represents a response rate of 95% this was ensured through use of two research assistants who reside in the area and according to Mugenda (2003) a response rate of 50% is adequate for data analysis.

4.3 Demographic Information

To understand the background of the respondents participating in the study, the researcher required them to indicate their gender, age, level of education, source of income and period of stay in Kibera-Soweto East.

4.3.1 Gender of Respondents

The study looked into the gender of the respondents in order to establish whether gender had any influence on sustainability of the Kibera Soweto East upgrading program. The responses are presented in Table 4.1.

Table 4.1: Gender of Respondents

Gender	Frequency	Percent (%)
Female	200	56
Male	160	44
Total	360	100

The study shows that majority of the respondents were female accounting for 56% this is because most of the households were run by single mothers. The male respondents accounted for 44%, this may be due to the fact that most of the males were at their places of work and some of the households had absent fathers.

4.3.2 Age of Respondents

The study sought to find out the age of the respondents. This information would help to know the different age groups residing in the settlement and how they influence sustainability of the Kibera Soweto East upgrading program.

Table 4.2: Age of Respondents

Age (Years)	Frequency (f)	(x)	(fx)	Percent (100%)
0 – 20	23	10	230	6
21 – 35	227	28	6356	63
36 – 50	94	43	4042	26
> 51	16	58	928	4
Total	360		11556	100

$$\begin{aligned} \text{Mean} &= \frac{\sum fx}{\sum f} \\ &= 11556/360 \\ &= \mathbf{32.1} \end{aligned}$$

The mean age of the grouped data was 32.1 this supports the fact that majority of the respondents were aged between 21 and 35 years accounting for 63%. This shows that the settlement has more youths and it may be because majority of them have completed or dropped out of school and are dependants to the respondents aged 36 years and above who accounted for 30%. Thus they may not have a stable source of income to support themselves hence their stay in Kibera.

4.3.3 Level of Education

The study sought to determine how the respondents' education level with a view of establishing if the respondents have the required skills and expertise to participate in Kibera Soweto East upgrading program.

Table 4.3: Level of Education

Level of Education	Frequency	Percent (100%)
Non-formal	26	7
Primary	136	38
Secondary	124	34
College	74	21
Total	360	100

Respondents sampled had basic education; 38% had primary education and 7% indicated they had not gone to school. This shows that 45% of the respondents do not have secondary and college education thus they may not be actively engaged to provide professional expertise during the planning, designing and implementation of the upgrading program.

4.3.4 Source of Income

The study looked into the sources of income with a view of assessing how this influenced the sustainability of the Kibera Soweto East upgrading program. This is due to the fact most people prefer to live in Kibera because housing and food is affordable and because of their level of income.

Table 4.4: Source of Income

Source of Income	Frequency	Percent (%)
Employed	70	19
Business	58	16
Casual Labour	126	35
Not employed	106	29
Total	360	100

35% of the respondents work as casual labourers and 29% are not employed. According to Coit (1998) he observes that slum dwellers are characterized by inadequate economic resources. This explains why the residents of Kibera are involved in the informal labour market due to lack of opportunities in the formal sector because they lack higher qualifications as shown in table 4.3. The number of respondents in the formal sector is considerably low accounting for 19% this shows that the upgrading program should consider having working space and shops in an effort to help the residents improve their livelihoods and entrepreneurial skills.

4.3.5 Respondents' Period of Stay

The respondent's period of stay may have had an impact on the sustainability of Kibera Soweto upgrading program. This is due to the fact that Kibera slum has been in existence for over 50 years at the time of the study (Lowder, 1986). The study looked into the period of stay the respondents with a view of establishing how this influenced community participation in Kibera Soweto East slum upgrading program. Therefore the respondents who participated in the project conception and planning stage must have been staying in the settlement by the time the project was initiated.

Table 4.5: Period of stay

Period (Years)	Frequency	Percent (100%)
1 – 5	42	12
6 – 10	64	18
11 – 15	102	28
Over 15 years	152	42
Total	360	100

The findings show that the respondents have lived in Kibera for varying durations. Table 4.5 shows that 70% of the respondents have stayed in Kibera for over 11 years. This indicates that majority of the respondents lived in the area by the time Kibera Soweto East upgrading program was conceived thus it is likely that majority of the respondents were actively involved in the project.

4.4 Influence of Policies on Sustainability of Kibera Soweto-East Slum Upgrading Program

The respondent's awareness of policies put in place by the government to promote low-cost housing at affordable prices may have had an impact on their project ownership. The study looked into the accessibility to low-cost housing for people with low income levels with a view of establishing how this influenced sustainability of Kibera Soweto upgrading program.

Table 4.6: Access to Low-Income Housing

Response	Frequency	Percent (%)
Yes	44	12
No	316	88
Total	360	100

The findings revealed that 88% of the residents indicated that they did not have access to low income housing and they attributed this to their income levels as revealed in table 4.4 where 64% of the residents are in informal employment. This may be attributed to the government's failure to respond to the needs of slum dwellers and bad urban governance (Mitullah, 2003). Ministry and KENSUP officials interviewed stated that one of the main challenges is that the lower middle and low income groups are unattended by the private sector housing market which mainly attends to the high and upper-middle income groups, also lack of land. The officials also confirmed that due to the high demand for residential housing by the urban population the government needs to put in place initiatives that enable private developers accommodate all groups of citizens in their development work.

The respondents were also asked to indicate if the issue of secure land tenure in the settlement had been addressed, as this would help determine how it influenced sustainability of Kibera Soweto East upgrading program. Secure land tenure is important in slum elimination and the foundation in the promotion of human rights as observed by Castillo & Stein (2005).

Table 4.7: Secure Land Tenure

Response	Frequency	Percent (%)
Yes	0	0
No	360	100
Total	360	100

The study revealed that the issue of secure land tenure has not been addressed. This is due to the fact that majority of the residents do not own the land upon which their houses are built. This is also supported by the fact that there are no landlords in Kibera but structure owners because the land upon which Kibera slums stands belongs to the government (Cobbett, 2009). When asked on government's effort to address the land tenure problem in Kibera, Ministry of Housing officials interviewed reiterated that the main challenge affecting provision of low cost housing to the urban poor is lack of land. According to Castillo & Stein (2005), slum dwellers will invest in improving their housing if they have some security of tenure and policies to be regulated to support housing development in informal settlements.

The respondents were asked to state how the upgraded units have been rented out. This was in order to establish if some of the units have been rented out to non-community members. This information is presented in Table 4.8.

Table 4.8: Occupation of Units

Response	Frequency	Percentage (%)
Occupied by community members	274	76
Occupied by non-community members	86	24
Total	360	100

The study shows that 24% of the respondents noted that some units have been occupied by non-community members. This can be explained by the fact that some of the project beneficiaries sublet the units to middle class families and move back to the slums in order to supplement their source of income and may be due to corrupt unit allocation by the officials in charge of the allocation process.

4.5 Influence of Community Involvement in Sustainability of Kibera Soweto-East Slum Upgrading Program.

According to Lemma (2010), community participation is an indispensable element in any informal settlement upgrading program and it is necessary to involve the community in the preparation of the regularization and upgrading plans, without active co-operation, the plans cannot be successfully implemented. Therefore it is important for the local community to be involved in defining their own problems, setting priorities for their resolutions and identifying solutions that may help solve their problems for any project to be successful.

4.5.1 Community Involvement in the Conception Stage

The study sought to examine how community involvement in the conceptualization stage influenced sustainability of Kibera Soweto East upgrading program.

Table 4.9: Community Involvement in the Conception Stage

Participation	Frequency	Percentage
Designing of the program	0	0
Determine community needs assessment	8	2
Did not participate	352	98
Total	360	100

The findings reveal that none of the respondents participated in the program design and 98% were not actively involved in the project conceptualization stage. This could be used to indicate that the community was not sensitized and informed by the project stakeholders on the preparation of the upgrading project hence their minimal participation in this stage.

Interviews with KENSUP officials confirmed that community members were invited to attend sensitization meetings on the proposed project but the attendance was not commendable and it was noted that some members of the community took the government to court seeking to compel the court to stop the upgrading program. Connor (1997) notes that when stakeholders input is incorporated early in the development of a project, issues can be addressed before they become critical. Hence in this case the local community should have been actively engaged in the program design to ensure that any issues raised are addressed as early as possible.

4.5.2 Community Involvement in the Planning Stage

The study wanted to examine how community involvement in the planning of the Kibera Soweto upgrading program influences its sustainability.

Table 4.10: Community Involvement in the Planning Stage

Participation	Frequency	Percentage
Attending site meetings	20	6
Planning program activities	8	2
Did not Participate	332	92
Total	360	100

The findings show that only 8% participated in planning the program activities while majority of the respondents accounting for 92% did not participate in the planning phase. The findings show that the local community's low level of participation in the planning stage could be attributed to the fact that they did not actively participate in the conceptualization phase. This could be supported by the fact that their literacy levels are low thus they did not understand the importance of their engagement and contribution at each stage of the project. As a result project ownership by the locals was low.

4.5.3 Community Involvement in the Implementation Stage

The study also sought to establish how community participation in the program implementation stage influenced sustainability of Kibera Soweto East upgrading program.

Table 4.11: Community Involvement in the Implementation Stage

Participation	Frequency	Percentage
Provide manpower	34	9
Attend site meetings	66	18
Did not participate	260	72
Total	360	100

The findings reveal that 9% of the respondents participated in the implementation stage by attending site meetings, 18% provided manpower while the majority of the respondents did not participate in the implementation activities accounting for 72%. Majority of the respondents indicated that the contractors involved in putting up the units did not engage them and the labourers working at the site were outsourced thus their lack of participation in the implementation stage.

Interviews with officials from the ministry of housing and KENSUP confirmed the comments given by the respondents that the project contractor engaged more ‘outsiders’ than the locals to provide manpower during construction. This explains why respondent’s participation in the implementation stage was low especially on providing manpower. According to Imperato & Ruster (2003) active involvement of the community in the implementation process has positive impact on the community such as; ownership of the project and understanding of the expectations of project quality performance. Thus the respondents had little knowledge on what decisions are appropriate.

4.5.4 Community Involvement in the Monitoring and Evaluation Stage

The study also wanted to determine how community participation in the monitoring and evaluation stage influenced sustainability of Kibera Soweto slum upgrading program.

Table 4.12: Community Involvement in the Monitoring and Evaluation Stage

Participation	Frequency	Percentage
Attending meetings on program progress	8	2%
Access to program reports and information	0	0
Did not participate	352	98%
Total	360	100

The findings in Table 4.12 show that majority of the respondents who accounted for 98% did not participate in the monitoring and evaluation activities while none of the respondents had access to the program report and information. These findings indicate that the respondents were not aware of their existence thus it was difficult for them to evaluate the program success based on the project deliverables.

This shows that the implementing unit did not coordinate well the project reporting and monitoring activities with the community members. 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 according to (Cohen & Uphoff, 1977). From the findings it is apparent that the respondents had no control over the project activities thus they had low bargaining power in decision making.

4.5.5 Overall Community Participation and its Influence on Sustainability of Kibera Soweto East Upgrading Program

The overall community participation in the program was assessed to determine how it influenced sustainability of the Kibera Soweto - East slum upgrading program as presented in Table 4.13.

Table 4.13: Overall Community Participation

Response	Frequency	Percentage
Excellent	0	0
Good	0	0
Fair	140	39
Poor	220	61
Total	360	100

The findings indicate that overall community participation was minimal with a score of 61%. This may be due to the fact that the project was not sensitive to the needs of the community it was intended to benefit thus lack of participation by the community.

As observed in the literature review community participation facilitates ownership and sustainability hence if the community is not fully engaged in key decision making processes which occur in the conception and planning stage the success of the program is challenged (Lemma, 2010). However officials in the ministry and KENSUP confirmed that the program engaged the community through the Settlements Executive Committee but the respondent's reiterated that the community was not well organized, empowered and sensitized from the beginning.

4.6 Role of Stakeholders in Sustainability of Kibera Soweto-East Slum Upgrading

Programs

To understand the role played by the program stakeholders the respondents were required to indicate if they were aware of the stakeholders involved in the program and to rate the level of commitment by the stakeholders in funding of the program.

4.6.1 Knowledge of Program Stakeholders

The study wanted to find out if the respondents knew the stakeholders involved in the upgrading program. This was to establish whether the community was aware of their role in the upgrading program.

Table 4.14: Respondents Awareness of Program Stakeholders

Knowledge of Program Stakeholders	Frequency	Percent (100%)
Yes	158	45
No	202	56
Total	360	100

The findings show that 56% of the respondents are not aware of the program stakeholders. This may be due to the fact that majority of the respondents were not involved in the conceptualization phase as indicated in table 4.9 thus attributed their non-awareness on the fact that they were not actively engaged in the program cycle. Findings from table 4.3 indicate that 45% of the respondents sampled did not have secondary and college education, this supports the fact that the respondents did not realize that individual effort was important for them to be aware of the main project stakeholders involved.

4.6.2 Funding the Kibera Soweto East Upgrading program

The study sought to establish how funding influenced sustainability of Kibera Soweto East upgrading program. This was used to establish the level of resource commitment and fund allocation by the program stakeholders in support of the upgrading program. This information is presented in Table 4.15 and Table 4.16.

Table 4.15: Program Funding by the Government

Rating	Frequency	Percentage
Very good	0	0
Good	0	0
Fair	178	49
Poor	182	51
Total	360	100

The study shows that the respondents noted the level of support received from the government was poor rated at 51%. This is due to the fact that Kibera has been there for the last 50 years (Lowder Stella, 1986) thus the respondents response could be because the government has not been able to meet the demand for low-income housing and basic services for urban residents in

informal settlements as observed in table 4.6, thus it demonstrates that the government is not single-handedly capable of meeting urban housing needs of poor urban residents.

Table 4.16: Program Funding by the Donors

Rating	Frequency	Percentage
Very good	0	0
Good	360	100
Fair	0	0
Poor	0	0
Total	360	100

The study shows that the level of support received from the donors was good rated at 51%. This could be due to the fact that the government has not been able to provide affordable housing to the residents thus donors must have supported the government in funded the upgrading program. KENSUP officials interviewed noted that the capacity of local institutions needs to be strengthened to manage the increasingly urban population and more funding needs to be allocated to upgrading programs. The success of any program requires commitment from all stakeholders because they affect the realization of deliverables since they mobilize both financial and material resources (Cohen, 2001). Thus both the government and donors should increase funding to support low income housing.

4.7 Influence of Records Management on Slum Upgrading Programs.

The study sought to establish the state of records and information management systems put in place and assess how it influenced the sustainability of the slum upgrading programs. This is because continuous gathering of information regarding the growth of informal settlements is important to be able to anticipate future tendencies, should be the basis of any Slum Upgrading Program. It is impossible to design or provide appropriate infrastructure and services if proper information is lacking (Sabry, 2009).

Officials interviewed noted that the filing system used is cabinet filing which is characterized by much paper processing which is inefficient. They also stated that there is a lot of data duplication because planners and quantity surveyors do not exchange information generated frequently, thus information on the growth of the city especially in informal settlements is not accurate and reliable. According to Augustinus, (2005) there is need to have information on the existing settlement patterns and infrastructure because Kenya does not have a comprehensive catalogue on informal settlements.

Lack of archive of data and information is a barrier to completion and sustainability of projects. Information is important because it enhances local capacity, transparency and is instrumental in enhancing sustainable development.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter outlines the summary of the research findings, discussions; conclusions reached and then give the recommendations made from the study in relation to the research objectives. This is in relation to policy, community participation, role of stakeholders and record management. The chapter also presents the areas the researcher thought would require further research in related fields.

5.2 Summary of Findings

The purpose of the study was to investigate the factors that influence sustainability of Kibera Soweto slum upgrading program.

5.2.1 Influence of Policy in Sustainability of Kibera Soweto Slum Upgrading Program

The first objective of the study was to assess the extent to which policies influenced sustainability of Kibera Soweto-East slum upgrading program. The findings reveal that 88% of the respondents noted they did have access to low cost decent housing. Majority of the residents accounting to 100% also noted that the issue of secure land tenure in the slum had been addressed. The study further revealed that 24% of the respondents noted that some units have been occupied by non-community members. This can be explained by the fact that some of the project beneficiaries sublet the units to middle class families and move back to the slums in order to supplement their source of income and may be due to corrupt unit allocation by the officials in charge of the allocation process.

Interviews with officials in the ministry and KENSUP revealed that the lower middle and low income groups are unattended by the private sector housing market which mainly attends to the high and upper-middle income groups and lack of land to provide low cost housing for the urban poor.

5.2.2 Influence of Community Involvement in Sustainability of Kibera Soweto - East Slum Upgrading Program.

The second objective of the study was to establish how community involvement in the upgrading program influenced sustainability of Kibera Soweto-East slum upgrading program. Analysis of the findings reveal that none of the respondents participated in the program design and 98% were not actively involved in the project conceptualization stage. The study further revealed that majority of the respondents accounting for 92% did not participate in the planning phase, 72% did not participate in the implementation stage and 98% did not participate in the monitoring and evaluation activities while none of the respondents had access to the program report and information. The above findings indicate that overall community participation was minimal with a score of 61%. This may be due to the fact that the project was not sensitive to the needs of the community it was intended to benefit and the community was not well organized, empowered and sensitized from the beginning thus lack of participation by the community.

5.2.3 Role of Stakeholders in Sustainability of Kibera Soweto-East Slum Upgrading

Program.

The third objective of the study was to examine how the role of stakeholders influenced sustainability of Kibera Soweto-East slum upgrading program. The findings show that 56% of the respondents are not aware of the program stakeholders. This may be due to the fact that majority of the respondents were not involved in the conceptualization phase as indicated in table 4.9 thus blamed their non-awareness on the fact that they were not actively engaged in the upgrading program project cycle.

The study further revealed that the respondents noted the level of support received from the government was poor rated at 51%. This could be because Kibera has been in existence for over 50 years thus the respondents blamed the slum growth on the government since it has not been committed in improving the living standards in slums. Interviews with the officials revealed that that the capacity of local institutions needs to be strengthened to manage the increasingly urban population and more funding needs to be allocated to upgrading programs

5.2.4 Importance of Record Management on Sustainability of Kibera Soweto -East Slum Upgrading Program

The fourth objective of the study was to assess the importance of record management on sustainability of Kibera Soweto-East slum upgrading program. Findings from this study reveal that the filing system used is cabinet filing which is characterized by much paper processing which is inefficient. Officials interviewed also stated that there is a lot of data duplication because surveyors, planners and quantity surveyors do not exchange information generated frequently, thus information on the growth of the city especially in informal settlements is not accurate and reliable.

5.3 Discussion of Findings

5.3.1 Influence of Policy in Sustainability of Kibera Soweto-East Slum Upgrading Program

The study observed that 88% of the residents did not have access to low-cost decent housing. This shows that the lower middle and low income groups who have low levels have not been attended to by the private sector housing market which mainly attends to the high and upper-middle income groups. There is need to adopt proactive policies and programs to prevent growth of slums and informal settlements. There is also need for incentives by the government to attract private developers into the low income housing segment (Solares, 1999)..

The study also revealed that the issue of secure land tenure had not been well addressed. This is due to the fact that majority of the residents do not own the land upon which their houses are built because the land upon which Kibera slums stands belongs to the government. This establishment is mirrored in the study by Woodruff (2001) that pro-poor reforms can be undertaken to improve the tenure status of slum dwellers, their access to basic services and better housing. (Ferguson & Navarrete, 2003), emphasizes that land tenure should be clearly addressed to ensure informal settlements are well regularized and formally integrated in the city planning framework.

In this case there is need for clear policies on housing in informal settlements. The government should review the housing and land policies and implement demand driven policies that will support provision of low-cost housing development because this is an effective strategy for preventing slum formation. There is need for necessary reforms and legislation to improve land ownership structures in the slums and review of regulatory policies on land use, administration and management to harmonize support for housing development in the slums. The existing land management systems must be evaluated and outstanding issues to be resolved before upgrading.

5.3.2 Influence of Community Involvement in Sustainability of Kibera Soweto-East Slum Upgrading Program.

The study observed that overall community participation throughout the program cycle was minimal with a score of 61% this indicates poor management and communication of project activities by the project implementation team. According Lemma (2010) he implies that without active co-operation, project plans cannot be implemented. Scholar (De Soto, 2000) emphasizes that community's self-organization is key to the success of upgrading process evident in the Huruma upgrading program in Kambi Moto under the initiative of Pamoja Trust.

The local community should have been engaged in all the stages of the program cycle and decision making process. The community should also be actively engaged in low-cost housing needs assessment. An integrated and participatory approach to slum upgrading programs should be adopted because slum dwellers can positively contribute to the country's economy since slums are wellsprings of entrepreneurial energy. Community participation improves the relationship between the community and the authorities.

5.3.3 Role of Stakeholders in Sustainability of Kibera Soweto-East Slum Upgrading Program.

The study also revealed that 56% of the respondents were not aware of the program stakeholders involved in the upgrading program and that the support received from the government in form of funding was low rated at 51% this shows that the government is not single-handedly capable of meeting urban housing needs of poor urban residents. According to Cohen, 2001 development partners strengthen the capacity of local institutions through funding to support the implementation of slum settlement upgrading strategies and from the study donor support was rated at 51%. Therefore there is need for improved coordination, commitment and involvement

of all stakeholders which will lead to the development of clear strategies initiatives to achieve program goals all through the program cycle. There is also need for commitment from all stakeholders for the realization of deliverables because they mobilize both financial and material resources.

5.3.4 Importance of Record Management on Sustainability of Kibera Soweto -East Slum Upgrading Program

The study revealed that the record management and information system on the existing informal settlements needs to be improved because the system available is characterized by much paper processing which is inefficient This is echoed by (Sabry, 2009) in the literature reviewed who observes that it is impossible to design or provide appropriate services if a comprehensive catalogue on informal settlements is lacking. In this case there is need to create information systems for the city for ease of urban planning and information centers in informal settlements for use by the residents, organizations. The process will be more interactive and organizations, government and citizens will learn from each other hence no duplication of data, open communication and transparency. Program documentation of successful slum upgrading programs at the national and global level to be will be used for reference purposes.

5.4 Conclusion

This study reveals that the urban poor do not have access to decent low-cost housing this is due to their income levels and the other challenge is that the lower middle and low income groups are unattended by the private sector housing market which mainly attends to the high and upper-middle income groups. Therefore the government needs to put in place initiatives that enable private developers accommodate all groups of citizens in their development work. The study also revealed that the issue of secure land tenure had not been addressed and 70% of the respondents had stayed in Kibera for over 11 years. There is need to implement demand driven policies that will support provision of low-cost housing development and also review of land ownership structure.

This study concludes that overall community participation in the upgrading program is low this was due to poor management and communication of project activities by the project implementation team. Lack of community empowerment results in low participation hence participation should be increased in all stages of program development from initiation, planning, implementation and monitoring of project activities to ensure program success and sustainability.

The study further revealed that the respondents were not aware of the program stakeholders this may be because 45% of the respondents sampled did not have secondary and college education. It is apparent that the respondents did not realize that individual effort was important for them to be aware of the main project stakeholders involved. The study also revealed that the level of support received from the government was relatively low compared to the support received from donors. Thus the government needs to increase the level of support to the process by allocating more funds because success of any program requires commitment from all stakeholders because they affect the realization of deliverables by mobilizing both financial and material resources.

From the study findings it was clear that the filing system used was characterized by much paper processing which is inefficient. Thus the data management system needs to be improved to allow ease and flow of information between urban planners and quantity surveyors in an effort to avoid data duplication. There is need for continuous gathering of information regarding the growth of informal settlements since it is important to be able to anticipate future tendencies.

5.5 Recommendations

Based on the findings of the study the following recommendations were made:

1. Policies should be formulated by the government through various ministries and local government to improve provision of basic services and housing needs to such settlements. The government should regularize and have reforms in the land ownership structure.
2. Community participation should be encouraged at all stages of the project cycle to strengthen the citizen voice thereby improving accountability of policy makers which will motivate them to be more responsive to the needs of the community. The community should participate in planning and decision making and be the key drivers to ensure different needs and problems are addresses and integrated in the program deliverables.
3. The government needs to work with various stakeholders to form collaborative partnership and create a budget for slum upgrading programs. The government also needs to acknowledge the fact that each slum is unique in nature thus they should be developed, approved and adopt different strategies to deal with the variegated nature of the slums in the country.

4. There is need to develop a proper information and record system to support upgrading programs, these publications and experience can be used by other individuals or countries seeking to solve upgrading issues. Various ministries that correlate need to integrate their information to avoid duplication and enhance efficiency and transparency.

5.6 Suggestions for Further Research

1. There is need to assess the institutional capacity of the government and local authority in boosting low-cost housing.
2. There is need to examine how housing finance mechanisms support home ownership to low income levels.

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APPENDIX 1: Introduction Letter

Jecinta Anyiso
Cell No. 0721 265121
Nairobi- Kenya

University of Nairobi
College of Extra Mural studies
School of Continuing and Distance Education.
Kikuyu

Dear Respondents,

REF: ACADEMIC RESEARCH

I am a student at the University of Nairobi pursuing a Master of Arts degree in Program Planning and Management. I am conducting an academic research on Factors Influencing Sustainability of Slum Upgrading Programs in Kibera-Soweto East in Langata County, Nairobi.

You have been selected to provide information relating to issues of sustainability of upgrading programs. I hereby request you to please fill the questionnaire as accurately as possible. The information that you will give is confidential and will be used only for academic purposes only.

Thank you in advance.

Yours faithfully,

Jecinta Anyiso
Reg. No. L50/64462/2012

APPENDIX 2: Questionnaire for the Occupants of Kibera Soweto East Upgraded Units

Please answer these questions to the best of your knowledge. Please put a tick (✓) where appropriate. Do not include your name anywhere in the questionnaire.

Background Details

1.	Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>
2.	Age	0 - 20 <input type="checkbox"/>	<input type="checkbox"/>
		21-35 <input type="checkbox"/>	<input type="checkbox"/>
		36- 50 <input type="checkbox"/>	<input type="checkbox"/>
		>51 <input type="checkbox"/>	<input type="checkbox"/>
4	Please tick your education level	Non-formal <input type="checkbox"/>	<input type="checkbox"/>
		Primary <input type="checkbox"/>	<input type="checkbox"/>
		Secondary <input type="checkbox"/>	<input type="checkbox"/>
		College <input type="checkbox"/>	<input type="checkbox"/>
9.	How long have you lived in this settlement?	1 - 5 years <input type="checkbox"/>	<input type="checkbox"/>
		6 – 10 years <input type="checkbox"/>	<input type="checkbox"/>
		11 – 15 years <input type="checkbox"/>	<input type="checkbox"/>
		Over 15 years <input type="checkbox"/>	<input type="checkbox"/>
8	What is your source of income?	Employed <input type="checkbox"/>	<input type="checkbox"/>
		Business <input type="checkbox"/>	<input type="checkbox"/>
		Casual labour <input type="checkbox"/>	<input type="checkbox"/>
		Not employed <input type="checkbox"/>	<input type="checkbox"/>

Influence of Policies on Sustainability of Kibera Soweto - East Slum Upgrading Program

10.	Has the government promoted the provision of low-cost housing to urban poor?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
11	Briefly explain your answer to the above		
12	Has the issue of secure land tenure in Kibera been addressed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

	Briefly explain your answer to the above	
13	Are some of the units being rented out to non-community members?	Yes <input type="checkbox"/> No <input type="checkbox"/>

Influence of Community Involvement in Sustainability of Kibera Soweto - East Slum Upgrading Program

15	Which activities were you involved in during the program conception stage?	
	<ul style="list-style-type: none"> • Designing of the program. <input type="checkbox"/> • Participation in needs assessment survey. <input type="checkbox"/> • Did not participate <input type="checkbox"/> 	
	Which activities were you involved in during the program planning stage?	
	<ul style="list-style-type: none"> • Attending site meetings. <input type="checkbox"/> • Planning program activities. <input type="checkbox"/> • Did not participate. <input type="checkbox"/> 	
	Which activities were you involved in during the program implementation stage?	
	<ul style="list-style-type: none"> • Provide manpower. <input type="checkbox"/> • Attend site meetings. <input type="checkbox"/> • Did not participate. <input type="checkbox"/> 	
	Which activities were you involved in during the program monitoring and evaluation stage?	
	<ul style="list-style-type: none"> • Attending meetings on program progress <input type="checkbox"/> • Access to program reports and information <input type="checkbox"/> • Did not participate. <input type="checkbox"/> 	
18	In your opinion how would you rate the level of community participation in the program?	Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/>

Role of Stakeholders in Sustainability of Kibera Soweto -East Slum Upgrading Programs

	Are you aware of the main stakeholders involved in the program?	Yes <input type="checkbox"/> No <input type="checkbox"/>
19	Please indicate in your opinion the extent of how the following stakeholders have supported and funded the program? Use following scale below: 1= Very good, 2= Good, 3= Fair, 4= Poor	1 2 3 4
	Government	[] [] [] []
	Development partners/Donors	[] [] [] []

APPENDIX 3: Key Informants Interview Guide

Ministry of Housing and KENSUP Officials

1. For how long has the project been in existence?

.....
.....

2. What are challenges being faced by the government in providing low-cost housing units for the urban poor?

.....
.....
.....

3. Has the issue of secure land tenure in informal settlements been addressed?

3a. Yes (Briefly explain)

.....
.....
.....

3b. No (Briefly explain)

.....
.....
.....

4. What is the role of the community in the program?

.....
.....

5. Was the community engaged in the different phases of the project cycle?

.....
.....

6. Briefly explain how was the community members participated in the program cycle?

.....
.....
.....
.....

7. What challenges did you face when engaging the community to participate in the project?

.....
.....
.....

8. What approach is being used to ensure there are no delays in the upgrading program execution?

.....
.....

9. What is the role of the below stakeholders in the upgrading program?

Government

.....
.....

Donors

.....
.....

10. How would you rate the level of support and commitment of the government and donors involved?

.....
.....
.....

11. How would you describe the information systems of upgrading programs?

.....
.....

12. What type of filing system is being mostly?

Electronic Filing

Cabinet Filing

APPENDIX 4: Reliability Coefficient Table

X	y	xy	x^2	y^2	nx^2	ny^2	nxy
85	85	7225	7225	7225	180625	180625	180625
88	89	7832	7744	7921	193600	198025	195800
80	88	7040	6400	7744	160000	193600	176000
86	87	7482	7396	7569	184900	189225	187050
90	92	8280	8100	8464	202500	211600	207000
87	90	7830	7569	8100	189225	202500	195750
85	85	7225	7225	7225	180625	180625	180625
88	89	7832	7744	7921	193600	198025	195800
80	88	7040	6400	7744	160000	193600	176000
86	87	7482	7396	7569	184900	189225	187050
90	92	8280	8100	8464	202500	211600	207000
87	90	7830	7569	8100	189225	202500	195750
90	92	8280	8100	8464	202500	211600	207000
87	90	7830	7569	8100	189225	202500	195750
85	85	7225	7225	7225	180625	180625	180625
88	89	7832	7744	7921	193600	198025	195800
80	88	7040	6400	7744	160000	193600	176000
86	87	7482	7396	7569	184900	189225	187050
90	92	8280	8100	8464	202500	211600	207000
$\Sigma x = 1638$	$\Sigma y = 1685$	$\Sigma xy = 145347$	$\Sigma x^2 = 141402$	$\Sigma y^2 = 149533$	$\Sigma nx^2 = 3535050$	$\Sigma ny^2 = 3738325$	$\Sigma nxy = 3633675$

APPENDIX 5: Key Informant Consent Form

I am a student at the University of Nairobi pursuing a Master of Arts degree in Program Planning and Management. I am conducting an academic research on Factors Influencing Sustainability of Slum Upgrading Programs in Kibera-Soweto East in Langata County, Nairobi. The information that you will give is confidential and will be used in interpretation of the findings of the study.

I have read and understood the information sheet provided about this study.

I understand that my participation in this interview is voluntary.

I have the right to not answer any question I don't like or to stop the interview and withdraw my answers, at any stage of the interview, without having to explain why.

I understand that what I say will be kept confidential by the researcher and will only be used for research purposes. My name will not be used in any research reports and nothing will be published that might identify me.

Declaration:

I agree to be interviewed for this evaluation.

Signed: _____ (Participant) Date: _____

Signed: _____ (Researcher) Date: _____

This form has been adapted and amended to suit the study.

*Source: [www.health.wa.gov.au/publications/documents/FINAL-Port Hedland 6-wc.pdf](http://www.health.wa.gov.au/publications/documents/FINAL-Port_Hedland_6-wc.pdf),
Appendix C*