# FACTORS INFLUENCING GROWTH OF INFORMAL SETTLEMENTS: A CASE OF BANGLADESH SLUM, CHANGAMWE CONSTITUENCY, MOMBASA COUNTY, KENYA



**RIGHA EDWIN MWACHARO** 

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULLFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER
OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE
UNIVERSITY OF NAIROBI

#### DECLARATION

This research project report is my original work and has not been submitted to any other institution or University for examination.

Signature.....

NAME: RIGHA EDWIN MWACHARO

REG. NO. L50/62652/2010

Date 07-08-2012

This research project report has been submitted for examination with my approval as university Supervisor.

Signature.

CHRISTOPHER MWANGI GAKUU

Senior Lecturer,

Department of Extra Mural Studies

University of Natrobi.

Date Color

#### DEDICATION

To my younger brother, Tony Righa (RIP), for challenging me to take up this course

To my wife Diane and my daughters, Ashley and Elsie.

#### **ACKNOWLEDGEMENT**

This research project is indebted to many individuals and institutions for the successful execution of this mission and production of the final report.

First of all, I would like to acknowledge the invaluable support provided by my supervisor Dr. Christopher Gakuu and my lecturer, Dr. Moses Otieno for guiding me through this whole project.

Also, I would like to single out my colleagues at the Immigration Department Mombasa, and in particular, Mr. Felix Buluma, for their patience and support accorded to me throughout the course of my studies.

I would also like to thank the University of Nairobi fraternity, employees of the Ministry of Housing, the Provincial Administration, and the Kenya National Bureau of Statistics, Mombasa offices for their cooperation during my study.

Special thanks to those community members and partners who responded to my calls for meetings to validate data and speak into the report for its enrichment and for providing materials that made this work possible.

Above all, I would like to give thanks to the Almighty God for the gift of life and the good health that He has bestowed unto me and for the wisdom and patience required in the course of my studies.

God bless you all abundantly.

# TABLE OF CONTENTS

	Page
DECLARATION	i
DEDICATION	
ACKNOWLEDGEMENT	iv
LIST OF FIGURESLIST OF TABLESABBREVIATIONS AND ACRONYMS!	ix
LIST OF TABLES4	x
ABBREVIATIONS AND ACRONYMS!	xi
ABSTRACT	xii
CHAPTER ONE: INTRODUCTION	
1.1 Background of the study	
1.2 Statement of the Problem	5
1.3 Purpose of the study	
1.4 Objectives of the study	6
1.5 Research questions	7
1.6 Research Hypothesis	7
1.7 Basic assumptions of the study	8
1.8 Significance of the study	8
1.9 Delimitations of the study	9
1.10 Limitations of the study	9
1.11 Definition of significant terms	
1.12 Organization of the study	10
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	11
2.2 Industrialization and growth of informal settlements	11

	14
2.4 Unemployment and growth of informal settlements	17
2.5 Population growth and growth of informal settlements	19
2.6 Government policies on housing and slum upgrading programmes	21
2.7 Conceptual framework	24
CHAPTER THREE: RESEARCH METHODOLOGY	
3.1 Introduction	26
3.2 Research design.	26
3.3 Target population	26
3.4 Sample Size and Sampling Procedure	26
3.5 Data collection methods	29
3.6 Validity and reliability of research instruments	31
3.7 Data presentation and analysis techniques	31
3.8 Ethical considerations	33
3.9 Operationalization of variables	34
3.9 Operationalization of variables	
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION,	AND
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION	AND
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION  4.1 Introduction	35
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION  4.1 Introduction	ANE3535
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION  4.1 Introduction.  4.2 Response rate.  4.3 Demographic characteristics of the respondents.	ANE353636
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION  4.1 Introduction	AND35363636
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION  4.1 Introduction	ANE35363636
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION  4.1 Introduction	AND3536363637

4.4.1 Key informants perceptions on awareness of industrialization	40
4.4.2 Key informants perceptions on industry workers residence	40
4.4.3 Key informants' perceptions on solutions to informal housing	41
4.5 Poverty and growth of informal settlements	41
4.5.1 Respondents and key informants opinions on poverty	4
4.5.2 Key informants and respondents opinions on income and housing	42
4.6 Unemployment and growth of informal settlements	43
4.6.1 Respondents opinions on nature of employment and housing	43
4.6.2 Key informant's opinions on solving the unemployment problem	44
4.7 Population growth and growth of informal settlements	44
4.7.1 Respondents and key informants opinions on population	44
4.7.2 Respondents and key informants opinions on family size	45
4.7.3 Respondents and key informants opinions on housing programs	45
4.8 Testing of the research hypotheses	46
4.9 Summary	49
CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSION, CONCL RECOMMENDATIONS	USION AND
5.1 Introduction	51
5.2 Summary of findings	51
5.3 Discussion of findings	53
5.4 Conclusion of the study	56
5.5 Recommendations	57
5.6 Suggestions for further research	58
REFERENCES	59

### **APPENDICES**

Appendix 1: Letter of Transmittal	63
Appendix 2: Respondents Questionnaire	64
Appendix 3: Key informants Questionnaire	68

# LIST OF FIGURES

Page

Figure 1: Conceptual framework	 25
The street of th	
Total Design Management	
CONTRACTOR OF THE PARTY OF THE	
Control Program in the State of State o	
contract the second second second second second second second	
A STATE OF THE PARTY OF THE PAR	
and the second s	

# LIST OF TABLES

	Page
Table 3.1 Sampling of general respondents	28
Table 3.2 Sampling of key informants	29
Table 4.1 Response Rate of respondents	35
Table 4.2 Gender of respondents	36
Table 4.3 Marital status of the respondents	37
Table 4.4 Average age of respondents	37
Table 4.5 Level of education of respondents	38
Table 4.6 Occupation of the respondents	39
Table 4.7 Level of awareness and familiarity with industrialization	40
Table 4.8 Role of poverty in the choice of housing	42
Table 4.9 Employment and decent housing	43
Table 4.10 Population size	.44
Table 4.11 Family size and choice of housing	.45
Table 4.12 Appropriateness of housing programs in the community	46
Table 4.13 One-Sample test for poverty	.47
Table 4.14 One-Sample test for industrialization	47
Table 4.15 One-Sample test for unemployment	48
Table 4.16 One-Sample test for population growth	49

#### ABBREVIATIONS AND ACRONYMS

ILO International Labour Organization

NGO Non-Governmental Organization

UN United Nations

UNEP United Nations Environmental Program

UNPD United Nations Population Division

DAIVERSITY OF NAIROBI KIKUYU LIBRARY P. Q. GOX 30197 NAIROBI

#### ABSTRACT

This research study was on the Factors Influencing Growth of Informal Settlements: A Case of Bangladesh Slum, Changamwe Constituency, Mombasa County, In spite of all efforts and the introduction of various housing policies in the country, informal settlements continue being a permanent feature in our community. In view of this, the study sought to investigate the factors influencing the growth of informal settlements in Bangladesh slum. Changamwe constituency. In particular it sought to determine the extent to which industrialization, poverty, unemployment and population growth contribute to the growth of informal settlements. The study was conducted through survey method. Data was collected using questionnaires and guides from 90 household heads obtained through cluster sampling in Bangladesh slum and 10 key informants purposively selected. It was then analyzed using Statistical Package for Social Sciences (SPSS) and presented in tables percentages and t-test. The study revealed that informal settlements were the product of rapid urbanization and industrialization in that, most of the people who were living in the slums worked in the many factories and industries surrounding the area. The study also revealed that the levels of poverty in the community were high and this played a major role in the choice of housing for community members, most of whom could afford cheap, informal settlements. Further, unemployment and its associated problems contributed immensely towards the growth of informal settlements in the community because most of the unemployed people lived in alternative settlements that were not expensive. Finally the study revealed, due to the large family sizes, the respondents, most of whom were poor chose to live in cheaper, informal housing. Further research could be carried out to establish the impact of devolution and the establishment of devolved units on the growth of informal settlements.

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background of the Study

Housing is important because it provides privacy and security as well as protection against physical elements. Good housing improves the health and the productivity of the occupants and thereby contributes to their wellbeing and to broader economic and social development. Housing is also a good investment and house owners often use their property to save. Housing is an important asset for its owner; it can generate income through home-based activities, and it can serve as collateral for loans (Masika, de Haan and Baden, 1997).

As continuing economic hardship forces a growing number of migrants to urban areas in search of employment and better life, an even greater strain is placed on urban pressure points like housing. The urbanization of developing countries and the growth of spontaneous settlements are taking place at a scale that national and local governments cannot cope with the demands for appropriate service delivery (Peters, 1998). As people continue to migrate away from rural areas and into cites that are growing to devour the land around it, the numbers of people living in slums, shanty towns and informal settlements are skyrocketing (Tovrov, 2011). The locus of global poverty is moving from rural areas to the cities, and more than half of the world population now lives in urban areas for the first time in human history. Slums come about because of, and are perpetuated by, a number of forces. Among these are rapid rural-to-urban migration, increasing urban poverty and inequality, insecure tenure, and globalization; all contribute to the creation and continuation of slums (UN- Habitat, 2007).

Between 2000 and 2005, a third of Commonwealth countries had urban growth rates between 3 and6 per cent (UN- Habitat, 2006). Most of the world's urban population, most of its largest cities and most of its urban poverty is now located in Africa, Asia and Latin America; the Developing World. Indeed the growth in slums since the 1980s is both formidable and unprecedented and the number of slum dwellers worldwide is

expected to continually increase in the decades ahead (Parsons, 2010). The percentage of urban dwellers living in slums decreased from 47 % to 37% in the developing world between 1990 and 2005. However due to rising population and the rise especially in urban populations, the number is rising again. One billion people worldwide live in slums and the figure will likely grow to 2 billion by 2030 (UN-Habitat, 2006). Indeed recent years have seen a dramatic growth in the number of slums as urban populations have increased more so in the third world.

The existence and growth of slums has major environmental implications. Because of the lack of access to secure land, millions of urban poor are forced to live on marginal land, vulnerable to flooding, landslides and other environmental hazards. About 327 million people live in slums in commonwealth countries, which are almost one in six commonwealth citizens. In a quarter of commonwealth countries (11 African, 2 Asian and 1 Pacific, more than two out of three urban dwellers live in slums and many of these countries are urbanizing rapidly(Com Habitat, 2006). Currently there are 200,000 slum communities across the World, most of them in and around cities and that number is growing exponentially (United Nations Special Rapporteur on adequate housing, 2010). Even before the economic crisis of 2008, about one third of all city dwellers lived in slums, and it is expected to grow by one billion people within the next twenty years (Tovrov. 2011). While 90 percent of the world's informal settlements are in developing nations such as Kenya, they are a worldwide phenomenon.

Although the structure, size and development of slums across Sub-Saharan Africa differ tremendously, the UN-HABITAT has defined, in general, the social conditions that constitute a slum colony. These conditions are: lack of access to adequate water supply, lack of access to adequate sanitation facilities, insufficient living area, inadequate durability of dwellings and tenure insecurity. (Tester, 2012). Slums are typically described as heavily populated urban areas, characterized by substandard housing and squalor. (Asha website).

The concept of a slum was first introduced in London in the early 1800s, when the working class of England began migrating en masse to the city, and living in makeshift houses factories where they worked. This concept did not accelerate rapidly until the 20th century, when the urbanization of many developing countries in South-East Asia

and Africa occurred. (Shankardass, 2006). The UN estimates that the number of people living in slums passed 1 billion in 2007 and could reach 1.39 billion in 2020, although there are large variations among regions.

In Asia and the Pacific, two out of five urban dwellers live in slums, compared with three out of five in Africa. In percentage terms, Sub-Saharan Africa has about 72 percent of city dwellers living in slums. Asia has by far the highest number of city dwellers living in slums, while the problem is worst in South Asia, where half of the urban population is composed of slum dwellers (Spagnoli, 2008).

In Africa, Kinshasha, Kampala, Luanda, Bamako, Abuja and Lagos are among the other cities in Sub-Saharan Africa with "mega-slums" that are supposed to increase between 50 and 57% in the next ten years. (Vidal 2011).

The largest slum in Sub-Saharan Africa is Kibera, Kenya just outside Nairobi. 1 out of every 5 Nairobians lives in Kibera, and the estimated population density is 750,000 people per square mile. (Affordable Housing Institute,2011).

Urbanization continues in Kenya and it is estimated that by 2015 urban dwellers will constitute over 50 percent of the total population. Existing figures are compelling evidence demonstrating the dire situation in many of Kenya's cities and towns. Depending on the city, 60-80 percent of Kenya's urban population lives in slums that are characterized by lack of access to water and sanitation, insecure tenure, lack of adequate housing, poor environmental conditions, and high crime rates. For instance, in Mombasa, about 40 percent of the population lives in slums that occupies only 5 percent of the total land area and the growth of Mombasa's slums is unprecedented; the population living in slums is expected to double within the next 15 years. Indeed these figures present the grim realities facing the city and they provide a justification for various slum upgrading initiatives in the country that are aimed at improving the living conditions in Kenya's slums.

Due to a combination of demographic, economic and political realities, many Kenyan cities are facing critical challenges. Such a situation is due to the fact that in developing countries, there is a large disconnect between the rate of rural-urban migration and provision of housing by the governments. This has resulted in booming urban populations that has seen poverty on the rise in the cities of the developing countries.

Indeed rapid urbanization, outstripping the capacity of the government and local authorities to guide the physical growth of urban areas and to provide essential urban services to their citizens has been observed. This has resulted in the rapid growth of slums in Kenyan cities and towns, which is due to a combination of rural-urban migration, increasing urban poverty and inequality, high cost of living, non-transparent land allocation systems, land grabbing and insufficient investment in new low-income housing (UN Habitat, 2008).

A slum is a rundown area of a city characterized by substandard housing and squalor and lacking in tenure security (UN-Habitat, 2005). Although their characteristics vary between geographical regions, they are usually inhabited by the very poor or socially disadvantaged. Slum buildings vary from simple shacks to permanent and well maintained structures. Most slums lack clean water, electricity, sanitation and other basic services (World Bank, 2009). They are usually characterized by urban decay, high rates of poverty, illiteracy and unemployment. They are commonly seen as breeding grounds for social problems such as crime, drug addiction, alcoholism, high rates of mental illness and suicide. In many countries they exhibit high rates of disease due to unsanitary conditions, malnutrition and lack of basic health care (UN, 2003).

Slums like Bangladesh in Mombasa County have been notoriously difficult to measure because they often serve as a conduit for people shifting from the countryside to the city. A large population of the city's population lives in over 50 slums and settlements like Bangladesh within the city, with little or inadequate access to safe water and sanitation. Most of the land in these slums is actually owned by the government hence those who occupy it are squatters on it. However, even though the land is not owned by the inhabitants legally, they take ownership of its structures, which are bought sold and rented just as in every other neighborhood in the city.

The homes, most of which are just shacks are made of mud, plastered over sticks and boards or made from mabati (corrugated iron sheets). Few, if any, are plastered over with cement. The roofs are all made from mabati (corrugated iron), which, looking out over the top of the area, gives it a great rusted checkerboard appearance. Some of the homes are divided into two rooms, often by a sheet, each room approximately 8 feet by 8 feet. Each home may house anywhere from two to a dozen people. The paths leading

through the homes are narrow, so narrow in places that you can actually touch the buildings on both sides of the path if you stretch out your arms. Many of the pathways are divided right down the middle by smelly ditches which help drain both rain and waste water away. After any amount of rain, the paths and walkways become muddy and slippery, rendering them almost impassable. Indeed, such situations present the grim realities facing cities and towns across Kenya and they provide a justification for slum upgrading initiatives in the country, aimed at improving the living conditions in Kenya's slums.

#### 1.2 Statement of the Problem

It is in a country's best interest to prevent against establishment of slums and informal settlements because if slums are allowed, governments may lose authority within a city, exposing slum dwellers to informal systems of service provision and control, with slums becoming areas of crime, insecurity and diseases that can affect the whole city (UN-Habitat, 2008).

The commonwealth made a commitment to realizing the millennium development goals where it adopted a specific goal on human settlements issues. The UN Millennium Development Programme also highlighted the need to address slum growth in Sub-Saharan Africa in their Target 11 of Goal 7 which states, "by 2020, achieve a significant improvement in the lives of 100 million slum-dwellers" (UN Settlement Committee).

Equally, the Constitution of Kenya in article 43 of the bill of rights, provides for among others the right to clean, decent and affordable housing by the government.

However Kenya's slums are growing at an unprecedented rate. The government and local authorities are faced with the serious challenge of guiding the physical growth of urban areas and providing adequate services for the growing urban population. More than 70 percent of the urbanites live in slums, with limited access to water and sanitation, housing, and secure tenure. They have poor environmental conditions and experience high crime rates.

In spite of all efforts and the introduction of housing and slum upgrading policies, actions and experiences in the housing sector paint a poor picture; slums in the country have continued to grow. Slums like Bangladesh in Mombasa are no longer just marginalized neighborhoods housing a relatively small proportion of the urban population; they are a dominant type of human settlement, carving their way into the fabric of modern day cities as a distinct category of human settlement that now characterizes so many cities in the developing world (UN- Habitat, 2006).

It is against this backdrop that it is important to investigate the factors that influence the growth of informal settlements so as to curb the growth and spread of informal settlements.

#### 1.3 Purpose of the Study

The purpose of this study was to investigate the factors influencing the growth of informal settlements in urban areas in Kenya.

#### 1.4 Objectives of the Study

The main objective of this project was to study the factors influencing the growth of informal settlements, the case of Bangladesh slum, Changamwe constituency, Mombasa County.

The specific objectives of this study were:

- 1. To determine the extent to which industrialization influences the growth of informal settlements.
- 2. To establish how poverty influences the growth of informal settlements.
- 3. To assess how unemployment influences the growth of informal settlements.
- 4. To determine the extent to which population growth influences the growth of informal settlements.

#### 1.5 Research Questions

This research sought to answer the following questions:

- i. How does industrialization influence the growth of informal settlements?
- ii. To what extent does poverty influence the growth of informal settlements?
- iii. How does unemployment influence the growth of informal settlements?
- iv. To what extent does population growth influence the growth of informal settlements?

#### 1.6 Research Hypotheses

The researcher sought to test the following hypotheses;

- 1. H<sub>1</sub>; There is a positive relationship between poverty and growth of informal settlements in Changamwe Constituency.
  - H<sub>0</sub>; There is no relationship between poverty and growth of informal settlements in Changamwe Constituency.
- 2. H<sub>1</sub>; There is a positive relationship between industrialization and growth of informal settlements in Changamwe Constituency.
  - H<sub>0</sub>; There is no relationship between industrialization and growth of informal settlements in Changamwe Constituency.
- 3. H<sub>1</sub>; There is a positive relationship between unemployment and growth of informal settlements in Changamwe Constituency.
  - H<sub>0</sub>; There is no relationship between unemployment and growth of informal settlements in Changamwe Constituency.
- 4. H<sub>1</sub>; There is a positive relationship between population growth and growth of informal settlements in Changamwe Constituency.
  - H<sub>o</sub>; There is no relationship between population growth and growth of informal settlements in Changamwe Constituency

#### 1.7 Basic Assumptions of the study

The following factors: industrialization, poverty, unemployment and population growth were expected to have a role in the growth of informal settlements in Changamwe constituency. The existing government programs and policies on slum upgrading may not be controlled due to the fact that some of these programs have yet to be fully operationalized and are just in the pilot phase in some parts of the country and may change without notice. The basic assumption of this study therefore was that these laws and government policies on slums upgrading and provision of housing remain the same throughout the course of this study. It was hoped that they would not have a significant effect on the results of the study.

#### 1.8 Significance of the Study

Without a doubt, this study will contribute valuable knowledge to the field of informal settlements and the provision of decent housing. Indeed this study explored the factors that influence the growth of informal settlements; variables of focus in the study were the effect of industrialization on the growth of informal settlements, the effect of poverty on the growth of informal settlements, the impact of education on the growth of informal settlements and the impact of population increase on the establishment of informal settlements. As such it is expected to produce hitherto unavailable knowledge on this subject. It should therefore form a useful material for reference to other researchers and other readers in general.

This report also suggests significant policy and knowledge statements through its recommendations. The study makes recommendations on urban housing and reduction of informal settlements in the country. Undeniably such recommendations could inform policy formulations in the various cities and counties in the country in general because they are originated through valid research data.

The report should also influence various programs established on provision of urban housing in the country. In the attempt to deal with the problem of urban housing, it focuses on the specific issues identified through research. Henceforth, policy makers and implementers need not follow theories, rules or traditions that are remote and without specific relevance to them but to base their practices, decisions and other managerial behaviors on products of research that are specific to their particular

situations. The use of such specific knowledge will improve upon the various informal settlements upgrading programs in the country.

#### 1.9 Delimitations of the Study

This research study was intended to determine the factors influencing the growth of informal settlements in Bangladesh slum Changamwe constituency in Mombasa in 2012 through a descriptive survey design. In particular, it sought to determine the effect of poverty, unemployment, industrialization and population growth on the growth of informal settlements in Changamwe constituency.

#### 1.10 Limitations of the study

The major limitation of this study was the issue of availability of time. This was overcome by distributing and filling in questionnaires during weekends when the respondents and the researcher were off duty from work.

Another limitation was to establish boundaries of the villages in the slum. This was overcome by requesting community leaders to help in showing the boundaries.

There were also limitations in obtaining data from the respondents, who thought that the information collected would be used to evict them from the slum area. This was however overcome by assuring them that the research was purely academic and that the information they provided would not be used against them.

#### 1.11 Definition of significant terms

Industrialization- It is the process of social and economic change that transforms a human group from an agrarian society into an industrial one. In this study it will refer to economic growth and development of the city of Mombasa.

Population growth- the relative extent of size of the population or number of people in an area compared to the recommended optimum size. In this study it will be the number of people in the area compared to its relative size.

Poverty-it is the lack of basic human needs such as clean and fresh water, nutrition, health care, education, clothing and shelter because of the inability to afford them (Anyangu, 2011). In this study it will be the level of neediness or hardship that the

residents in the area experience. It will have its reference to the shortage or scarcity of basic social or economic necessities by the people in the area.

Unemployment- this refers to the state of being without a job or income generating activity in spite of being willing to work. In this study this will refer to the levels of joblessness in the community.

#### 1.12 Organization of the Study

In chapter one the researcher presents the background of the study, outlining the problem statement and significance of the study. The chapter further states the objectives that guided the study in investigating the factors influencing the growth and existence of informal settlements. In chapter two the researcher presents a review of literature with particular focus on the factors that influence the growth of informal settlements. The chapter provides an in depth analysis of industrialization, unemployment, population growth and poverty as the important variables that influence the growth and existence of informal settlements. Chapter three examines the research design, location of the study, population, sampling, data collection and data analysis procedures that were used in the study. Chapter four looks at the data analysis, presentation and interpretation of the data collected during the research and finally, chapter five presents the summary of findings, their discussions, conclusions and recommendations as well as suggestions for further research.

#### CHAPTER TWO

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents a review of literature with particular attention paid to the various variables of this study, that is, the factors influencing the growth of informal settlements. It provides in-depth analysis of literature on industrialization, poverty, unemployment and population increase (growth) in relation to the role that they play in the existence of informal settlements. Through this systematic review a deeper understanding of the variables is achieved.

#### 2.2 Industrialization and growth of informal settlements

Industrialization is a part of a wider modernization process, where social change and economic development are closely related with technological innovation, particularly with the development of large-scale energy and metallurgy production (Wikipedia, 2011). It is the extensive organization of an economy for the purpose of manufacturing. It is a stage of economic growth where industrialization is identified as the process in which the requisite rise in the rates of capital formation and investment accrues, thereby permitting the take-off into self-sustained growth (Goheen, 2007). It should be noted that cities play a major role, not only as providers of employment, shelter and services, but also as centers of culture, learning and technological development, portals to the rest of the world, industrial centers for the processing of agricultural produce and manufacturing, and places to generate income (UNEP, 2002).

Slum formation is closely linked to industrialization, economic cycles, trends in national income distribution, and in more recent years, to national economic development policies. Indeed the cyclical nature of capitalism, increased demand for skilled versus unskilled labour, and the negative effects of industrialization and urbanization – in particular, global economic booms and busts that ratchet up inequality and distribute new wealth unevenly –

contribute to the enormous growth of slums (UN-Habitat, 2007). Industrialization is accompanied by a disproportionate provision of housing for the masses that get to work in the various industries. Indeed slums are the byproducts of industrialization and urbanization (Billah, 2012). Globalization has been progressing for decades, but under the impact of new information technologies the speed of globalization has quickened and its reach has broadened. These technologies are reinforcing the importance of knowledge and information in economic transformation, while reducing the relative importance of traditional manufacturing and industrial development based on raw materials (UNEP, 2002). Since 1950, the proportion of people working in developing countries, agriculture has declined by 20 to 30 per cent. The immigrant urban poor have largely moved from the countryside to the cities voluntarily, in order to exploit actual or perceived economic opportunities largely brought about by industrialization. Opportunities manifest in part, due to the growing urban informal sector, which is most spectacularly visible in the many growing and large-sale informal and squatter settlements in urban centers (UN-Habitat, 2007). Technology has increased the already dominant economic role and importance of urban areas, not just those in the more developed economies but globally (Economist 2000, World Bank 2000), indicating the growing importance of cities in the global economy.

In modern times, industrialization of agriculture has negatively affected the economy of small and middle-sized farms and strongly reduced the size of the rural labor market (UN-Habitat, 2006). The growth of great cities and the industrialization of their economies were central themes of the nineteenth-century world wide experience in the decades from 1840 to the modern day (Goheen, 2007). With this in mind, industrialization and urbanization will continue with the march of civilization. The very existence of slums with their inhuman conditions and defacement of human rights proclaims the ingenuity and hollowness of this modern civilization (Parsons, 2010).

The rise of slums has become inevitable, almost a part of urbanization (Billah, 2012). It is important to note that the fast expanding slums stretches the ability of government and other social organizations to provide decent housing for the citizens in the various towns.

The rise of industry and redistribution of the population in the nineteenth century and early decades of the present period are described in terms of changing methods of production, parameters of entrepreneurship and efficiencies in the distribution of goods (Goheen, 2007). Industrialization has a major impact on population increase in urban areas. Over time industrialization has contributed to the influx of migrants into the cities. The unemployed labour has been forced to join the rapidly expanding and disorganized informal sector in cities. The labour influx has stimulated a rapidly growing housing sector which unfortunately is unplanned and in the nature of slums (Nyakaana, Sengendo, Lwasa, 2010).

Due to a combination of demographic, economic and political realities, many kenyan cities are facing critical challenges. Perhaps the most impotant one is rapid urbanization, outstripping the capacity of the government and local authorities to guide the physical growth of urban areas and to provide essential urban services to their citizens. This has resulted in the rapid growth of slums in kenyan cities and towns, which is due to a combination of rural-urban migration, increasing urban poverty and inequality, high cost of living and insufficient investment in new low income housing.

Urbanization continues in kenya and it is estimated that by 2015 urban dwellers will constituete over 50 % of the total population (Tibaijuka, 2008). It follows that if industrialization could be shifted from these megacities to small towns and suburbs, definitely people would be clinging to their parental homeland. As the metropolitan cities offer all sorts of commercial benefits, the owners and investors become lured to the commercial establishments in these areas (Parsons, 2010). In Kenya, the process of urbanization is still an evolving phenomenon. However, it has proceeded at a tremendous pace over the past four decades, especially after political independence in 1963. By 1999, the proportion of the urban population had increased to 34.5%, and is expected to increase to 50% by the year 2015 (MPND, 2005). The resulting explosive growth in the informal sector has been accompanied by poverty and the rapid growth of slums (UN-Habitat, 2007).

There is no question that the main challenges that rapid urbanization accompanied by industrialization brings are centered on how to provide adequate shelter and how to deal with the rising problems associated with slums (Tibaijuka, 2008). It follows therefore that unprecedented urbanization and industrialization rates in most developing countries are changing the face of urban housing through the creation of unmanageable informal housing (Goodenough, Hadingham and Klug, 2005).

#### 2.3 Poverty and growth of informal settlements

Poverty is a state of destitution in which one experiences many levels of hardship (Tibaijuka, 2008). Absolute poverty or destitution refers to the one who lacks basic human needs, which commonly includes clean and fresh water, nutrition, health care, education, clothing and shelter. About 1.7 billion people are estimated to live in absolute poverty today (UN-Habitat, 2007). It should be noted that poverty creates slums and slums breed hopelessness and crime (Sud, 2006). In the past few decades, poverty brought about by urbanization and urban growth has accelerated in many developing countries. In 1970, 37percent of the world's population lived in cities. In 1995 this figure was 45percent, and the proportion was expected to pass 50 percent by 2005 (UN, 1995). Although globalization has often increased opportunities for jobs and knowledge, it has also increased social inequalities and poverty. Benefits are not equally shared, resulting in large groups of people living in slums in developing countries unconnected to water and sanitary services, and unemployment, poor health and social exclusion in the developed world (UNEP, 2002). Indeed, poverty is among the major drivers of environmental degradation. The urban poor, who are unable to compete for scarce resources or protect themselves from harmful environmental conditions, are most affected by the negative impacts of urbanization. The growth of large cities, particularly in developing countries, has been accompanied by an increase in urban poverty which tends to be concentrated in certain social groups and in particular locations (Billah, 2011), in this case, informal settlements.

Poverty can also be a lack of basic capabilities to lead the kind of life one values, and should therefore not be seen merely in financial terms. Poverty has three dimensions: poverty of income and productive assets, poverty of access to essential services, and

poverty of power, participation and respect. Deprived of these essential attributes, people will not be able to realize their full capabilities, and therefore will not be able to benefit from, contribute to and have an influence on development (Sheng and Mehta, 2008). Poverty is manifest in patterns of social relationships in which individuals and groups are denied access to goods, services, activities and resources which are associated with citizenship (ILO 1996). It is caused by the stagnation of productive forces and production over time and government policies and development measures which only help the rural rich to get richer and increase inequality.

Urban poverty is on the increase. It is estimated that one-quarter of the population lives below the poverty line and that female-headed households are disproportionately affected (UNCHS, 2001).

It is brought about by a number of factors key among them being socio-economic and political factors - particularly inequality in the distribution of economic and political power, insincerity and the indifferent attitude of the ruling power elite who control resources, external factors such as the role of metropolitan capital, foreign aid and loans (in which again the role of the national power elite is critical) and lack of poor people's participation in decision-making and the development process (Hossain, 2008).

It follows that rural and urban poverty are interrelated and there is a need to consider both urban and rural poverty together for they have many structural causes in common, e.g. socially constructed constraints to opportunities (class, gender) and macroeconomic policies (Masika, Haan and Baden, 1997).

Lack of access to secure and safe housing is a central feature of urban poverty. It is estimated that at least 600 million urban dwellers in Africa, Asia and Latin America live in housing that is so over-crowded and of such poor quality, with such inadequate provision for water, sanitation, drainage and garbage collection that their lives and their health is continually at risk (Paolisso and Gammage, 1996). It is important to note that about one third of all urban residents are poor, which represents one quarter of the total poor. Poverty

is becoming increasingly urban with exceptions of countries which are already urbanized (Baker, 2009).

From a human rights perspective, slums pose a variety of problems: they are an indicator of poverty, and the rights to housing and healthcare (article. 25 of the Universal Declaration) are only the most obvious rights that are less than perfectly protected in slums. Bad housing is a cause of bad health (due to the absence of sanitation), of a lack of education (due to a lack of electricity and light), a lack of security (because of the risk of fire and burglary) and it therefore perpetuates poverty (Spagnoli, 2008). Typical slum problems such as bad sanitation, lack of clean water and disease are caused by a combination of overpopulation and insufficient government investments.

The slum populations mostly live below the poverty line in terms of both calorie intake and the cost of basic needs. Moreover, despite having lived in the city for a long period of time the urban poor have limited access to the economic and social systems of the city (Hossain, 2008). With this in mind, it is noteworthy that the rapid growth of urban populations has led to a worsening in absolute and relative poverty in urban areas (Baker, 2009). Indeed, the urban populations in cities face extreme poverty due to its low level of earnings and the majority is living below the poverty line in terms of both calorie intake and cost of basic needs. What is more, the slum dwellers are mostly involved in low paid jobs in informal sectors of the urban economy (Hossain, 2008).

Slum populations in urban areas are 'vulnerable' in terms of their access to urban land. Indeed they have mostly settled temporarily on public or private land and they are often evicted from their settlements (Baker, 2009). In Kenya, most slums are to be found on land belonging to the Kenya Railways (e.g. Kibera), Kenya Pipeline (e.g. Sinai), and other state corporations. Bangladesh slum for instance sits on Kenya Railways' land. This is because most slum dwellers cannot afford to purchase land due to poverty.

The effect of poverty also means that slum populations have limited access to health and education. Though theoretically the urban poor have equal access to the public health facilities in cities, in reality very little are available to them. They are the most deprived

groups here as they have very limited access to existing educational opportunities. It has been evident from official statistics that although enrolment in primary school in urban areas is higher than that for rural areas, the enrolment of the slum population is very low (Hossain, 2008). The poor are mostly involved in informal activities as they are excluded from the formal sectors of the economy through lack of education and employment training. Employment in the informal sectors is generally characterized by a low level of income and high level of vulnerability in terms of risk and harassment (Billah, 2011).

Generally, socio-political and economic structures of a country are mainly responsible for urban poverty and the emergence of slums in cities. The formation of slums is closely associated with rural-urban migration. Poor people living in the city slums have mostly migrated there from rural areas rather than other cities or towns. Both the pull and push factors - including low incomes in rural areas, poverty, river erosion of agricultural land and job opportunities in the city are the main factors behind this rural-urban migration (UN-Habitat, 2008).

# 2.4 Unemployment and growth of informal settlements

Unemployment (or joblessness), is a state in which people are without jobs and they have actively sought work for a period of time. It is an economic condition marked by the fact that individuals actively seeking jobs remain unhired, and is expressed as a percentage of the total available work force. Unemployment is widely regarded as a major social and economic global problem (Wolf, 2011). The level of unemployment varies with economic conditions and other circumstances (ILO, 2011). There is a strong positive link between national levels of human development and urbanization levels. Unemployment in developing countries has become a living reality today. It is a serious problem that is preoccupying those concerned with various countries development (Fawzy, 2002).

The implications of rapid urban growth include increasing unemployment, environmental degradation, lack of urban services, overburdening of existing infrastructure and lack of access to land, finance and adequate shelter (UNEP, 2002).

Most of the people who become unemployed after working for some time remain without work for very short periods. However, there is also a hard core of unemployed who remain without work for long periods of time. The adverse consequences of unemployment are much more acute for this group (Wolf, 2011). The inability of cities to absorb the labour market has a negative impact on economic growth and poverty reduction, a trend that undermines the endeavours of UN member states to achieve the targets set by the Millenium Development Goals (UN-Habitat, 2007). Worldwide cities are fast becoming centres of crime. This is caused in large part by the high rate of unemployment, especially amongst young people. Large numbers of the youth in many of these cities are unemployed (UN-Habitat, 2008). However, there is a consensus that ful! employment is but a theoretical concept that cannot be realized even in the most advanced countries. This is due to the presence of a degree of 'frictional unemployment' ranging between 2-4percent, even during the times of great boom (Fawzy, 2002).

Unemployment has obvious and well-documented links to economic disadvantage and has also been connected in some discussion to higher crime rates (Cantor and Land 1985; Ottosen and Thompson 1996), especially among the young (Britt 1994), suicide, and homicide (Yang and Lester 1994; Ottosen and Thompson 1996). Other consequences of unemployment can be increases in the incidences of alcoholism, child abuse, family breakdown, psychiatric hospitalization, and a variety of physical complaints and illnesses (Ottosen and Thompson, 1996). The increase in the level of unemployment has been primarily due to the inability of economic policies in general and investment policies in particular to achieve high and labor-intensive growth rates. These policies have led to modest investment levels, which weakened the economy's ability to create jobs, and resulted in investment patterns biased against labor-intensive growth (Fawzy, 2002).

Indeed, unemployment among youth not only causes current hardship, but may also hinder future economic success. This is because unemployed youths are not able to gain experience and on-the-job training and because a history of joblessness signals that the individual may not have the qualities that are valued in the labor market (Gitter and Scheuer, 1997). It is therefore important to note that rapid urbanization, particularly the

growth of large cities, and the associated problems of unemployment, poverty, inadequate health, poor sanitation, urban slums and environmental degradation pose a formidable challenge in many developing countries (Nsiah-Gyabaah, 2008).

# 2.5 Population growth and growth of informal settlements

Population growth is the change in a population over time, and can be quantified as the change in the number of individuals of any species in a population using "per unit time" for measurement (UN-Habitat, 2008). Population growth is a vicious cycle that is led by opportunities in the cities (leading to migration to the cities), poverty with low incomes, tendency to be closer to work hence occupying any land in the vicinity etc. The key reason out of all is the slow economic progress in other areas of the country (Hossain, 2008). However, the implications of rapid urban growth include increasing unemployment, environmental degradation, lack of urban services, overburdening of existing infrastructure and lack of access to land, finance and adequate shelter (UNCHS, 2001). The rapid increase of the world's urban population, coupled with the slowing of rural population growth has led to a major redistribution of the population over the past 30 years. By 2007, one-half of the world's population was living in urban areas compared to little more than one-third in 1972, and the period 1950 to 2050 will see a shift from a 65 per cent rural population to 65 per cent urban (United Nations Population Division, 2001). By 2002, some 70 per cent of the world's urban population was living in Africa, Asia or Latin America (UNCHS, 2001).

Slums are built as more population move to the cities as it is a fact that very poor people live in slums (Sud, 2006). Poor rural families migrate to cities seeking greater opportunity. However, the urban advantage of better access to education remains a myth for the majority of slum dwellers (UN-Habitat, 2007). Due to the concentration of both domestic and foreign investment, cities have experienced massive migration from rural populations but a critical downside to this has been the dramatic rise in poverty and informal settlements to shelter this ever growing population (Hossain, 2008). The increase in the percentage of population residing in urban areas is attributable to three factors; the first factor is the rural-urban differential in the rates of natural increase, the second factor is

migration from rural to urban areas and the third reason is the reclassification of villages as towns (Chandrasekhar, 2005). Over the past half century, a great rural-to-urban population shift has occurred and the process of urbanization (the concentration of people and activities into areas classified as urban) is set to continue well into the 21st century (UNEP, 2002).

In many third world cities natural population growth is the major contributor to urbanization, while rural-urban migration is still an important factor (de Haan 1997). Internal migration flows are diverse, complex and constantly changing (including rural to urban, urban to rural, urban to urban, and rural to rural). A key determinant of migration is the income differential between rural and urban regions (Gilbert and Gugler, 1992).

Migration is also affected by crop prices, landowning structures and changes in agricultural technologies and crop mixes in surrounding areas and distant regions. It is also influenced by other factors related to individual or household structures and survival strategies, and wider political, economic and social forces (UNCHS 1996). People migrate either because they are "pushed" out of their place of origin or because they are "pulled" to their migration destination. Generally, people move because of a combination of both "push" factors and "pull" factors. Some are "pushed" out of their present place of residence because they cannot earn sufficient income to sustain themselves or their growing families. Others may be forced out of their place, either temporarily or permanently, because of natural disasters such as floods, droughts or earthquakes or sustained ecological changes such as desertification or soil erosion. People are "pulled" to their migration destination by better economic prospects, better education and health facilities, or more freedom from restrictive social and cultural norms for themselves and for their children (Sheng and Mehta, 2011).

High population densities combined with rapid, uncontrolled growth in informal settlements pose a problem for city administrators as their capacity to keep pace in providing infrastructure and public services to residents is severely strained. In cities such as Nairobi, Mombasa and Cairo, for example, problems associated with informal settlements include lack of usable open spaces, inadequate drainage and sewerage, limited

road, pathway, and water infrastructure, poor environmental conditions and high crime rates (Alder 1995, El-Batran and Arandel 1998, UN Habitat 2008).

Rapid urbanization in many cities has been attributed to sustained increases in rural-urban migration (above 2-3 % p.a.) coupled with a high birth rate. In many countries, the urban population grows at an average of over 6 % per annum, twice that of the national average (World Bank 2002). Due to increasing levels of poverty, population growth and lack of sustainable housing policy, the urban population is absorbed into informal settlements. Absorption of this population into informal settlements, on the one hand, is due to the lack of provision of formal or surveyed plots for the greater portion of the urban population (Younga & Flackea, 2010).

In Kenya, the current urban population constitutes approximately 11 million. By 2020, it is predicted that this population will have doubled, reflecting the continued urban growth experienced by Kenya over the last three decades; it has been labeled one of the 25 fastest growing cities in the world (Kenya Demographic Health Survey, 2010). It is important not to present the rural-urban divide as being rigid, when in fact it is a continuum and many people continue to engage in livelihoods that straddle both rural and urban areas. For example, from a figure of 2.3 million at the time of the 1999 Census, it was estimated that the total population of Nairobi city was just over 3 million people, with estimates ranging up to 3.5 million. The population since then has grown more than ten-fold since then experiencing some of the highest growth rates per annum in Africa (Hossain, 2008).

# 2.6 Government Policies on Housing and Slum Upgrading Programmes

The major challenges of the 21st century are currently leading to a world-wide return to planning: rapid urbanization, climate change, global recession, and resource shortages. These are issues that have significant implications for the spatial structure and functioning of urban areas.

Essentially, they demand state intervention to fundamentally change the nature of cities, and this implies a need for planning.

Planning can be an important tool in addressing some of the issues that confront cities, especially sustainable urbanization (environmental, economic and social), slums and

poverty, urban crime and violence, and post-conflict and post-disaster situations (UN, 2009)

As part of their efforts to ensure the full and progressive realization of the human right to adequate housing, the UN-HABITAT and the United Nations Office of the High Commissioner for Human Rights (OHCHR) published a joint report entitled *Housing Rights Legislation* in 2002, in which it spells out how constitutions and legislations of various countries in the world affect housing programmes in their countries.

Nepal, it shows, for example, that urban land prices had increased 300 percent since 2003, putting housing increasingly out of reach for lower income residents.

Today, the housing situation in Nepal, especially for the urban poor, remains far from adequate. Indeed, urban dwellers in Nepal have been finding it increasingly difficult to afford housing due to rapid price rises in land. Such is the challenge that the Government of Nepal approached UN-HABITAT to help it formulate its new national housing policy. (Clos, 2010)

Taking into account of current demand and need for housing, the government of Nepal is committed to provide shelter to all at an affordable cost, hence the review of The National Shelter Policy 1996, to accommodate the aspirations and expectations of the people.

Over the last three decades, Tunisia has been very successful in reducing the proportion of its population living under the poverty line, improving the lives of the country's urban dwellers through access to water and sanitation, electricity, and in reducing the percentage of slum population, as well as the number of slum dwellers in absolute terms, while succeeding to increase the quality and quantity of the country's housing stock. While Tunisia's housing sector has benefited from government's reforms in terms of institutions, regulations, and financing in support of housing production and improvement, there are lessons for other countries to learn from this experience. However, there are still some challenges ahead for the county to achieve the Habitat Agenda goal of adequate shelter for

all, where the Tunisian authorities would need to explore in developing their new housing policies (UN 2011).

Locally, the first comprehensive Housing Policy for Kenya was developed in 1966/67 as Sessional Paper No. 5. The policy advocated for slum clearance and encouraged mobilization of resources for housing development through aided self-help and cooperative efforts.

And, in its commitment to improving housing, the Government introduced a National Housing Policy in 2004 that comprehensively addresses the shelter problem. This National Housing Policy is intended to arrest the deteriorating housing conditions countrywide and to bridge the shortfall in housing stock arising from demand that far surpasses supply, particularly in urban areas, a situation which has been exacerbated by population explosion, rapid urbanization, widespread poverty, and escalating costs of providing housing. The shortage in housing is manifested in overcrowding, proliferation of slum and informal settlements especially in peri-urban areas.

The policy aims at enabling the poor to access housing and basic services and infrastructure necessary for a healthy living environment especially in urban areas, encouraging integrated, participatory approaches to slum upgrading, harmonising existing laws governing urban development to facilitate more cost effective housing development as well as facilitating increased investment by the formal and informal private sector, in the production of housing for low and middle-income urban dwellers.

This effort is echoed in the Housing Bill 2011 which aims at providing for the effective coordination, facilitation and monitoring of the housing and human settlements sector; providing for capacity building within the housing sector; to establish the Kenya Housing Authority and the National Housing Development Fund for the provision of the right to accessible and adequate housing under Article 43(1) (b) of the Constitution.

Hence, it is clear that governments create the rules and frameworks in which infrastructural developments are to be based upon. From time to time the government will change these rules and frameworks forcing development patterns to change

Indeed, legislation on urban planning is a significant management tool for governments for dealing with the sustainable urbanization challenges facing 21st century cities, including housing, infrastructure development and general governance (Benschop, 2002).

#### 2.7 Conceptual framework

The conceptual framework was developed through explaining and ascertaining the relationships and interconnectivity of the objectives of this study.

The level of industrialization, prevalence and spread of poverty, population growth rate and levels of unemployment all affect the growth of informal settlements in their own individual ways, or collectively. However, there are regulatory frameworks in form of government policies on housing that govern and regulate the growth of these informal settlements as shown the figure 1 below.

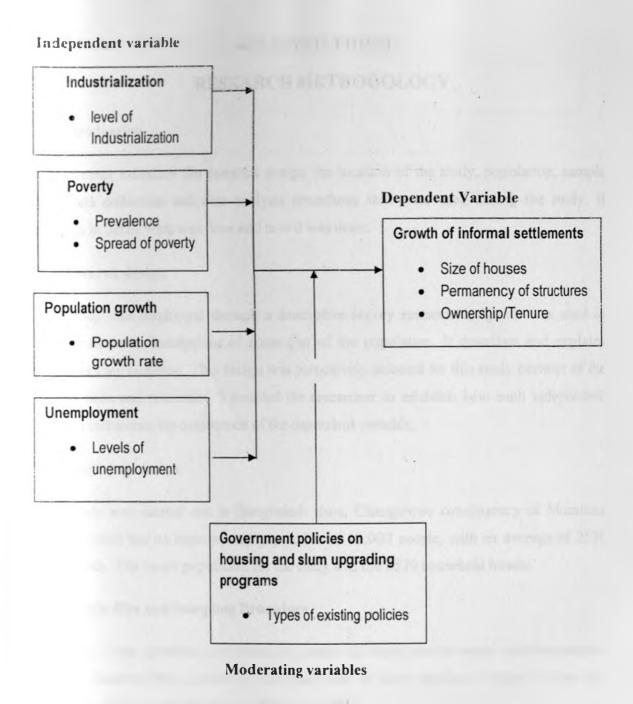


Figure 1 Conceptual framework.

In this study, industrialization, poverty, unemployment and population growth (increase) are the independent variables. They all interrelate and work together, and have a collective impact but are moderated by the existing government housing and slum upgrading policies. It is all these variables which collectively influence the growth of informal settlements.

## CHAPTER THREE

## RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter examines the research design, the location of the study, population, sample size, data collection and data analysis procedures that were used during the study. It presents in detail what was done and how it was done.

#### 3.2 Research design

This study was conducted through a descriptive survey research design. It was used to provide numeric descriptions of some part of the population. It describes and explains events as they occurred. This design was purposively selected for this study because of the limited time and resources. It enabled the researcher to establish how each independent variable influences the occurrence of the dependent variable.

#### 3.3 Target population

This study was carried out in Bangladesh slum, Changamwe constituency of Mombasa county which has an approximate population of 18,000 people, with an average of 2570 households. The target population for the study was the 2570 household heads.

#### 3.4 Sample Size and Sampling Procedure

Sampling is the gathering and asking of a range of individuals the same questions related to their characteristics, attributes, how they live, or their opinions. It also involves the collection of relevant information (O' Leary, 2004).

The following formula was utilized in calculating the sample size:

$$N = \frac{Z_2 x (p) x (1-p)}{d_2}$$

Z= the standard normal deviate at the required confidence level (1.96 for 95% confidence level)

p= the proportion in the target population estimated to have characteristics being measured d= the level of statistical significance test

Thus,

$$N = \frac{(1.96)_2 \times (0.50) \times (1 - 0.5)}{(0.05)_2} = 384$$

However, because the target population was known and less than 10,000, the final estimate was calculated using the following formula:

# **Correction for Finite Population**

Where: N = target population

Hence;

$$nf = \frac{384}{1 + (384 - 1)} = 333$$

The ideal sample size for the research would have been 333 respondents. However, due to time and financial constraints, the researcher utilized a sample size of 100 respondents, 90 of who were household heads from the larger Bangladesh area and 10 purposively selected key informants.

This study employed cluster sampling technique to select the sample. The clusters were from the six villages of Bangladesh and respondents purposively selected as the sample from the clusters. All members chosen from the clusters were studied.

Table 3.1 Sampling of general respondents

Zone	Respondents in each zone
Kisumu Ndogo	15
Mkupe	15
Kichimbeni	15
Majengo Mapya	± 15
Giriamani	15
Bangladesh Center	15
Total number of respondents	90

From each of the zones or clusters, the researcher purposively selected 15 respondents to be interviewed in the study. This particular method was favored due to the fact that the respondents are responsible for major decisions in their households, including housing. Also, their traits are generally homogenous, and furthermore, the researcher used zones rather than individual members because the factual sampling frame could not be constructed. Another reason for the selection of this method was due to pragmatic reasons like time and money to be spent in the course of the study.

Table 3.2 Sampling of key informants

Key informants	Number
Community Leaders	5
Housing Ministry Employees	2
Provincial Administrators	2
Local NGO Representatives	1
Total number of key informants	10

Purposive sampling technique was used to sample the various key informants interviewed for this study. The researcher purposively selected the following individuals to be used in this study; 5 community leaders, 2 employees of the ministry of housing, 2 provincial administrators and 1 local NGO representative. These individuals were selected due to the fact that they are knowledgeable in issues to do with housing and informal settlement in the area, as well as challenges like time and money for the research.

#### 3.5 Data collection methods

Questionnaires and interviews were both used as the main tools for primary data collection from the various respondents and key informants selected for the study. Questionnaires, which are a collection of items to which a respondent is expected to react to in writing were constructed by the researcher and administered to the various respondents and key informants in the study in the following ways: he personally administered some of the questionnaires to the respondents and key informants and sent a few via e-mail to other key informants in the study. These particular questionnaires contained basic demographic information like gender, age, marital status, socio-economic status in the form of employment, level of education etc. They also contained both open and closed ended questions.

The open ended questions asked the respondents to construct answers using their own words. Without a doubt, through these, they were be able to offer information and to express their opinions regarding the various variables of the study as they deemed them fit. The closed ended questions restricted the respondents to choose from a range of predetermined responses that gave them a range of answers from which they were able to choose from.

All the questionnaire interview sessions were recorded through respective appropriate answers being taken; note taking or jottings at the bottom of the questionnaires that were made at the time of the interviews and typed transcripts created from such notes soon afterwards, more often that same day. Most of the interviews were conducted in both English and Swahili. On average, the interviews lasted for approximately 20-30 minutes. The researcher also made good use of focus group discussions with the various purposively selected key informants which comprised of a number of meetings with local community leaders, government officials and local NGO representatives on relevant study areas. Undeniably, these techniques were instrumental in helping the researcher to deepen his understanding of the various issues under study.

Participant observation is a systematic method of data collection that relies on a researcher's ability to gather data through his or her senses; it is to notice, using a full range of appropriate senses, to see, hear, feel taste and smell (O'Leary, 2004). Indeed, the nature of information which the researcher sought to obtain is what led him to adopt this particular method of study. By using this method, the researcher was able to see for himself what the people and the various key informants do in the course of their duties and by doing this he was able to bridge the gap between what the people said and what they actually did. This method allowed the researcher to gain firsthand experience without necessarily utilizing informants whose views at times could be misleading; the researcher recorded information obtained here as it occurred.

Document analysis is also another method of data collection utilized by the researcher in the course of this study. This method involved a collection, review, interrogation, and analysis of various forms of texts on the issues and subject of informal settlements that the researcher used as a secondary source of research data. These included censuses, surveys, books, journals, independent inquiries and reports prepared on the issues and problems related to slums and informal housing. The researcher also utilized personal communication in the form of e-mails and various mobile phone communications which are personal and subjective. Also utilized were multimedia sources in the nature of newspapers or various magazine columns/articles, current affairs, shows, news reports and internet sources on the various objectives of the study. He also used historical documents in the form of articles and various books that have been written on the various issues of the study. The purpose of this particular method was to obtain unobtrusive information that was done at the pleasure of the researcher's time without interrupting the research process. Through this the researcher was able to obtain the language and words of the informants who by their nature are the authors of these documents; he was able to access data at his convenience. Overall the researcher was able to save time and expense in transcribing this data.

## 3.6 Validity and Reliability of research instruments

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials while validity is the accuracy and meaningfulness of inferences, which are based on the research results (O. Mugenda & A. Mugenda, 2003). The reliability of the instruments was assessed by means of internal consistence and test re-test coefficient. It was hoped that the community and the respondents have some similarity to the study organizations which would make up the test population and this ensured that the expected results were valid. The questionnaires were approved after making all the necessary adjustments. The results obtained from the pilot study were used to test the reliability of the research instruments.

# 3.7 Data presentation and analysis techniques

The data collected as per the questionnaires in this study were in the form of "Yes", "No" or "I do not know" responses with a further segment provided for a slight explanation for each of the responses selected for each of the various closed ended questions; while in the

open ended questions, a range of responses were offered for some of the questions; this was in the form of pairing some of the problems associated with slums and informal housing and any other socio-economic or medical problems associated with this problem, providing a range of answers from "good", "poor" to "do not know" and the request of solutions to the problems associated with the issue of informal housing.

The researcher systemically organized this mass of raw data that had been collected in a manner that facilitated proper and adequate analysis. Since empirical or quantitative analysis was anticipated, the various responses in the questionnaire were assigned numerical values in the form of yes taking the value of 1, no taking the value of 2 and I do not know taking the value of 3. This was done for the closed ended questions while for the open ended questions, the researcher categorized the various responses given and assigned numbers or numerical values to these. The intention was to combine the power of words with the authority of numbers.

So as to permit quantitative analysis, the data was then converted to numerical codes that represent the attributes or measurements of variables. Coding is the conversion of data into numerical codes (O. Mugenda & A. Mugenda, 2003). The various code categories in the questionnaire were mutually exclusive and allowed for independent analysis of each of the responses provided. The coding process began with the preparation of a codebook that is found in the computer program used in the analysis (SPSS version 16).

The codebook is a document that describes in specific details the coding scheme to be followed (O. Mugenda & A. Mugenda, 2003). Here, the codebook describes the code assignment for each response category for each item in the questionnaire. It also indicates the variable name, its type (width), label, the values assigned for the various responses given for the particular variable, the missing values and the measurement types. The codebook was used to transfer the information to a code sheet. This is what was used to build or create a 'data set' that was managed and utilized throughout the process of analysis, which was essential for both qualitative and quantitative data.

The main reason for the researcher to adopt this was to save time and to increase the accuracy of the results of the analysis. The data analysis conducted involved developing summaries and looking for trends and patterns with the data. This was done with a view of analyzing the data in a systematic way in order to come up with useful conclusions and recommendations. The data was then presented in summary in tables and percentages, with various verbatim discussions being included in the presentation.

#### 3.8 Ethical considerations

The major ethical problem anticipated in this study was the privacy and confidentiality of the various respondents selected in this study. In some instances, obtaining a valid sample entailed gaining access to specific lists and sensitive, personal information which in itself may have been an infringement on the privacy and confidentiality of the respondents, but it was the only way that the researcher could construct a valid sampling frame and generate a representative sample. The respondents however while filling in information had the freedom to ignore the various items in the questionnaires and discussions that they may have not wished to respond to.

OBJECTI <b>VES</b>	VARIABLE	INDICATORS	MEASUREMENT	SCALE	TYPE OF RESEARCH	DATA COLLECTION METHOD
To determine the extent to which industrialization influences the growth of informal settlements	Independent variable: Industrialization	Industrialization levels in the community	Number and types of industries	Nominal	Survey	Key informant Questionnaires: Question 7, 8 & 10 Documents analysis.
To establish how poverty influences the growth of informal settlements.	Independent variable: Poverty	Prevalence and spread of poverty.	Levels of poverty in the community.	Ordinal	Survey	Questionnaires: Question 6 & 13
To assess how unemployment influences the growth of informal settlements.	Independent variable: Unemployment	Levels of unemployment in the community	Unemployment levels in the community: high or low	Ordinal	Survey	Questionnaires: Question 7 & 15
To determine the extent to which population growth influences the growth of informal settlements.	Independent variable: population growth	Population growth rate	Overall population growth in the community	Ratio	Survey	Questionnaires: Question 8, 9 & 15
To investigate the factors that influence the growth of informal settlements.		Size of houses  Permanency of structures  Ownership/tenure	Number of houses owned	Ordinal	Survey	Questionnaires: Question 10 & 16
To determine how government policies on housing and slum upgrading programs influence growth of informal settlements	Moderating variable: Government policies	Types of existing policies on housing.	Knowledge of the existence of the government policies influencing housing	Nominal	Survey	Questionnaires: Question 11, 17 & 19

## **CHAPTER FOUR**

## DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This study investigated the factors influencing the growth of informal settlements, case of Bangladesh slum, Changamwe constituency. This was in light of how industrialization, poverty, unemployment and population growth influences the growth of informal settlements. The data collected was analyzed using Statistical Package for Social Sciences (SPSS). This section begins with a brief description of the study respondents and the rest of the chapter presents the findings of the study.

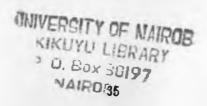
#### 4.2 Response Rate

The respondents included local residents and other stakeholders. They were identified on the strength and the roles they play in terms of decision-making, especially in matters concerning housing and settlement. The respondents were distributed across clusters as shown in table 4.1 below.

Table 4.1 Response rate of respondents

Category	Respondents	Percent	Tools used	Response	Cumulative
	(n)			rate	Percent
General respondents	90	90%	Questionnaires	90	90.0
Key Informants	10	10%	Questionnaires	10	100.0
Total	100	100%		100	

From table 4.1, 90% of the respondents were household heads, 5% were local community leaders, 2% were provincial administrators, 2% were drawn from the ministry of housing and 1% represented the local NGO representatives. All these responded to the questionnaires and interviews hence the researcher registered 100% response rate.



#### 4.3 Demographic characteristics of the respondents

General information about the respondents was obtained, and this included their age, gender, marital status as well as other socio-economic attributes.

## 4.3.1 Gender of respondents

The gender of the respondents, whether male or female is shown in the table 4.2 below,

Table 4.2 Gender of respondents

	Gender	Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>	
	(n)					
Valid	Male	60	60%	60%	60.0	
	Female	40	40%	40%	100.0	
	Total	100	100%	100%		

In this study, 60 % of the respondents were male while 40 % of them were female. A large number of the households in this study were male headed households meaning that the men were the ones mostly associated and concerned with matters to do with housing and settlement. It is them who decided where their families lived and in this case they chose Bangladesh slum.

#### 4.3.2 Marital status of respondents

Concerning the marital status of the respondents, some respondents were found to be married others single, some divorced and others widowed, as shown in table 4.3.

Table 4.3 Marital status of the respondents

	Marital	Frequency	Percent	Valid Percent	Cumulative	
	status	(n)			Percent	
Valid	Married	45	45%	45%	45.0	
	Single	13	13%	13%	58.0	
	Divorced	14	14%	14%	72.0	
	Widowed	28	28%	28%	100.0	
	Total	100	100%	100%		

In this study, 45% of the respondents were married, 13% of them were single, while 14% of them were divorced and 28% of them were widowed.

A large portion of household heads in the study was married as compared to those from other categories in this section. It also was a sign that a majority of those interviewed had families and therefore matters of housing were important to them and their families thereby finding shelter for them in the current houses they lived in.

## 4.3.3 Average age of respondents

Respondents were of different age brackets as shown table 4.4.

Table 4.4 Average age of respondents

	Age bracket	Midpoint	Frequency		Cumuative
		(x)	<b>(f)</b>	Fx	Percent
Valid	26-35	30.5	30	915	30.0
	36-45	40.5	21	850.5	51.0
	46-55	50.5	15	757.5	66.0
	56-65	60.5	20	1210	86.0
	66-75	70.5	14	987	100.0
		Total	∑t100	∑fx4720	

The mean age of the respondents was calculated as follows.

$$\overline{X} = \frac{\sum xf}{\sum f}$$

$$=4720/100=47.2$$

The respondents' ages were distributed in the following manner; about 30% of them were under 36 years, while 21% of them were in the 36–45 years age bracket. A further 15% of them were between 46-55 years, whereas 20% of them were in the 56–65 years age bracket and 14% of them were above 65 years.

The population in this study was relatively young with the mean age of the respondents being about 47.2 years, implying that they were able-bodied and independent to make decisions on where to live with their dependants.

#### 4.3.4 Level of Education of respondents

Respondents interviewed were found to posses varied qualifications in terms of education.

Table 4.5 Level of education of respondents

	Level of	of Frequency	Percent	Valid	Cumulative	
	Education		Percent		Percent	
Valid	Primary	57	57%	57%	57.0	
	Secondary	30	30%	30%	87.0	
	Diploma	11	11%	11%	98.0	
	Undergraduate	2	2%	2%	100.0	
	Total	100	100% ;	100%		

Among the respondents in this study, the highest level of education for about 57% of them was primary school certificate, 30% of them had secondary school certificate and 11% of them had a diploma certificate or equivalent. Only 2% had university degree certification.

Majority of the respondents in this study were semi-literate with large percentage of them having had various levels of formal education. This implied that they were able to understand the various aspects of informal settlements hence they were expected to give appropriate and accurate information on the issue.

#### 4.3.5 Occupation of respondents

Respondents interviewed worked in different organizations, some in private organizations, some governmental and others in non-governmental organizations

Table 4.6 Occupation of the respondents

	Occupation	Frequency	Percent	Valid Percent	Cumulative
					Percent
Valid	Government employment	17	17%	17%	17.0
	Private employment	70	70%	70%	87.0
	NGO	13	13%	13%	100.0
	Total	100	100%	100%	

17% of the respondents in the study were in government employment, 70% of them were in private employment and 13% were in NGO employment.

This study had a large portion of the respondent's engaged in various economic activities as a majority of the respondents were in private employment.

This implied that they had some form of income, thereby enabling them to provide housing for themselves and their dependants in areas they could afford.

## 4.4 Industrialization and growth of informal settlements

The first objective of this study was to determine the extent to which industrialization influences the growth of informal settlements. Here the researcher sought to establish whether the process of social and economic change had an impact on the growth of informal settlements. Overall, he sought to establish the effect that industrialization had

on the growth of informal settlements. The results are presented in the discussions below.

#### 4.4.1 Key informants perceptions on awareness of industrialization

Data was collected and analyzed from the various key informants on the question of whether they were aware and familiar with industrialization. The results are presented in the table below.

Table 4.7 Level of awareness and familiarity with industrialization

	Level	of Frequency	Percent	Valid Percent	Cumulative
	awarenes		Percent		
Valid	Excellent	6	60%	60%	60.0
	Good	1	10%	10%	70.0
	Fair	2	20%	20%	90.0
	poor	1	10%	10%	100.0
	Total	10	100%	100%	

60% of them had excellent knowledge of industrialization in Mombasa, 10% of them had good knowledge, 20% of them had fair knowledge and 10% had poor knowledge of industrialization.

Indeed this was an indication that the sample selected had good knowledge of the variable in discussion, in this case industrialization and how it influences growth of informal settlements.

## 4.4.2 Key informants perceptions on industry workers residence

Data was collected and analyzed from the key informants on where most of the industry workers lived. Here the researcher sought to establish the kind of residence that they lived in. Most of them lived in informal housing. They were of the view that the demand of housing by these workers could not meet the housing supply in the town. Most of them said that slums were the product of rapid urbanization and industrialization. Indeed industries and many factories are in the city of Mombasa, the result of this being that most of the workers are forced to live in the environs

surrounding it. According to the key informants, the major consequence of this is that they get to live in informal settlements in these areas.

#### 4.4.3 Key informant's perceptions on solutions to informal housing

Data was collected and analyzed from the key informants on the solutions to the problem of informal housing in Mombasa. Here the researcher sought to establish from them about the solutions on the informal housing problem in Mombasa. Most of them were of the opinion that with proper planning by the government and other concerned authorities the issues to do with growth of informal housing will be reduced. The growth and expansion of cities and industries should be in tandem with the provision of decent housing by the authorities. Others were of the view that legislation should be put in place to require industries to provide decent housing for their workers. Such a measure will force the industries to build staff quarters for their workers and this will go a long way towards reducing the problem of informal housing.

A number of the key informants were also of the opinion that industries in the city of Mombasa should be decentralized to rural areas. This will enable the workers to find decent housing in the various areas where they are located.

#### 4.5 Poverty and growth of informal settlements

The second objective of this study was to establish how poverty influences the growth of informal settlements. The researcher sought to find out how poverty affected the growth of informal settlements in Mombasa. He sought to establish whether the shortage or scarcity of basic social or economic necessities by the people in the area had an impact on the growth of informal housing. To do this, the researcher sought the views of both the key informants and the general respondents in the study. The results are presented in the discussion below.

#### 4.5.1 Respondents and key informants opinions on poverty

Data was gathered and analyzed from both the key informants and respondents on the question of whether poverty had a role in the choice of housing in the community. The results are presented in the table and discussion below.

Table 4.8 Role of poverty in the choice of housing

	Poverty influe residence choi	nces Frequency ce	Percent	Expected	Residual
Valid	Yes	87	87%	50	37
	No	13	13%	50	-37
	Total	100	100%		

87% percent of the respondents said that poverty was the contributing factor to where they lived whereas 13% of them responded in the negative.

This was a sign that for the majority, their low income could not enable them to live in better housing.

Most of the key informants were of the opinion that poverty played a major role in the choice of housing for community members. The cost of decent housing was prohibitive for the community members and this forced them to live in alternative informal housing. In some instances, those with better income may be able to build their houses but the poor in society had to depend on housing provided for by either private owners or the government. In such instances they were forced to look for housing where their income could support them hence settling in slums which are affordable.

#### 4.5.2 Key informants and respondents opinions on income and housing

Data was collected and analyzed from both the key informants and respondents on the question of whether they would get better housing with increased income.

There was an indication that given the choice, and with higher income levels, majority of the respondents would move to better housing.

Most of the key informants noted that the problem of growth of informal settlements is compounded by the fact that most of the residents have low incomes. Indeed this is the largest contributing factor to the growth of informal settlements in the area.

#### 4.6 Unemployment and growth of informal settlements

The third objective of this study was to assess how unemployment influences the growth of informal settlements. The researcher sought to establish whether unemployment influences the growth of informal settlements. He sought to find out whether the state of being without gainful employment had an impact in the growth of informal settlements. In order to achieve this he sought the views of both the key informants and general respondents in the study. The results are presented in the discussion below.

#### 4.6.1 Respondents opinions on nature of employment and housing.

Data was gathered and analyzed under the question of whether the respondent's employment permitted to live in decent housing. The results are presented in table 4.10

Table 4.9 Employment and decent housing

Employment	Frequency	Percent	Valid Percent	Cumulative	
ensures	(n)			Percent	
decent housing			ā		
Yes	10	11.1%	11.1%	11.1	
No	58	64.4%	64.4%	75.6	
Not Fully	22	24.4%	24.4%	100.0	
Total	90	100%	100%		
	ensures decent housing Yes No Not Fully	decent housing  Yes 10 No 58 Not Fully 22	ensures (n)  decent housing  Yes 10 11.1%  No 58 64.4%  Not Fully 22 24.4%	ensures (n)  decent housing  Yes 10 11.1% 11.1%  No 58 64.4% 64.4%  Not Fully 22 24.4% 24.4%	

11.1% of the respondents were of the opinion that their occupation could permit them to live in decent housing, while 64.4% were of the view that it did not. About 24.4%'s occupation could not fully permit them to live in decent housing.

Majority of the respondents were engaged in some form of economic activity but it was not stable. Their terms of employment were temporary and as such they could not afford to stay in decent housing. It was also noted that the type of employment had a major impact on the type of housing that the respondents lived in. Majority of those in informal housing were engaged in casual employment.

## 4.6.2 Key informant's opinions on solving the unemployment problem

Data was gathered and analyzed on the question of whether solving the unemployment problem would tackle the problem of growth of informal settlements. Majority of the key informants noted that unemployment pushes people to the edge and they have to look for cheap housing. This leaves them with informal housing as the only alternative. Indeed majority of them were also of the opinion that creation of legislation on matters to deal with employment would go a long way in solving the problem of informal housing.

#### 4.7 Population growth and growth of informal settlements

The fourth objective of this study was to determine the extent to which population growth influences the growth of informal settlements. The researcher sought to find out the relative size of the population or number of people in the area compared to the recommended optimum size and if it had an impact on the growth of informal housing. In order to achieve this he sought the views of both the key informants and general respondents in the study. The results are presented in the discussion below.

## 4.7.1 Respondents and key informants opinions on population

Data was collected and analyzed under the question of the population size in their area of residence. The results are presented in table 4.11.

Table 4.10 Population size

	Population	Frequency	Percent	Valid Percent	Cumulative
	size	(n)	1		Percent
Valid	Low	3	3.3%	3.3%	3.3
	High	27	30.0%	30.0%	33.3
	Very High	44	48.9%	48.9%	82.2
	Medium	16	17.8%	17.8%	100.0
	Total	90	100.0%	100%	

3% of the respondents said that the population in their area was low, while 30% said it was high. Another 49% said that the population was very high and 18% said that population was medium in their area of residence.

This infers that majority of the population lived in areas that were highly populated due to the fact that these are the areas that most of them could afford to get accommodation in.

## 4.7.2 Respondents and key informants opinions on family size

Data was collected and analyzed under the research question of whether family size had a direct impact on choice of area of residence. The results are presented in the table and discussion below.

Table 4.11 Family size and choice of housing

	Size	determines Frequency	Percent	Valid	Cumulative
	choice of	f housing		Percent	Percent
Valid					
	Yes	78	86.7%	86.7%	86.7
	No	12	13.3%	13.3%	100.0
	Total	90	100%	100%	

87% of the respondents said that the size of the family had an influence on where they lived and 13% said that family size did not play any role in their choice of residence.

Among most of the key informants it was noted that majority of the residents of informal housing had large families. Due to the large family sizes, the respondents had no choice but to live in cheaper, informal housing which they could afford.

It was also noted that the cost of proper housing was prohibitive to the area residents due to other responsibilities that they faced, and which are in one way or another related to the large family sizes that they had. Indeed, large family size contributed to where most of them lived.

## 4.7.3 Respondents and key informants opinions on housing programs

Data was collected and analyzed on the question of whether there were appropriate housing programs by the government. The results are then presented in the table and discussion below.

Table 4.12 Appropriateness of housing programs in the community

					Cumulative
	Appropriate	Frequency (n)	Percent	Valid Percent	Percent
Valid	Yes	20	22.2%	22.2%	22.2
	No	70	77.8%	77.8%	100.0
	Total	90	100%	100%	

About 22% of the respondents were of the opinion that there are appropriate housing programs in the community and 78% were of the opinion that there are no government programs on housing in the community.

Clearly, majority of the respondents agreed that there were no appropriate government programs on proper housing in the community. They noted that this was the major reason for the continued growth of informal settlements.

Among the key informants it was noted that the best solution to the problem of informal housing was the establishment of appropriate housing programs by the government. These programs should be focused on the poor and informal housing dwellers. Barriers to the smooth running of these housing programs by the government should be removed.

## 4.8 Testing of the Research Hypotheses

The researcher sought to test the following hypotheses;

H<sub>1</sub>; There is a positive relationship between poverty and growth of informal settlements in Changamwe Constituency.

H<sub>o</sub>; There is no relationship between poverty and growth of informal settlements in Changamwe Constituency

Table 4.13 One-Sample Test for poverty

	Test Value = 0										
	_			95% Confidence Interval of the Difference							
t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper						
Poverty 33.432	99	.0000	1.13000	1.0629	1.1971						

From table 4.13, the computed value of t was 33.432 and the degree of freedom was 99. The critical t value at 5% significance level was 2.576.

Since the computed value of t was greater than the critical value of t, the null hypothesis was rejected and the alternative hypothesis accepted.

This implies that there existed a positive relationship between poverty and the growth of informal settlements, meaning that poverty contributed to the growth of informal settlements in that, since majority of the respondents were poor, they could not afford decent housing, thereby deciding to live in slums.

The second hypothesis that the researcher sought to test was;

H<sub>1</sub>; There is a positive relationship between industrialization and growth of informal settlements in Changamwe Constituency.

H<sub>0</sub>; There is no relationship between industrialization and growth of informal settlements in Changamwe Constituency.

Table 4.14 One-Sample Test for industrialization

				Test Value	= 0		
			Sig.	Mean	95% Confidence Interval of the Difference		
	t	df	(2-tailed)	Difference	Lower	Upper	
Industrialization	5.014	9	.001	1.80000	.9879	2.6121	

From table 4.14, the computed value of t was 5.015 and the degree of freedom was 9. The critical t value at 5% significance level was 3.250.

Since the computed value of t was greater than the critical value of t, the null hypothesis was rejected and the alternative hypothesis accepted.

The implication of this is that there existed a positive relationship between industrialization and the growth of informal settlements, meaning that high level of industrialization contributed to the growth of informal settlements. This was because, as the industries expanded, there was a corresponding increase in the work force, who could not find decent housing hence settling in Bangladesh slum.

Another hypothesis that was tested by the researcher was;

H<sub>1</sub>; There is a positive relationship between unemployment and growth of informal settlements in Changamwe Constituency.

H<sub>o</sub>; There is no relationship between unemployment and growth of informal settlements in Changamwe Constituency.

Table 4.15 One-Sample Test for unemployment

				Test Value	= 0	
						nce Interval of the
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Unemployment	34.629	89	.0000	2.13333	2.0109	2.2557

From table 4.15, the computed value of t was 34.629 and the degree of freedom was 89. The critical t value at 5% significance level was 2.576.

Since the computed value of t was greater than the critical value of t, the null hypothesis was rejected and the alternative hypothesis, i.e., there was a positive relationship between unemployment and growth of informal settlements in Changamwe Constituency accepted.

This implies that indeed unemployment contributed to the growth of informal settlements.

Finally, the researcher tested the following hypothesis;

H<sub>1</sub>: There is a positive relationship between population growth and growth of informal settlements in Changamwe Constituency.

H<sub>o</sub>; There is no relationship between population growth and growth of informal settlements in Changamwe Constituency

Table 4.16 One-Sample Test for population growth

					ence Interval of the
t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Population 34.960	89	.0000	2.81111	2.6513	2.9709

From table 4.16, the computed value of t was 34.960 and the degree of freedom was 89. The critical t value at 5% significance level was 2.576.

Since the computed value of t was greater than the critical value of t, the null hypothesis was rejected and the alternative hypothesis accepted.

This implies that population growth contributed to the growth of informal settlements, in that, because of the fast growing population in the area and no development of houses to match the high population, most people were force to live in alternative settlements, and in this case Bangladesh slum.

#### 4.9 Summary

This chapter contains the findings of this study which were guided by the objectives of the study. Here the researcher put the study findings into tables and discussions which explained the study findings according to the variables of the study. Also included in the analysis are the key informants views and relevant focus group discussions and

opinions. The findings in this study showed that industrialization, poverty, unemployment and population are major factors that influence the growth of informal settlements in Bangladesh slum of Changamwe constituency. It showed that industrialization had led to the growth of informal settlements in the community in that, most employees of the industries opted to live in informal houses surrounding the industries they work in due to their proximity to the place of work. Poverty was also a contributing factor to the growth of informal settlements in the community because most people could not afford to live in formal houses due to the fact that they were beyond their financial reach hence deciding to settle in cheaper alternatives, hence informal settlements. Further, most people living in slums were either unemployed or had employment that was not stable. As a result, their income was equally unstable making them unable to live in formal housing, hence slums. This indicated that unemployment led to the growth of informal settlements. Population growth, which is high in the area, was also found to be a major factor in the growth of informal settlements in Bangladesh slum. This was because the population growth rate was high, and it was difficult to match the rapidly growing population in the slum area with corresponding provision of decent housing.

#### **CHAPTER FIVE**

# SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of the findings, discussions of those findings, conclusions, recommendations and suggests areas for further research.

#### 5.2 Summary of findings

This study was to investigate the factors influencing the growth of informal settlements in Bangladesh slum of Changamwe constituency. From an analysis and review of the research data and additional data gathered through focus group discussions a number of issues became apparent.

The first objective of the study was to determine the extent to which industrialization influences the growth of informal settlements. Data analysis, interpretation of interview and questionnaire responses from the key informants of the study revealed that industrialization has a great influence and effect on growth of informal settlements in Bangladesh. The respondents were of the view that demand of housing by the industrial workers could not meet the housing supply in the area. Most of them said that slums were the product of rapid urbanization and industrialization. These findings indicate that industrialization is a significant factor in the growth of informal settlements in the community. Informal settlements were the product of rapid urbanization and industrialization in that, most of the people working in the industries lived in the slums surrounding the many factories and industries due to their proximity to the industries. It must therefore be taken into account when developing an appropriate slum reduction and housing strategy in the community.

In regards to the second objective which was to establish how poverty influences the growth of informal settlements, responses from the various household heads and key informants revealed that for the problem of growth of informal settlements to be tackled, poverty needs to be tackled. About 87% percent of the respondents said that poverty was the contributing factor to where they lived whereas 13% of them responded in the negative.

The study reveals that the levels of poverty in the community were high and this contributed to the growth of informal housing in the community in that, as many respondents could not afford proper and decent housing due to their prohibitive costs, they opted for cheaper housing, and in this case, slums, hence leading to the continued growth of the same. Indeed the study revealed that the cost of proper housing in the community is prohibitively high as compared to their income.

On the aspect of the third objective of this study which was to assess how unemployment influences the growth of informal settlements, responses from the key informants and respondents of the study revealed that unemployment has a great influence in the growth of informal settlements in the community. Unemployment resulted to lack of, or limited income. As a result, people were not able to meet their basic needs, including shelter. This forced them to seek alternative housing which they could afford with their low on no income, hence settling in informal settlements and slums, thereby making them grow at a high rate. Indeed these findings indicate that unemployment and its associated problems contribute immensely towards the growth of informal settlements in the community.

The fourth objective of this study was to determine the extent to which population growth influences the growth of informal settlements. Data analysis, interpretation and questionnaire responses from the various household heads and key informants of the study revealed that high population growth has a significant impact on the growth of informal settlements. About 87% of the respondents said that the size of the family had an influence on where they lived and 13% said that family size did not play any role in their choice of residence.

Among most of the key informants it was noted that majority of the residents of informal housing had large families. Due to the large family sizes, the respondents had no choice but to live in cheaper, informal housing.

Population growth, if unchecked, coupled with the inability to match the rapid growth with provision of shelter for the growing population leads to establishment of alternative settlements, most of which are not planned. This occasions haphazard construction of houses on any available land, hence leading to increased informal settlements and slums

#### 5.3 Discussion of findings

This study has shown that industrialization, poverty, unemployment and population growth, all play a role in one way or another in augmenting the growth of informal settlements. From an analysis and review of the research data and additional data gathered through focus group discussions a number of issues become apparent.

The findings indicate that industrialization is a significant factor in the growth of informal settlements in the community. It must therefore be taken into account when developing an appropriate slum reduction and housing strategy in the community. Indeed this finding is in tandem with (UN-Habitat 2007), (Billah2012) and (Goheen 2007) who also express the same view. They are of the opinion that slum formation is closely linked to industrialization, economic cycles, trends in national income distribution, and in more recent years, to national economic development policies. Indeed the cyclical nature of capitalism, increased demand for skilled versus unskilled labour, and the negative effects of industrialization and urbanization – in particular, global economic booms and busts that ratchet up inequality and distribute new wealth unevenly – contribute to the enormous growth of slums. It is evident that industrialization and the growth of informal housing are closely linked.

Industrialization is the extensive organization of an economy for the purpose of manufacturing. It is a stage of economic growth where industrialization is identified as the process in which the requisite rise in the rates of capital formation and investment accrues, thereby permitting the take-off into self-sustained growth (Goheen, 2007). Though industrialization is a positive development in any society, it is accompanied by negative developments. Some of these may be the formation of informal settlements that provide residence for the people who work in these industries. The very existence of slums with their inhuman conditions and defacement of human rights proclaims the ingenuity and hollowness of this modern civilization (Parsons, 2010). The study noted that with increased industry levels in the community, many people have to work in them but their income cannot sustain better housing for them. This is the main cause for growth of informal settlement in the community. It therefore follows that for the problem of the growth of informal settlements to be tackled, the development of proper housing should be done simultaneously with that of industries in the community.

The second objective was to establish how poverty influences the growth of informal settlements. The study reveals that the levels of poverty in the community are high and this contributes to the growth of informal housing in the community. Several respondents were engaged in temporary employment and did not have sustainable income. Under such conditions, poverty levels in the community contributed to where most of the community members lived. This finding is in agreement with the views of (Sud, 2006), (UN, 2005) and (Billah, 2011) who are of the view that poverty creates slums and slums breed hopelessness and crime. According to them, the growth of large cities, particularly in developing countries, has been accompanied by an increase in urban poverty which tends to be concentrated in certain social groups and in particular locations in this case, informal settlements. The lack of appropriate programs to tackle poverty in the community has increased the problem of growth of informal settlements. Poverty is manifest in patterns of social relationships in which individuals and groups are denied access to goods, services, activities and resources which are associated with citizenship (ILO 1996). It is caused by the stagnation of productive forces and production over time and government policies and development measures which only help the rural rich to get richer and increase inequality in the community. Indeed lack of access to secure and safe housing is a central feature of urban poverty.

Solutions to poverty in the community should be found because through these then the problem of the growth of informal housing can be solved. People need to be able to afford proper housing so as to prevent the growth of informal housing in the community.

Further, the problem of unemployment must be taken into account while developing an effective strategy for tackling the growth of informal housing in the community since it contributes to the growth of informal settlements. This finding is in agreement with the views of (UNEP, 2002), (Fawzy, 2002) and (Wolf, 2011) who are of the view that the implications of rapid urban growth include increasing unemployment, environmental degradation, lack of urban services, overburdening of existing infrastructure and lack of access to land, finance and adequate shelter. It should be noted that the inability of cities to absorb the labour market has a negative impact on economic growth and poverty reduction, a trend that undermines the endeavours of UN member states to achieve the targets set by the Millennium Development Goals (UN-Habitat, 2007).

Indeed the study established that as unemployment in the community increases, so does the problem of growth of informal housing. Bangladesh like any other informal housing community is faced with high levels of unemployment and this has an impact on the growth of these informal settlements. The cities of Africa are fast becoming centres of crime. This is caused in large part by the high rate of unemployment especially among young people. In Kenya, those aged 20 to 29 represent 65% of the total unemployed (UN-Habitat, 2008). With such statistics then the problem of the growth of informal housing increases.

Among the greatest challenges facing the youth today, the most critical is unemployment. It should be noted that most unemployed youth lack appropriate skills and access to capital to enable them to start a business. Another factor is that most of the unemployed youth reside in urban slums making them vulnerable (Githu, 2007). Such a situation then greatly contributes to the growth of informal housing in the community. It follows therefore that for the problem of growth of informal housing to be effectively managed, solutions must be found for the ballooning unemployment numbers in the urban areas.

High population growth is another factor that has a significant impact on the growth of informal settlements. Population growth is the change in a population over time, and can be quantified as the change in the number of individuals of any species in a population using "per unit time" for measurement (UN-Habitat, 2008). This study established that for the problem of growth of informal housing in Bangladesh to be efficiently tackled, population growth in the area should be managed. It must be taken into account when developing an effective strategy for tackling the growth of informal housing in the community.

This finding is in agreement with the views of (UN-Habitat, 2008), (Hossain 2008) and (Sud, 2006). Due to the concentration of both domestic and foreign investment, cities have experienced massive migration from rural populations but a critical downside to this has been the dramatic rise in poverty and informal settlements to shelter this ever growing population.

The increase in the percentage of population residing in urban areas is attributable to three factors; the first factor is the rural-urban differential in the rates of natural increase. The second factor is migration from rural to urban areas and the third reason is the rapid development of towns (Chandrasekhar 2005). Population growth is a vicious cycle that is led by opportunities in the cities (leading to migration to the cities), poverty with low incomes, tendency to be closer to work hence occupying any land in the vicinity. Indeed with increased populations in Bangladesh slum this is the case. It follows therefore that for the problem of informal housing to be tackled adequately then population growth needs to be managed.

#### 5.4 Conclusions

This study investigated the factors influencing the growth of informal settlements in Bangladesh slum, Changamwe constituency. This was in relation to the fact that this particular informal settlement is rapidly growing and developing. The study specifically sought; to determine the extent to which industrialization influences the growth of informal settlements; to establish how poverty influences the growth of informal settlements; to assess how unemployment influences the growth of informal settlements and to determine the extent to which population growth influences the growth of informal settlements.

The study established that the industrialization of Mombasa County has a great impact on the growth of informal settlements. This is due to the fact that with the growth of industries in the County, majority of the workers in these industries get to live in the informal settlements surrounding the industries. It is recommended that while industries are being established, they should put in place programs to ensure that their workers housing needs are also taken care of, by means of building staff quarters for them.

The study also established that poverty plays a major role in the growth of informal settlements. This is due to the fact that majority of the residents of Bangladesh could not afford better accommodation due to high poverty levels.

Therefore for the problem of the growth of informal settlements in Changamwe constituency to be adequately tackled, then the problem of poverty in the community must be tackled effectively. This study also established that unemployment plays a major role in the growth of informal settlements. This is owing to the fact that majority of the residents of Bangladesh are either in temporary forms of employment or are not employed.

Indeed the problem of unemployment in the community must be solved if solutions to the growth of informal settlements in Changamwe constituency are to be found.

Finally the study established that rapid population growth influences the growth of informal settlements. This is due to the fact that the population of the area has increased greatly over the past period. The increase in population in the area has not matched the development of housing in the area. It follows therefore that for the problem of informal housing to be solved then the growth in the area population must be checked.

The researcher has argued in this report that the problem of the growth of informal settlements in Changamwe Constituency is caused by many factors. The study has also shown that the problems of industrialization of Mombasa County, poverty in the community, unemployment and population growth in Changamwe Constituency must be sufficiently addressed if the problem of the growth of informal settlements in the community is to be addressed. It is against this background that the recommendations below are made.

#### 5.5 Recommendations

Despite its limitations, this study should contribute valuable knowledge to the field of informal housing in general. It has offered suggestions on how to improve the housing in Bangladesh and other slums in general. In view of this it is hoped that this study will also influence the housing strategies and policies in the country. Basing generalizations on the findings of this study, the researcher recommends that:

- 1. The government should monitor industrialization levels in the various counties in the country so that housing development can be made and developed in tandem with the growth of these industries. This will ensure that the workers in these industries get access to proper housing in these counties
- Legislation should be created that will force the owners of various factories in the
  various counties to put up staff quarters for their workers. This is one sure way of
  ensuring that factory workers get to live in proper accommodation.
- Adequate measures should be placed to tackle the existing and growing problem of
  poverty in the country. Diminished poverty levels means that majority of the people
  will afford decent housing in the various counties.
- 4. The government should consider developing housing estates specifically targeted to the poor in the society. In the places where they exist, slum-upgrading programs should be undertaken and measures put in place to ensure that they are not taken over by the affluent and the corrupt in the society.

- The problem of unemployment in the community should be tackled effectively if the problem of informal housing is to be solved. Effective programs should be initiated to tackle this problem.
- 6. The government should consider giving housing subsidies to the poor so that they can afford to live in decent housing
- 7. Checks should be put in place to check on the ballooning population in the urban areas. Measures should be taken to ensure that family size numbers and in turn the population in the various informal housing settlements are sustainable.
- 8. Appropriate legislation should be formulated to decentralize various industries from the urban areas to rural areas. This will check the rural-urban migration which is responsible for the large population in the various urban areas.

## 5.6 Suggestions for further research

This study was on the factors influencing the growth of informal settlements, the case of Bangladesh slum, Changamwe constituency, Mombasa County.

With the decentralization of government services to the county level, further research needs to be carried out to investigate the impact of devolution and the establishment of devolved units on the growth of informal settlements.

#### REFERENCES

- African Population and Health Research Centre. (2002). Population and Health Dynamics in Nairobi's Informal Settlements. Report of the Nairobi Cross-Sectional Slums Survey. Nairobi.
- Baker, J., & Anchor, U. (2009). Meeting the challenge of urban poverty and slums. New York. World Bank Press.
- Becker, C. M., & Morrison, A. (1999). Urbanization in transforming economies: Handbook of regional and urban economics. Amsterdam. North-Holland.
- Benschop, M. (2002). Rights and Reality. Nairobi. UNON.
- Billah, M. (2009). Rising slums and role of NGOs. Chicago. University Of Chicago Press.
- Calderia, T. (2000). City of walls: crime, segregation, and Citizenship in Sao Paulo. Sao Paolo. Berkeley.
- Centre for Urban Studies. (1976). Squatters in Bangladesh cities: A survey of urban squatters in Dhaka. Chicago. University Of Chicago Press.
- Chandrasekhar, S. (2008). Multiple Dimensions of Urban Well-Being: Evidence from India. Workshop on Poverty Measurement and Analysis, African Population and Health Research Centre. Nairobi.
- Chittagong, K., & Chandrasekhar, S. (2005). Growth of Slums, Availability of Infrastructure and demographic outcomes in Slums: Evidence from India. Paper to be Presented during the session on urbanization In developing countries at the population Association of America Annual meeting. Philadelphia.
- Cohen, B. (1981). The new International Division of Labor, Multinational Corporations and Urban Hierarchy. London. Methuen.

- Cohen, B. (2004). Urban Growth in Developing Countries: A Review of Current Trends and a Caution Regarding Existing Forecast. *National Research Council*. Washington, DC. Elsevier Ltd.
- Dear, M., & Scott, J. (1987). Urbanization and urban planning in capitalist Society. London. Methuen
- Deng, X., Huang, J., & Rozelle, S. (2006). Growth, Population and Industrialization and Urban Land Expansion of China. In *Journal of Uchida Geographical Sciences*. (Vol. 12)
- Economist, & World Bank. (2000). Effects of Population Growth and Urbanization in the Pacific Islands. New York. World Bank press.
- Friedmann, J. (1995). Where we Stand: A Decade of World City Research. In Knox P., & Taylor P. J. World Cities in a world-system. Cambridge. Cambridge University Press.
- Githu, A. (2007). Urban Slums Youth Economic and Social Empowerment Project, Kenya. New York. World Bank Press.
- Goheen, P. (2003). Industrialization and the growth of cities in nineteenth-century America. Chicago. University of Chicago press.
- Government of Kenya. (2004). National Housing Policy for Kenya. Sessional Paper No. 3 of 2004
- Government of Kenya. (2005). Millenium development goals. In *Kenya needs & costs*. Nairobi. Ministry of Planning and National Development.
- Government of Kenya, & UNCHS. (2001). Nairobi Situation Analysis Consultative Report. Collaborative Nairobi Slum Upgrading Initiative. Nairobi. Government of Kenya, UN-HABITAT.
- Gulyani, S. (2006). Inside Informality: Poverty, Jobs, Housing and Services in Nairobi's slums. New York. Columbia University.

- Herr, H., & Karl, G. (2005). Estimating Global Slum Dwellers. Monitoring The millennium Development Goal 7, Target 11. Geneva. Global Urban Observatory and Statistics Section of UN-HABITAT
- Hossain, S. (2008). Rapid urban growth and poverty in Dhaka city. In Bangladesh e-Journal of Sociology. (Vol. 5)
- Kamau, G. R., & Devas, N. (2000). Poverty and Political Conflict in Mombasa. In *Environment and Urbanization*. (Vol. 12)
- Kingdon, G., & Knight, G. (2003). Unemployment in South Africa, Causes, Problems and Policies; Economic and social Research council.

  Oxford. Centre for the Study of African Economies University of Oxford and Department of Economics University of Oxford
- Koppel, T., & McGee, G. (1991). The Emergence of Desakota Regions in Asia: Expanding a hypothesis. In *The Extended Metropolis: Settlement Transition in Asia*. Honolulu. University of Hawaii Press.
- Montgomery, M., Stren, R., Cohen, B., & Reed, H. (2003). Cities Transformed: Demographic Change and Its Implications in the Developing World. Washington DC. National Academy Press.
- Mugenda, O. M., & Mugenda, A. G. (2003). Research Methods; Quantitative and Qualitative Approaches. Nairobi. African Centre for Technology Studies (ACTS) Press
- Nsambu, J. M. (2006). Urban Migration Heightens Housing Crisis. *The New Vision*. World Habitat Supplement
- Nyakaana, J. B., Sengendo, H., & Lwasa, S. (2011). Population, Urban Development and the Environment in Uganda: the Case of Kampala City and its Environs. Kampala. Makerere University, Faculty of Arts.
- Sud, H. (2006). Poverty and slums in India: Impact of Changing economic landscape. In *Journal of South Asia Analysis Group*. (Paper no.1769)

- Tester, K. (2012). Exercise Exercises and Land Tenure Insecurity in Subsaharan African slums. Harvard Model Congress, Asia. London. Havard press.
- UNEP. (2002). State of the Environment and Policy Retrospective. Geneva.

  UN press
- UN-Habitat. (2005). State of the World's Cities. Geneva. UN Press.
- UN-Habitat. (2006). Urbanization, Growing Slums and Global Change: a Challenge Commonwealth Countries Need to Address Urgently.

  Briefing paper Produced for the Commonwealth Civil Society Consultation. London. Marlborough House.
- UN-Habitat. (2008). 2<sup>nd</sup> African Ministerial Conference on Housing And Urban Development. Geneva. UN Press.
- UN-Habitat. (2009). Planning Sustainable Cities: Policy Directions. London. Sterling VA
- UN-Habitat. (2011). Urban World. Cities and Land Rights. Vol 3 Issue 1.
- United Nations. (1980). Patterns of Urban and Rural Population Growth.

  New York. United Nations.
- World Bank (2000). World Development Report 1999/2000: Entering the 21st Century. New York. Oxford University Press.

## Appendix I

#### LETTER OF TRANSMITTAL

SCHOOL OF CONTINUING AND DISTANCE EDUCATION
UNIVERSITY OF NAIROBI
MOMBASA CAMPUS
DATE
Dear Sir/Madam,
RE: DATA COLLECTION
I am a masters student pursuing the Degree of MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT course at the School of Continuing and Distance Education of the University of Nairobi.
As part of my course, I am required to collect data from the field and prepare a research project. I am therefore collecting data related to my research topic: FACTORS INFLUENCING GROWTH OF

The information I am gathering is purely for academic purposes and will be treated with utmost confidentiality.

INFORMAL SETTLEMENTS: THE CASE OF BANGLADESH SLUM, CHANGAMWE

Any assistance extended to me will be highly appreciated.

CONSTITUENCY, MOMBASA COUNTY, KENYA.

Regards,

EDWIN M. RIGHA

REG. NO. L50/62652/2010

**EDWIN MWACHARO RIGHA** 

## Appendix 2

#### RESPONDENTS QUESTIONNARE

#### INTRODUCTION

My name is Edwin Mwacharo Righa; I am a Masters of Arts student in Project Planning and Management at the University of Nairobi, School of Continuing and Distance Education. I am interviewing respondents here in Bangladesh slum in order to investigate factors influencing the growth of informal settlements.

#### CONFIDENTIALITY AND CONCENT

Would you be willing to participate?

No.....

Yes.....

You have been selected to participate in the study. Consequently, with your consent, you will respond to this questionnaire. I would like to assure you that the information you share with me will be treated with high confidentiality. Your name will not be written on this form, and will never be used in connection with any of the information you fill. You do not have to answer any questions that you do not want to answer, and you may stop filling the questionnaire at any time you want to. However, your honest answers to these questions will help us understand better the topic under research and will be highly appreciated.

SE	CCTION ONE					
1.	Personal Data			1		
1.	Gender (please tick	one)				
	a) Male	[]	b)	Female	[]	
2.	Marital status (pleas	se tick one)				
	a) Married	[]	b)	Single	[]	
	c) Divorced	[ ]	d)	Widowed	[]	

_									
							YES	NO	EXPLAIN
to	poverty b	y ticking (√) in	the boxes p	provided.			T		
		dicate the extent			with the	tollowi	ng state	ments	in reference
	Poverty								
SF	ECTION	TWO							
	e) Stud	ent		[]					
	d) I do	not work		[]					
	c) NGO	)		[]					
	b) Priva	ate employment		[]					
	a) Gov	ernment employi	nent	[]					
5.		tion (please tick of							
	·	graduate (diplom						[]	
		ergraduate (bach				•		[]	
		oma certificate (		f ordinary	diploma	a and eq	uivalent	ts)[ ]	
		ondary school cer						[]	
4.	_	level of educationary school certification		ick one)				[ ]	
	e) 66-75	year	[]						
	c) 46-55	years	[ ] d)	56-65 y	ears	[]			
		5 years		36-45 y	ours	,			

3. Age bracket in years (please tick one)

d)	Do you think this situation contributes to where you live?	
e)	With better or increased income would you move to better housing?	
ŋ	Are there any financial impediments to you getting better housing?	

# SECTION THREE

# 3. Unemployment

7. Please indicate the extent to which you agree with the following statements in reference to the activities by ticking  $(\sqrt{\ })$  in the appropriate space.

		Yes	No	Not fully	Explain
a)	Are you currently employed?				
b)	Does the nature of your employment permit you to live in decent housing?				
c)	Can you term your employment status as being permanent?				
d)	Have you ever been between jobs?				
e)	Did this status affect your housing?				

	n	Have you tried to get any other type of employment apart from what you currently do?
	g)	Do you think there are appropriate job opportunities in the community for you?
4.	Po	opulation Growth
	6.	How is the population in terms of numbers in the area where you stay?
	Lo	ow [ ] High [ ] Very high [ ] Medium [ ]
	Ex	plain
	7.	Do these numbers influence the type of housing where you live
		Yes [ ] No [ ]
		Explain
	8.	Do you think there is appropriate housing for all in the community?
		Yes [ ] No [ ]
		Explain
	9.	In your opinion is there appropriate government or otherwise programs for
		improving the housing in the community?
		Yes [ ] No [ ]

Thank You.

#### Appendix 3

## **KEY INFORMANTS QUESTIONNARE**

#### INTRODUCTION

My name is Edwin Mwacharo Righa; I am a Masters of Arts student in Project Planning and Management at the University of Nairobi, School of Continuing and Distance Education. I am interviewing respondents here in Bangladesh slum in order to investigate factors influencing the growth of informal settlements.

#### CONFIDENTIALITY AND CONCENT

Would you be willing to participate?

You have been selected to participate in the study. Consequently, with your consent, you will respond to this questionnaire. I would like to assure you that the information you share with me will be treated with high confidentiality. Your name will not be written on this form, and will never be used in connection with any of the information you fill. You do not have to answer any questions that you do not want to answer, and you may stop filling the questionnaire at any time you want to. However, your honest answers to these questions will help us understand better the topic under research and will be highly appreciated.

Ye	es No	•••	••••	••			
SE	ECTION ONE						
1.	Personal Data						
**	1 Ci 30hai Data						
1.	Gender (please tick one)						
	a) Male	[	]	b)	Female	[	]
2.	Marital status (please tic	k o	ne)				
	a) Married	[	]	b)	Single	[	]
	c) Divorced	[	]	d)	Widowed	[	]

3.	Ag	e bracket in years (ple	ase tick	cone	)	200				
	a)	26-35 years	[]	b)	36-45 years	[]				
	c) ·	46-55 years	[]	d)	56-65 years	[ ]				
	e)	66-75 year	[]							
4.	Hi	ghest level of education	n (plea	se tio	ck one)					
	a)	Primary school certif		[	]					
	b)	Pecondary school cer	tificate				[	]		
	c)	Diploma certificate (	inclusiv	e of	ordinary diplor	na and equivalen	ts)[	]		
	d)	Undergraduate (bach	elors ar	nd eq	uivalents)		[	]		
	e)	Postgraduate (diplom	ıa, mast	ers,	PHD)		[	]		
5.	Oc	cupation (please tick of	one)							
	a)	Government employs	ment		[]					
	b)	Private employment			[]					
	c)	NGO			[]					
~=						13				
SE	CT	ION TWO								
In	dust	rialization								
Ple	ease	answer the following	questio	ns						
	6.	What is your level of	`awareı	ness	and familiarity	with industrializa	ition	in Mombasa?		
	Ex	cellent [ ]		Go	od [ ]	Fair [ ]	P	oor[]		
	I d	o not know [ ]								
	7.	Where do most of the	e worke	rs in	the various inc	dustries in Momb	asa l	ive?		
		Proper residential areas [ ] Informal housing [ ]								
		Rural areas [ ]								
	8.	In your opinion do	you th	ink	this has contri	ibuted to the pro	oble	m of informal		
		housing in the town?								
	Ye	s [] No								

	Explain
	9. Are there viable solutions to the problem of industrialization and informal housing
	in Mombasa?
	Yes [ ] No [ ]
	Explain
	10. Has industrialization and the growth of factories in the town contributed towards
	poverty in the region?
	Yes [ ] No [ ]
	Explain
	11. Does the location of the various industries in the town contribute to the problem of
	informal housing?
	Yes [ ] No [ ]
	Explain
	12. How can the industries assist in the problem of informal housing in the town?
SE	CCTION THREE
Po	verty, unemployment, population
	13. Does poverty play a role in the type of housing people live in Bangladesh?
	Yes [ ] No [ ]
	Explain
	14. Is the cost of proper housing prohibitive to all residents in the area?
	Yes [ ] No [ ]
	Explain
	15. Will solving the problem of unemployment in the town tackle the problem of
	informal housing in the area?
	Yes [ ] No [ ]
	Explain
	16. Does family size in terms of general population lead to informal housing?
	Yes [ ] No [ ]
	Explain

16. If the problem of population size is tackled can it help solve the issue of informal
housing?
Yes [ ] No [ ]
Explain
17. Are there appropriate government programs tackling the problem of informal
housing?
Yes [ ] No [ ]
Explain
18. Are these programs sustainable and appropriate?
Yes [ ] No [ ]
Explain
19. What are the biggest impediments to these government programs?

Thank You.