

**PROJECT INTERVENTIONS AND SLUM IMPROVEMENT IN GHANAIAN  
CITIES: A CASE STUDY OF KUMASI METROPOLITAN AREA**

**by**

**Anthony Asamoah**

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## DECLARATION

I hereby declare that this submission is my own work towards the MSc and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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Anthony Asamoah (PG1088207)  
(Student)

.....  
Signature

.....  
Date

Certified by:

Mr. Clifford Amoako  
(Supervisor)

.....  
Signature

.....  
Date

Certified by:

Dr. Yaw Nsiah- Peprah  
(Head of Department)

.....  
Signature

.....  
Date

## **ABSTRACT**

Rapid urbanization in Africa comes with myriad of problems including slum growth. Factors such as rural-urban migration, and weak institutional and regulatory framework in the management of land in the cities are some of the causes of slum growth. The proliferation of slums changes not only the urban form and structure, but it also exacerbates poverty, housing problems, inequality and social exclusion in the cities. This poses socio-economic and developmental challenges to the management of the city, and this is the problem which the study investigated taking Kumasi as a case study.

The study was guided by the following objectives; the examination of the socio-economic and spatial structure of slums and the assessment of the efforts being made towards slum control and urban growth management. The study further sought to examine the challenges associated with slum control efforts and based on the challenges, recommendations were made towards slum control and urban planning and management.

A case study method was adopted in which the Kumasi metropolis was chosen to facilitate the ease of data collection. Respondents were selected through a simple random sampling technique to gather household data using structured questionnaires from four purposively sampled slum communities of Asawase, Aboabo, Oforikrom and Anloga all in the Kumasi metropolis. Institutional survey involving the Kumasi Metropolitan Assembly (KMA), Ghana Water Company, Electricity Company of Ghana, the Department of Urban Roads, among others was also done.

The study identified that slum dwellers are mainly rural-urban migrants, and it was thus revealed that 50.9 percent of them are females. The informal sector employs about 71 percent of the slum dwellers and that 60 percent of the people employed in this sector are poor due to low earnings. Only 11 percent of the sampled population have any form of a tertiary education.

Recommendations were made to help resolve the challenges posed by slum growth. Some of these include the need for KMA to reduce her overreliance on the external sources of funding for slum control projects to make them successful, squatting on marshy areas and other unauthorized locations should be made a punishable offence and the house-to-house waste collection in the slum communities should be intensified to help address the worsening sanitation problem in the slum.

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## **DEDICATION**

I dedicate this thesis to my daughter, Emmanuella Ohenewaa Asamoah. Baby, you give me joy in my heart. Ever since you were conceived, great things have happened to the family and they continue to happen. So if today this thesis has reached its successful completion, the entire family says it should be dedicated to you. May God bless you and the entire family.

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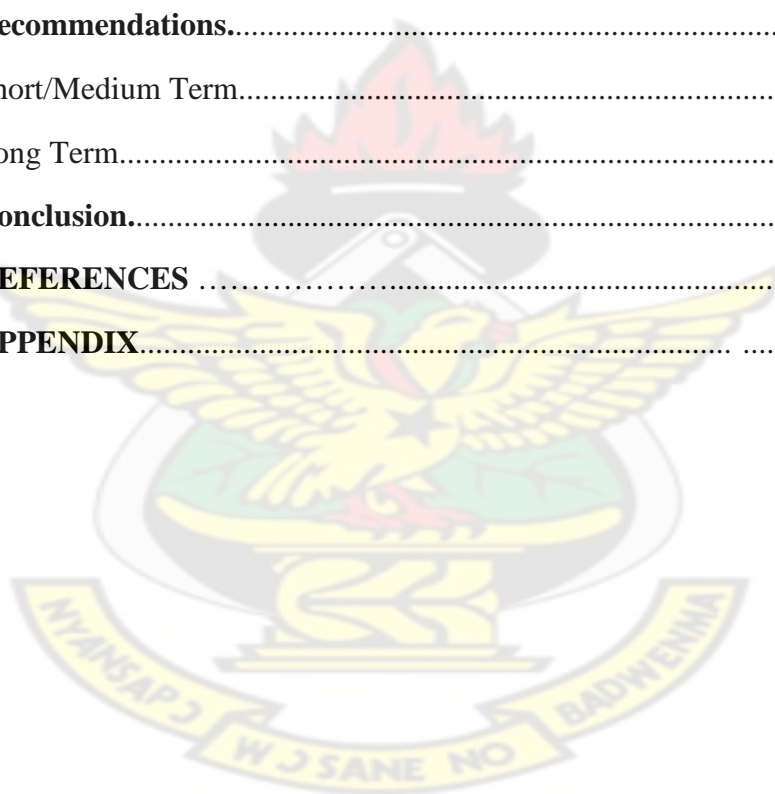
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## LIST OF ACRONYMS



CBD-	Central Business District
CPF-	Central Pension Fund acronyms
CWS-	Cities Without Slums
DUR-	Department of Urban Roads
ECG-	Electricity Company of Ghana
EU-	European Union
GCMA-	Greater Cairo Metropolitan Area
GAIT-	Government Accountability Improvement Trust
GIS-	Geographic Information System
GMT-	Greenwich Mean Time
GSS-	Ghana Statistical Service
GWCL-	Ghana Water Company Limited
HDB-	Housing Development Board
IDAs-	International Development Agencies
KMA-	Kumasi Metropolitan Assembly
KNUST-	Kwame Nkrumah University of Science and Technology
KVIP-	Kumasi Ventilated Improved Pit Latrine
MDGs-	Millennium Development Goals
MPO-	Metropolitan Planning Officer
SIF-	Social Investment Fund
SME-	Small and Medium Scale Enterprises
T&CPD-	Town and Country Planning Department
UESP-	Urban Environmental Sanitation Project
UN-	United Nations
UN-Habitat-	United Nations Settlement Programme
USAID-	United States Agency for International Development

## **CHAPTER ONE**

### **URBANIZATION AND SLUM DEVELOPMENT: PROBLEMS AND KEY ISSUES**

#### **1.1 Introduction**

Population pressure in Africa comes not only from reproduction but also from migration to the urban areas from the country side as well. African governments live in cities and, not surprisingly, their policies favour the cities, hence the swelling up of the urban populations and city sizes in Africa (Timberlake, 1991).

In 1950, Cairo was the only city in Africa with a population of over one million people. In 1980 however, there were about 19 cities in this category (Timberlake, 1991). As at 2001, there were 41 cities in Africa with population of more than one million inhabitants, and this is expected to increase to 70 million by 2015 (UN Population Division 2001).

Rapid urbanization in Africa comes with myriad of problems. Carter (1981) outlined the problems of urbanization as alienation, traffic congestion, pollution, vulnerability and slum growth. Hardiman and Midgley (1982), also identified some of the negative effects of urbanization which raises the need for planning and efficient urban management as poverty, inadequate housing, homelessness, erratic sprawl of economic activities on public spaces, urban violence, waste management problems, and poor access to basic infrastructure and services.

Today, slum settlements represent about one-third of the urban population in all developing countries and in many cases, they account for more than 60% of the urban total. During the late 1980s, about 72 out of every 100 new households established in the urban areas of developing countries were located in shanties and slums. In Africa, the number was 92 out of every 100. Most of the settlements are without clean water, sewage systems or electricity. For example, Metropolitan Cairo is attempting to cope with a population of about 14 million people with a water and sanitation system built to serve only 2 million people 30 years ago (Todaro and Smith, 2006).

Again, the number of squatters in some cities the world over has reached alarming proportions. In 1959, for example, Delhi-India was estimated to have 200,000 squatters, forming 13% of its population, and in the same year the 100,000 squatters of Kuala Lumpur formed 20% of that city's population. This phenomenon is not restricted to Asia. The shanty towns of Latin America are famous (or infamous). These are the Favelas of Brazil, the Villas

de Miseria of Argentina and the Barrios of Venezuela. Also the shanty towns of some African cities – The Bidonvilles of the former French colonies are very notorious.

The UN-Habitat (2003) in its report has indicated that since the 1950's, the urban population living in slums has continued to increase in the cities of developing countries. The report further indicated that 78.2% of urban dwellers in developing countries now live in slums and the trend does not show any sign of slowing down.

The implications of this trend on the planning of the cities include among other things the difficulty in the enforcement of planning regulations in the cities to ensure orderly development. Again, the situation creates real difficulty for resource mobilization and distribution in the cities. This research therefore is an attempt to investigate into the growth of slums in the urban areas of Ghana and the development issues associated with them, taking Kumasi as a case study.

## **1.2 Problem Statement**

Since the 1950s, the number of urban population living in slums has continued to grow in the cities of developing countries the world over. Shanty areas perhaps pose the most serious problems to the Local and Metropolitan Authorities of the developing world cities. For instance, the UN-Habitat in 2003 stated that 99.4% of urban dwellers in Ethiopia, 99.1% of urban dwellers in Chad and 98.5% of urban dwellers in Afghanistan were slum dwellers. (Carr,1987). It is not surprising therefore that a recent survey conducted by the UN-Habitat in 2006 indicated that between 40 and 70% of urban dwellers in developing countries live in slums. This poses serious challenge to city authorities in developing countries.

The situation in Ghana also follows the global trends. Ghana has four primate cities, two of which, Accra (1,658,937) and Kumasi (1,170,270) have a population of over one million each. Tamale (202,317) and Takoradi (175,436) follow in that order. In all, the four cities have a total population of 3,206,960, constituting 17% of the total population of Ghana (18,912,079) (Ghana Statistical Service, 2000).

The four cities continue to attract more people from the countryside. This gives more credence to the argument made by Cox (1939) that, once a city is ahead, it is almost impossible for others to catch up, since as he puts it, advantages breed more advantages, and in so far as citizens are free to move, many will choose the primate cities. Census data in



Ghana indicate that the proportion of urban population has increased from a low of 33% in 1960s to 43.8% by 2000 (Ghana Statistical Service, 2000).

The implications of the rapid urbanization in the cities of developing countries, is that governments and City Authorities will have a difficulty of mobilizing adequate resources for development in order to strengthen the contribution of the cities towards economic growth, social development and alleviation of poverty (Adarkwa and Post, 2001).

This situation calls for proper urban planning, which aims at improving the spatial organization of the city to help it adequately perform its economic and social functions. This is done through improvements in the organization and functioning of Local Government, the management of land, and the provision of infrastructure both in quantity and in quality (Adarkwa and Post, 2001). Unfortunately, very little enforcement of planning regulations is done in the cities and housing provision seems to be beyond the capacity of the Metropolitan Authorities.

The implication of the foregoing is the growth of slums in the cities. This is because the rural-urban migrants do not have the resources to acquire land for shelter in the cities. They therefore make use of the marginal or less valuable urban lands such as riverbanks, steep slopes, dumping grounds, abandoned or unexploited plots, near industrial areas and market places, low lying areas, wet lands, among others. These sites normally do not cost the slum dwellers anything and they are able to secure them almost immediately as they arrive in the city.

Considering the weak institutional and regulatory framework in the management of land, migrants settle for a long time without being noticed by the City Authorities, and they multiply in number until their existence begins to pose social and developmental challenges to the city and its inhabitants and the nation as a whole. Slum growth has therefore become a problem which affects all and therefore needs urgent attention, since it has implications on the planning and management of our cities (Adarkwa and Post, 2001).

In addition, the proliferation of slums, associated with the lack of security of tenure is changing not only the urban form and structure but also, more importantly, is exacerbating poverty, housing problems, inequality and social exclusion in most cities of developing countries. This is the problem which the study seeks to investigate, taking Kumasi, a major city with some manifestations of slums as a case study.

### 1.3 Research Questions

The discussion thus far raises a number of questions which require answers. As a result, the study aims at providing answers for such questions which include the following.

- What is the socio-economic and spatial structure of slums in Ghanaian cities?
- What efforts are being made to control slum development?
- What are the main challenges to slum control in Ghanaian cities?
- What should be the planning and policy response to slum control in Ghana?

### 1.4 Research Objectives

The broad objective of the study is to examine slum growth and the developmental challenges it poses to urban planning in Ghanaian cities. The study therefore sought to achieve the following specific objectives.

- ◆ To examine the socio-economic and spatial structures of slums in Ghanaian cities;
- ◆ To assess the efforts towards slum control and urban growth management in Ghana;
- ◆ To examine the challenges associated with slum control efforts in Ghanaian cities;
- ◆ To, based on the above, make recommendations towards the control of slums and urban planning and management in Ghana.

### 1.5 Justification of the Research

The study is an assessment of the past urban planning strategies which has led to slum growth in the cities of developing countries in general, and Ghana in particular. It also involves gathering first hand information from both primary and secondary sources to ascertain the manifestations of the phenomenon and how it is being addressed in the Kumasi Metropolis. The findings shall be put at the disposal of students and other researchers in urban planning for reference purposes, hence it will add to knowledge.

Again, the research serves as a spring board to generate interest for further research into the other aspects of slum growth in Ghanaian cities. This stems from the fact that slum growth is a multifaceted phenomenon and no one research is capable of addressing it in full. For instance, the contribution of political instability, natural disasters civil unrest and the implementation of the Structural Adjustment Programme among others to slum growth in the



cities of developing countries were not discussed in this study but are known to have played significant parts for slum growth in many developing countries.

Finally, the study contains an analysis of data collected through a field survey which makes available findings which are information-rich and could assist in urban planning and slum control in Ghana. Since effective planning is based on the availability of relevant information, the research makes recommendations for shaping slum control policies in the Kumasi metropolis.

### **1.6 Scope of the Research**

Geographically, the research covers the growth of slums in the Kumasi metropolitan area. However, the research was narrowed to four specific slum communities of Aboabo, Oforikrom, Asawase and Anloga in the Kumasi metropolis.

The Kumasi metropolis was chosen because it is the second largest city in Ghana. Again, it attracts rural- urban migrants due to its location as a commercial centre linking the northern and the southern sectors of the country.

In terms of contents, the study covers the socio-economic characteristics, household characteristics, housing conditions, access to basic household services, slum control efforts in the selected communities and the challenges associated with slum control.

### **1.7 Limitations of the Research**

The study had some limitations regarding its data collection and analysis. These limitations emanated from the respondents and their personal biases and institutional inefficiencies which affected the study in diverse ways.

In the first place, some individuals were suspicious of the interviews and were therefore reluctant to co-operate and to disclose information, especially those on household sizes and room occupancy since they felt embarrassed to disclose them. On few occasions some people even refused to respond to the questions and they had to be replaced by other household heads who were willing to provide the information.

Again, the institutional survey was a difficult task to undertake. The sampled officers from the various institutions were too busy to provide the information on time. Uncountable movement to and fro their respective offices were made before the data could be gathered from them. Apart from the above, the data required from the institutions were not kept in a

presentable form to facilitate easy accessibility and analysis. This contributed in part to a delay of the study.

The biases of some of the respondents based on the fear that the outcome of the interview may lead to their eviction from their homes was also a challenge to the study. This negatively affected the level of cooperation of some of the respondents which was manifested in the responses some of them gave to some of the questions.

The outcome of the study however, could not be affected negatively by the limitations since the data were properly coded and interpreted. This helped to reduce the impact of the limitations on the research outcome.

## **1.8 Organization of the Report**

The research has been organized into five chapters. The first chapter introduces the research, identifies the key problem under investigation and asks the relevant research questions. It further states the specific objectives for the research, defines its scope, gives a justification for the topic and outlines the limitations of the research. This chapter is relevant to the study because it puts the study into perspective and helps to check deviations.

The second chapter presents a review of relevant literature on slum growth in cities of developing countries, definition of related terms, historical review of slum control programmes and some selected case studies on slums. This chapter provides the theoretical and historical information needed to carve a methodology for the research.

Chapter Three contains the research design adopted, the data requirement and the source of the data, the data collection tools employed, the sampling technique, the key data variables and the framework for data analysis and reporting. This chapter provides a guide as to the conduct of the field survey.

The fourth chapter gives a brief background of Kumasi and the selected slum communities. In this chapter, data collected from the field were analysed in terms of the socio-economic and spatial manifestations of slums in the selected slum communities in the Metropolis. This is a very important chapter in the research because it provides answers to the research questions and forms the basis for the recommendations made for slum control.

The fifth chapter constitutes the key findings of the study and a set of recommendations and a general conclusion for the study. This is very relevant to the study because it discloses information which hitherto was unknown and hence adds to the existing knowledge.

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## **CHAPTER TWO**

### **SLUM DEVELOPMENT AND CONTROL IN DEVELOPING COUNTRIES**

#### **2.1. Introduction**

This chapter presents a review of relevant literature on the growth of slums, its control and the urban planning implications, the location of slums in the cities of the Third World, and the historical review of slum control programmes implemented in the cities of the Third World. In addition, there is a review of two case studies on slum growth and control and a summary of the lessons learnt from the review of the literature.

#### **2.2 Definition of Relevant Terms**

The key terminologies to be defined in this section include; slum, squatter settlement and shanty towns. These terms have been elaborately defined and reviewed below to help put the research into a right perspective.

##### **2.2.1 Slum**

Hutchinson (1997) has defined a slum as an area of poor quality housing, typically found in the inner city in rich countries and in other parts of cities in poor countries. He observed that, slum housing is usually densely populated, in a bad state of repairs and has inadequate services including poor sanitation, poor supply of electricity, irregular water supply among others, and its inhabitants are often poor with low rates of literacy.

This definition of slums indicated above, places more emphasis on housing quality for the determination of whether or not a community is a slum. It further provides a distinction between slum locations both in the developed and the developing countries, to say that in rich countries, slums are located in the centre of the city, while in poor countries, slums can spring up anywhere, but mostly, outside the city centre.

Turkstra and Raithelhuber (2004), also described a slum as any settlement which lacks anyone of the following indicators; access to water and sanitation, sufficient living area, a housing with durable materials, non-hazardous location and tenure security. This definition carries more details and can constitute a working definition since it contains criteria for the determination of what constitutes a slum.

UN-Habitat (2003), in its attempt to define what constitutes a slum, described a slum household as a group of individuals living under the same roof that lack one or more of the following conditions: access to potable water, access to sanitation, secured tenure, durability of housing and sufficient living area.

Access to potable water, access to sanitation, secured tenure, durability of housing and sufficient living area constitute the key variables for the identification and measurement of the manifestations of slums in cities. This idea is conveyed in the definitions given by both Turkstra and the UN Habitat as they provide measurable criteria for slum manifestations and control.

### 2.2.2 Squatter

Carter (1981) has defined squatter settlement as “any housing which contravenes existing legislations on the occupation of land or the construction of dwellings. Hutchinson (1997) has made a distinction between squatters and slum dwellers, he observed that, slum dwellers are legal occupants of sub-standard buildings, while squatters are illegal occupants of buildings or land in the city.

Hartshorn (1992) has also described squatter settlement as the nonconventional housing, constructed by the urban poor-predominantly the rural migrants, without government authorization and frequently, illegally on lands they do not own.

The use of the term ‘squatter’ connotes illegality and their inhabitants usually hide their identity, making it difficult for planners to gather enough data about them for planning purposes. Squatters mostly develop as a result of the homelessness and the joblessness of the rural-urban migrants. They settle on any unoccupied space available, ply their trade and eventually use there as their homes without the notice of the city authorities, and within a short time, they multiply in numbers so it becomes difficult to eject them.

### 2.2.3 Shanty Town

Hutchinson (1997) has defined a shanty town as a group of unplanned shelters constructed from cheap or waste materials such as cardboard, wood and cloth. He observed that, shanty towns are commonly located on the outskirts of cities in poor countries, or within large cities derelict land or near rubbish tips. In addition, land available for shanty towns are often of poor quality, for example, too steep or poorly drained. These areas often lack such services as running water, electricity and sanitation, and they are high density developments.



The use of the term shanty town is preferred to the use of squatter, in that the shanty dwellers are considered legal occupants and are not afraid of ejection, therefore, enough data can be collected from them to help in planning. This explains why tenure security is very crucial in dealing with slums in the cities.

### **2.3 Situating Slums, Squatter and Shanty Towns in the Urbanization Process**

Slums, squatters and shanty towns are identifiable in cities, based on the durability of housing materials. Often, slum homes are built with poor quality materials, such as wood, mud and scrap materials which lack the capacity to protect their occupants against the vagaries of the weather.

Again, most slum homes lack tenure security. This emanates from the fact that slums are generally sited on lands which are unsuitable for human habitation such as marshy areas, marginal lands, sloppy and degraded lands which normally are left to lie fallow. Also most of the inhabitants of slums did not buy the land and those who bought them did not buy from official sources. Others though legal occupants of their homes, have built unauthorized extensions which go contrary to planning regulations.

Also, most slum homes lack sufficient living areas that allow for good ventilation. This is manifested in the occupation of rooms that are too small and poorly aerated, room occupancy of over three people per room on the average, no living rooms and without spacious forecourts. The houses are so close to each other that even walking in between them is difficult. This makes slum areas hazardous for human habitation.

Most slum areas are poorly served with utility services such as water and sanitation, access roads, electricity, health facilities among others. This exposes the people to diseases and infections which are not very common in other parts of the city.

The process of slum development starts with squatter settlements, where some few people, mostly rural-urban migrants take advantage of the laxity in the enforcement of planning regulations in the city to embark on illegal settlement on lands they do not own. If the city authorities fail to act quickly, their relatives and friends join them and their number increases to a point where they form a town. Since a town of this nature is not planned, the buildings below acceptable standards, they are referred to as 'Shanty Towns'. At this stage, the community grows faster and becomes the first point of entry into the city by rural-urban

migrants. It therefore becomes a heavily populated sub- standard community located outside but sometimes close to the CBD called a 'Slum'.

The existence of slums fuels the process of urbanization since they provide cheap accommodation for more people from the rural areas who migrate to the city on a daily basis in search of non-existing jobs. This situation has implications for the planning and management of the city because their populations increase on a daily basis without a corresponding increase in the city resources.

## **2.4 Location and Physical Characteristics of Slum Areas.**

Slums in the cities of developing countries have developed different structures from that of the cities in the developed countries. In the developed countries, slums mostly develop at the city centre, unlike the developing countries where slums develop outside the city centre. In both cases, they consist of sub-standard and dilapidated dwellings which are poorly served with basic social infrastructure (Sietchiping 2005). The various locations and characteristics of slums in urban areas are discussed below.

### **2.4.1 Functional Zones of the city**

Five functional zones of the cities in developing countries have been outlined to show their deviation from the cities of the developed countries to explain in part why slums are major phenomenon of the urbanization process in cities of developing countries.(Bradshaw, 2000).

The first of the functional zones is the Central Business District (CBD): This is similar to those of the Western European cities. It is located at the centre of the city where all roads converge. It serves as the administrative and commercial centre of the city, except that, congestion and competition for space are greater in the cities of the developing countries due to poor planning.

After the CBD, is the 'Inner Zone', where the wealthy land owners, merchants and administrators of the developing countries live in large and luxurious homes, around the CBD. Though, the conditions of some of these buildings might have deteriorated with time, the well-off have continued to live in this inner zone, often in high security, high-rise apartments. This is different from the developed countries, where slums are usually located in the Inner Zone and are popularly referred to as the Inner City (Bradshaw, 2000).

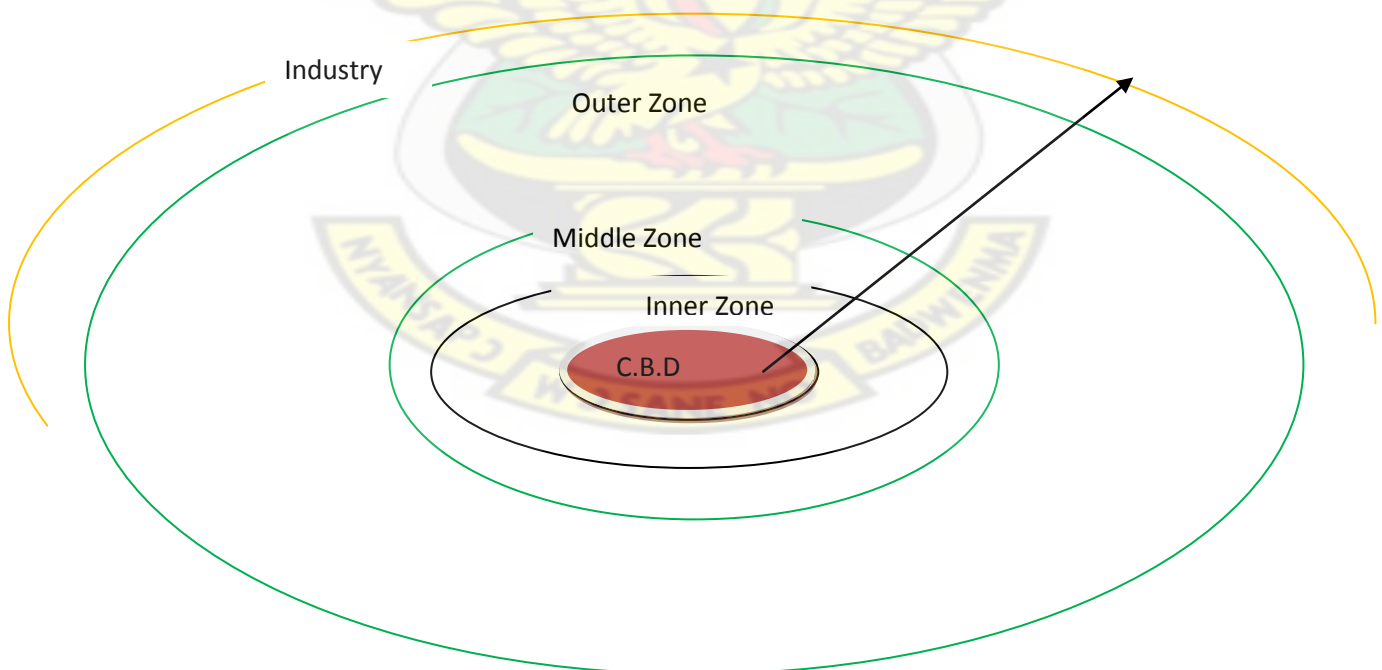


The Middle Zone follows, and this is similar to the cities of both developed and developing countries. It provides the in-between housing, except that, it is of much poorer quality in the developing countries. The location of the well-off in the Inner Zone and the Middle Zone makes it difficult for the poor to compete with them for space in these locations. The poor therefore finds solace in the Outer Zone where they multiply and live in sub-standard dwellings in slums to be employed by the well-off close by.

Immediately after the Middle Zone is the 'Outer Zone'. However, unlike that found in the cities of the developed countries, the location of the lower class zone is reversal as the quality of housing decreases rapidly with distance from the city centre. This is where migrants from the rural areas live, usually in shanty towns, which lack basic amenities.

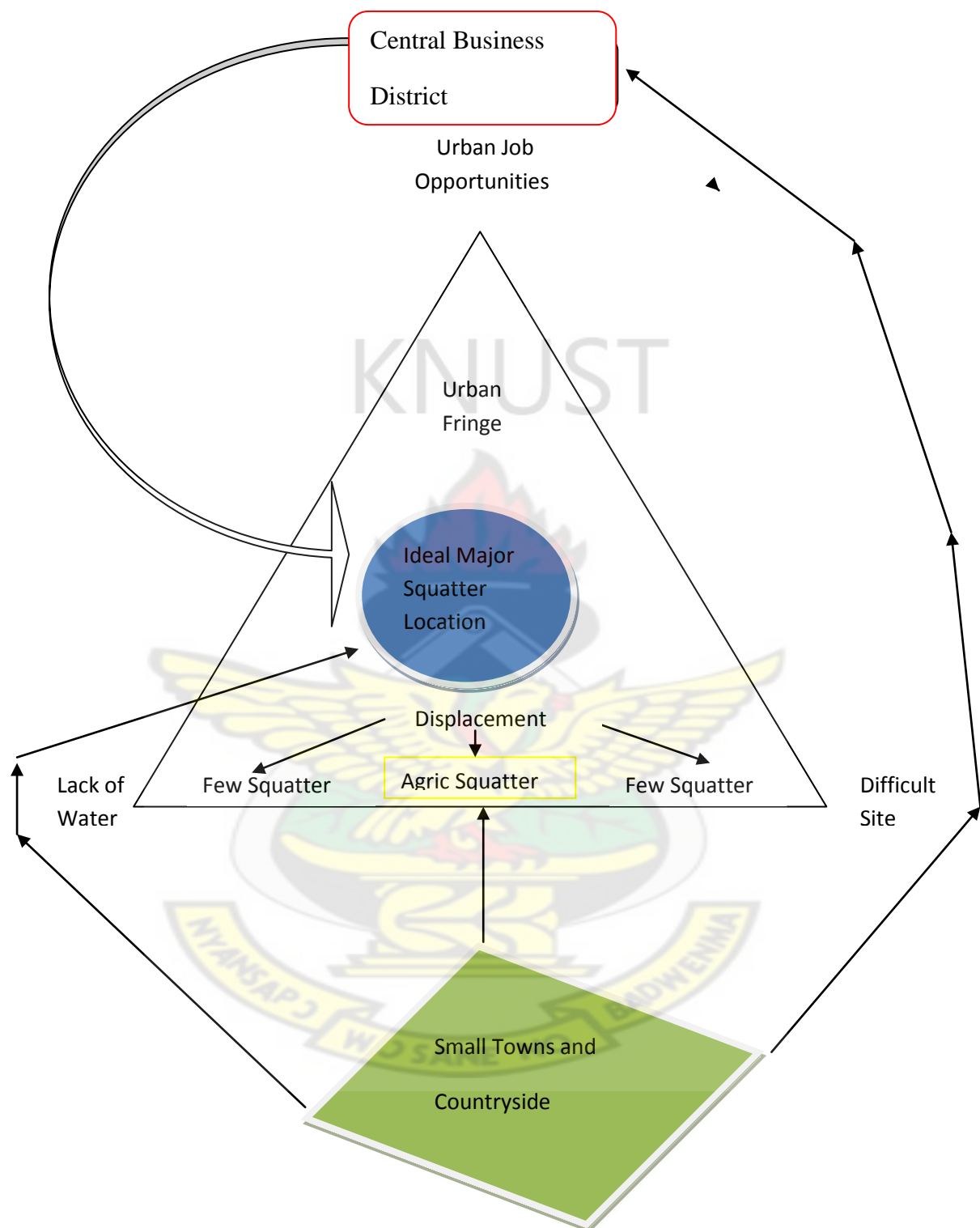
The last in the zones is the 'Industry': This has either been planned within the inner zone or has grown spontaneously along main lines of communication leading out of the city. This process also fuels urbanization and slum growth since it encourages urban sprawl so that before the city authorities become aware, slums have already sprang up. Figure 2.1 below shows the functional zones diagrammatically.

Fig. 2.1 Location of Slum Areas in Cities of Developing Countries



Source: Adapted from Waugh ( 1995) Geography, An Integrated Approach (2<sup>nd</sup> Ed.), Page 285

**Fig 2.2 Slum Development Process**



**Source:** Adapted from Carter (1981) The Study of Urban Geography: Page 399

Carter (1981) has argued that rural-urban migration takes place, both characteristically to the Inner City areas of reception, as well as to the periphery which is the 'Ideal Squatter Location'. Fig 2.2 above is a diagrammatic representation of the processes of rural-urban migration and slum formation in the urban areas.

As the central city expands, those least able to meet the rising cost of rent, are pushed to the periphery and they are continually displaced into the worsening environments in terms of water access and site conditions, such as steep slopes, marshy areas and open spaces in the Outer Zone. He argues that slums start with few squatters and later grow to become a big squatter community. This explains why in the Third World, slums and squatters are located in the outer zone of the city and not in the Inner Zone as it is in the developed countries.

Based on a study conducted in Jamaica, Carter (1981) proposed four stages of development of slums and shanty towns as follows: the initial occupation stage- also known as squatter settlement, the transitional stage- popularly called shanty towns, the stage of attaining secure tenure- the Slum, and the stage of absorption- an upgraded slum community. These stages of slum development suggests a gradual change from an initial state of insecurity and lack of organization, to a gradual achievement of a feeling of permanence and this is accompanied by the improvement of dwellings and gradual establishment of small businesses, so that eventually, the settlement becomes part of the city.

The location of slums mostly close to the CBD, a market area or adjacent to a high class residential area is a confirmation of 'the centralization of residence' being inversely related to socio- economic status. He postulated and demonstrated that if households had the same location rent functions, the same transportation cost function, the same space preference, and the same valuation of time; but different incomes; the length of a household's journey to work would increase as an increasing function of income (Carter, 1981).

The study thus concluded that workers employed in higher income occupations and working in the inner rings, tend to make longer journeys-to-work by residing in the outer rings. On the other hand, lower income workers mostly make short journeys to work and resided mostly within the workplace ring or in the nearby rings.

It is therefore not surprising that most slums are located close to high class residential areas. This is because the slum dwellers are mainly low income workers who prefer to live closer to their places of work. Many of the migrants do not have employable skills and are mostly employed in the informal sector by the inhabitants of the high class residential areas. Their dwelling places which are slums are therefore mostly built close to the high class residential areas or the market or industrial areas where they are employed.

## **2.5 Social Characteristics of Slum Dwellers**

Four basic types of slum residents can be identified; these are the 'urban villagers', the 'cosmopolites', the 'trapped and downward mobile' and the 'deprived' (Clark, 1982). However, this study will focus on the social characteristics of the 'Urban Villagers', since that is the most well documented and falls in line with the study. They are so called because they are members of small, intimate and often ethnic communities based upon interwoven kinship networks and a high level of primary contacts with familiar faces.

The characteristics of urban villagers and their ways of life were described by Gans in his study of the residents of West End Boston in 1962 which was cited in Clark (1982). He argued that the slum area is populated by immigrants from diverse ethnic backgrounds both national and international. Their common features include; low incomes, absence of occupational skills and qualifications, poor housing which is manifested by dilapidated state of the buildings, garbage on the streets, among others. It is a very complex social relationship, as there is a friendly, intimate and close-knit community, reminiscent of that which exists in small towns and rural areas. The family remains a major component in their social organization, and religion retains its hold on the people.

Between groups, common residence, sharing of facilities and the constant struggle against absentee landlords create enough solidarity to maintain a friendly spirit. Although for many families, problems of unemployment, finance, illness, education and bereavement are common, but neighbours and friends are always on hand to provide assistance and support. The characteristics of slum dwellers in West End Boston are similar to that found in Cairo-Egypt, and similar slums in the other third world cities.

The inhabitants of slums are often minority ethnic groups who have migrated to the cities in search of a better life only to find worse conditions. Majority of them have virtually no employable skills, they therefore find it difficult to secure any decent jobs to fend for

themselves. Unable to afford urban dwellings, these migrants of diverse ethnic backgrounds settle in slums and shantytowns on the outskirts of the cities of the developing countries, as the only means of survival. Many of them who find jobs are low-paid workers in informal businesses.

## **2.6. Historical Review of Slum Control Programmes in the Third World Cities**

Sietchiping (2005) has outlined the major slum programmes implemented in developing countries since 1950. He argues that, slums are often conceived and portrayed as institutional failures in housing policy, public finance, public utilities, local governance and security of tenure. The various slum control programmes have been changing since 1950 due to their failure to achieve the desired results. He therefore listed the slum control programmes implemented by developing countries chronologically as follows:

- . Laissez – Faire Attitude: 1950s – 1960s
- . Site and Service Scheme: 1970s
- . Upgrading Strategies: 1980s
- . Security of tenure and enabling approach to slums: 1990s
- . Cities Without Slums Action Plan: Post 2000s.

The slum control programmes were presented chronologically in order to show the trends analysis of the programmes as they were rolled out each time, by the United Nations and the World Bank. In the case of the United Nations and the World Bank, new programmes are rolled out periodically to respond to the implementation challenges of the previous programmes and to bring new ideas on board to help address the slum problem efficiently. The various programmes, their strategies and levels of success have been discussed next.



### 2.6.1 Laissez – Faire Attitude (1950s – 1960s)

During the period 1950s and 1960s, urban authorities in developing countries turned a blind eye to slums and concentrated on public housing which was considered “relics of traditional villages”. This approach was popularly referred to as the Laissez-Faire.

The Laissez- Faire approach was adopted because at that time, there was a prevailing anti-urban mood on the part of many governments and donor institutions. This translated itself into programmes designed to stem the flow of people to cities, by improving living conditions in the rural hinterland. These included, programmes designed to redirect urbanization through spatial planning policy, and programmes aimed at discouraging migration to the cities (Turner 1970).

Throughout this period, there was virtually, a neglect of the housing problems of the mainly poor immigrants from the rural areas. The idea was that, by so doing they would be discouraged in their efforts to stay in the urban areas and return to the rural areas, but this did not happen; instead, it resulted in the growth of slums and squatter settlements. Although these problems were seen as troubling, they were considered to be of a temporary situation, and thus a minor threat to long-term urban development (Adarkwa and Post, 2001).

Unfortunately, the alternative choice, the Public Housing Scheme which was intended to address the housing problems of the urban dwellers performed poorly in terms of meeting housing demands in many cities in developing countries. For example, the public housing schemes across Africa as a whole provided only 5% of housing needs of the urban dwellers (Turner, 1970). The Laissez-Faire approach therefore failed because it marginalized the majority of urban dwellers and ignored low-income urban dwellers and the rural-urban migrants who eventually created more slums in the cities as the only way out for survival.

### 2.6.2 Site and Service Scheme (1970s)

In the 1970s most governments of the developing countries opted for a direct and centralized intervention, executed through the World Bank. This scheme advocated the clearance of centrally located slums and their relocation on newly serviced plots, often outside the existing urbanized areas.

Site and service schemes were credited with enabling shared responsibilities between the slum dwellers and government. On the one hand, the programme emphasized the

participation and contribution of the beneficiaries to the resettlement process (Short 1984). Similarly, the programme acknowledged and capitalized on the ability of low – income dwellers to mobilize informal resources (Sietchiping 2005). On his part Carter (1981) postulated that local governments stopped acting as providers in the process but served as facilitators which saved them some resources, however, the programme placed enormous burden on the already poor slum dwellers which worsened their plight.

However, as a result of the many good attributes of the site and service scheme, Hutchinson (1997) argued that the programme was very successful in the Western European Countries, United States of America, Singapore, among others. This means that the programme was successful in the developed and middle income countries where many of the countries cleared their Inner Cities to give way for urban regeneration.

The implementation of site and service scheme was however, heavily criticized especially in the Third World, basically, on its clearance and eviction components. Turner (1970) has indicated that in some cases, evicted slum dwellers were relocated to other parts of the city far away from the centre. In many other instances, slum dwellers were left in ‘limbo’ without alternative housing and land arrangement or compensation and this aggravated the housing situation.

Other shortfalls of the scheme included the relatively low number of beneficiaries, the lack of understanding and clarity around the role of the private sector in the programme, the lack of planning about the allocation of the new serviced plots, low or non-existent standards and the failure to achieve recovery (Turner 1970).

For instance, the number of beneficiaries, of the scheme was less than 6% of the intended beneficiaries in Kenya, Zambia and Zimbabwe, for the paradoxical reason of affordability. This was because the transitional period between the demolition and the new establishment was not properly negotiated. Overall, the implementation of site and service scheme failed to address slum management issues because there was often no provision made for preventing or reducing the future expansion of slums.

In the view of Carter (1981) the magnitude of the negative impact of the site and service easily offset the positives to a point that new strategies had to be introduced. In line with Carter’s argument, Payne (1977) postulated that slum upgrading was introduced as a programmatic response to the challenges posed by the site and service scheme which



typically drove the urban poor from their homes, bulldozed their shacks and their belongings, and made inadequate efforts to provide alternative housing that takes into account the economic and social realities of the slum dwellers.

### 2.6.3 Upgrading Strategies (1980s)

In the 1980s the upgrading strategies were adopted. This emphasized on the improvement of communal institutions and services within the established slums such as sewage, water, sanitary, electricity and infrastructure such as roads, schools, market and healthcare. The upgrading strategy was appealing because it avoided unnecessary demolition.

The slum upgrading programme focused on the achievement of three main goals: affordability, cost recovery and replicability (Short, 1984). In terms of affordability, there were instances of success. For instance, in the estimation of the World Bank (1994) the earlier assessment of onsite upgrading projects the world over was encouraging. The upgrading project was again praised for its commitment to participation and legal and institutional planning outcomes.

Despite the above specific successes, slum upgrading programmes also had many shortcomings and hence failed to meet their expectations. Generally, they were criticized at four main levels: lack of financial commitment, negative socio-economic impacts, insecurity of tenure and the non-replicability of best practices (Sehgal 1998). For instance, the programme was implemented and financed by the World Bank Agencies which overtime gradually reduced their financial support to the various programmes.

A case in point is when the slum upgrading budget of the World Bank was reduced from its 100% in the 1970s to less than 8% in the 1980s (Mohammed 2005). Similarly, the local governments of the various countries could not sustain the financial cost of the scheme and so many of the programmes under the scheme were suspended as the funding dried out (World Bank 1994).

Secondly, the improved infrastructural services led to increased real estate value, thus encouraging land speculation in the upgraded slum areas, hence shifting the upgraded areas to the benefit of high-class urban dwellers instead of the poor (UN – Habitat 1999). A case of Dandora, a slum in Nairobi – Kenya came into sharp focus in this case. When after 10 years of upgrading, a survey conducted by the UN-Habitat revealed that more than half of the new

inhabitants were not the original slum dwellers and that, they were middle or high – class city dwellers who had come to displace the original slum dwellers (UN – Habitat 1999).

Again the upgrading programme only reached a small portion of slums and did not develop any ambitious project that could address the shortage of shelter on a citywide scale (Carter, 1981). As a result of the above mentioned limitations of the upgrading strategy, the paradigm shifted to the security of Tenure approach in the 1990s.

#### 2.6.4 Security of Tenure and Enabling Approach to Slums (1990s)

By the 1990s, the World Bank which supported the upgrading programme had realized that one of the major ways in which urban planning strategies had to be approached to address slum conditions was to develop practical mechanisms to consolidate and strengthen land tenure in slum communities. The security of tenure strategy was therefore introduced. This strategy was supported by the World Bank and its aim was to enable the slum dwellers to acquire tenure security for their dwellings with the aim that by so doing they would rehabilitate their homes and improve upon their environment. This programme targeted mainly squatters who occupied lands illegally and were being constantly threatened of evictions.

The Security of Tenure approach advocated seven strategies as follows: Development of Housing Financing Systems; This involved the mobilization of private capital to enable slum dwellers to improve their own housing conditions on a financially sustainable basis (Painter, 1996). Targeting of subsidies involved forming partnerships with International Development Agencies (IDAs), to bear part of the cost to make it easier for the slum dwellers to improve their dwellings.

Other strategies included; encouraging property right; this was where some slum dwellers were given tenure security by having their dwellings regularized and recognized as part of the city; improving infrastructure, this strategy focused on minimizing physical and social dislocation of the urban poor; auditing and removing barriers, this was an inbuilt monitoring and evaluation plan to ensure that the strategy worked to perfection, restructuring building industries and reforming institutions, this enjoined the building institutions to shift from the old way of doing things and to embrace the new strategies to control slum growth (Takenchi, 2006).

The enabling approach instrument was understood as advocating that legal, administrative, economic, political, urban stakeholders and financial institutions should facilitate and secure the shelter and tenure to the most vulnerable portion of urban dwellers. This was implemented through strategies largely supported by IDAs such as the UN – Habitat and the World Bank, as a contingent measure to limit the eviction and demolition threats facing slum dwellers (Mohammed, 2005).

The security of tenure approach is derived from the assumption that when the residents are assured of that sense of appropriation, they also gain the confidence, motivation and the will to invest and improve their environment. The regularization of this informal environment was to help address the problem of tenure security in the already established squatter dwellings which otherwise would translate into a vicious cycle of construction, destruction, eviction and reconstruction (Sehgal, 1998).

In another development, Takenchi (2006) lamented that the security of land programme had a major limitation in that, the policy targeted the squatters who were facing the threats of eviction. Unfortunately as soon as the regularization was done and facilities improved, the landlords who did not necessarily live in the settlement, took the land and rented it to city dwellers, eventually at a higher price because the land value had appreciated with the security. Therefore many of the slum dwellers who could not afford the higher rent lost their dwellings and sought to settle in other slum-like settlements.

#### 2.6.5 Cities Without Slums Action Plan (Post 2000s)

This strategy is in line with the UN Millennium Development Goals (MDGs). Specifically the activities aim at improving the living conditions of at least 100 million slum dwellers by 2020 (UN Habitat 2003). The main innovation in this policy is to move from the physical upgrading of slums adopted by the past policies, to start to address one of the fundamental reasons why slums exist, that is 'poverty'.

The new century has called for strategies and plans for slums. In 1999, the World Bank and the UN-Habitat initiated the Cities Without Slums (CWS) Action Plan, which constituted the United Nations Millennium Declaration Goals 7 and target 11 (UN-Habitat, 2003). The Action Plan recognizes that slums are largely a physical manifestation of urban poverty, and to deal with them effectively, actions and policies should also associate urban and slum stakeholders in the poverty reduction or eradication campaign (World Bank 2003).

The Action Plan has been heavily criticized on the grounds that it was not comprehensive enough to determine the other variables that also account for the incidence of slums in cities, since after all, poverty is just one of the components of the incidence of slums. The other variables, include debt and health issues at the macro and cross country levels, political and social instability and natural disasters (Carter, 1981).

Again, the number targeted (100 million) by 2020 is far too modest to significantly change the number of slum dwellers whose number was 850 million in 2000 and was projected to increase to about 1.8 billion by 2015 (UN-Habitat 2003, Sietchiping 2005). It is clear that this target, modest as it is, will take too long to effectively improve the living conditions of more than 1.7 billion slum dwellers.

Again, there are no clearly defined variables to measure the improvement of living conditions of 100 million slum dwellers in the programme. One can reasonably query how possible it will be to differentiate between improved living conditions' driven by CWS Action Plan and other improvements in living conditions which were as a result of other city development strategies.

The implication of the lack of clearly defined variables to measure the improvement of poverty is that poverty which is the most important consideration for this programme may still not be properly addressed and slums will continue to grow in the cities, but if it happens like that, the programme will also fail like the others before. This is because as Adarkwa and Post (2001) put it, many of the programmes and projects failed because the planning and decision making environment was not geared towards working under conditions of rapid change in a setting of wide spread poverty.

The literature review clearly shows that despite a few "best practices" recorded in the implementation of the past and present policies, slums have continued to dominate the urban landscape of most cities in the developing countries and for that matter Ghana. It is therefore imperative to learn lessons from this history of urban planning in developing countries.

## **2.7 Development Planning Implications**

The very low levels of housing construction in the 1950s and the 1960s, when a Laissez-Faire attitude was adopted, and a blind eye was turned on the housing problems of the rural-urban migrants, had implications for planning in the subsequent years, since that marked the beginning of the creation of slums in the cities of the developing countries.



The site and service scheme in which many centrally located slums were cleared or bulldozed down with the intention of resettling the inhabitants in the outskirts of the city, also had planning implications which have lingered on even to date in that, today many slum dwellers hide their identity and sometimes give false information about themselves for fear of eviction. This accounts for the lack of accurate data on slums in developing countries, forcing authorities to rely on inaccurate data to plan for the slum communities, hence, their inability to control slum growth in the cities.

The slum upgrading strategies introduced in the 1980s, was intended to improve the living conditions of the existing slums in order to transform the sites into habitable residential areas to be absorbed as part of the city. This programme also had implications for planning in the sense that, the programme was so costly, such that, governments could not upgrade slums alone, and that they had to work with other international and local actors, which to a very large extent portrayed the countries negatively to the outside world.

Again after the upgrading, the original inhabitants were driven away in some countries because they could not pay the increased rents that the absentee landlords charged when the land values rose. The planning implication of this was that, more slums were created in other parts of the cities, by the original slum dwellers. This partly explains why it is so difficult to control the growth of slums.

The cities without slums strategy which was introduced in the post 2000 era saw poverty as the main cause of slum growth, and that it must be reduced before slum growth in cities could be contained. The implication of this strategy to planning is the difficulty with which the urban and rural planners can integrate their plans in order to reduce both rural and urban poverty, since most of the poverty in the city is imported from the rural areas.

## **2.8 Case Studies of Slum Development and Control**

The experiences of two cities; Cairo and Singapore are the focus of the discussion in this section. This is based on the causes of slum growth in the two cities, the factors which supported it, the physical characteristics, socio –cultural activities and the main Slum Control Programmes adopted in the two cities together with their sustainability measures and the assessment of their levels of success.

### 2.8.1 Slum Development and Control in Cairo-Egypt

Slum development and control in Cairo has attracted the attention of both local and international bodies including the UN-Habitat. This section therefore seeks to discuss the causes and the manifestation of slums and how they are being controlled in Cairo.

#### ✓ Development of Slums in Cairo

The Greater Cairo Metropolitan Area (GCMA) is a vibrant Megalopolis with an estimated 14 million inhabitants, making it the seventh-largest metropolitan area in the world. It has a population density of 40,000 people per square kilometre. Being one of the most densely populated areas in the world, it has also experienced a lot of slum growth (Jerome, 1990).

#### • Causes of Slum Growth in Cairo

Cairo is perceived to be a place where opportunities are available, where people think that life could be better and brighter than the rural areas. The GCMA is therefore a destination to rural-urban migrants who pour into the city on a daily basis. As a result, there is a mismatch between housing supply and demand; where demand for housing far exceeds supply.

#### • Factors Supporting Slum Development in Cairo

Cairo is a primate city in Egypt. It is four times larger than Alexandria, the second-largest city, and it has completely dwarfed all other major cities in the country. Cairo is a place where young people are willing to undergo deprivation for the chance to “make it”, yet, real opportunities are low relative to the size of the Metropolis.

The concentration of main services and facilities of the country in Cairo has made the GCMA the prime engine of economic growth in Egypt, dominating the economy even though it contains only about 24 percent of the nation’s population. For instance, the GCMA houses about 55 percent of Egypt’s universities, 46 percent of its hospital beds, 40 percent of its pharmacies, 40 percent of private sector employment, 60 percent of cars, 50 percent of buses, and 33 percent of trucks (Jerome,1990).

#### • Physical Characteristics of Slums in Cairo

The sewer and water systems modernized in the 1930s, which were intended to serve only about 2 million people now serves about 14 million people in the city. There is overcrowding of people into warrens of slums, often without tap water or sewage system. Houses are constructed from any materials available-wood, corrugated iron sheets, and even cardboards.

Also very few local jobs, schools, health facilities or form of public transport exist as compared to the ever-increasing population of the city.

- Socio –Cultural Activities in the Slums of Cairo

It is not unusual to find people living on little boats on the river Nile, under the arches of bridges, and in makeshift poorly constructed buildings. About one million people live in the cemeteries of Cairo called the ‘City of the Dead’. Many engage in all kinds of crimes for survival in the city, and they enjoy solidarity from each other.

- ✓ Slum Control Programmes in Cairo

The discussion below shows the attempts made by the authorities of the GCMA to control slum development in the city. The focus here is on the main slum control activities and the implementation strategies.

- Main Activities for Slum Control

Resettlement of slum communities at the outskirts of the city; the activities included the valuation of properties, payment of compensations to affected homes, addressing grievances, and undertaking redress mechanisms.

- Implementation Strategies and Processes

The strategies used in Cairo to control slum growth were the urban renewal and resettlement. Under these strategies, complete urban renewal of slum areas was done, relocating residents to other urban areas. After the relocation, the lands were reused for other public purposes such as schools, youth clubs, parks, and others with fair compensation in the form of housing units or cash.

Programmes to raise the skills and job marketability of the youth in the affected areas were organized, businesses were supported with credit. The misunderstandings about informal and squatter areas and the widely held negative perceptions were tackled through general media and information campaigns.

- Sustainability

The negative perceptions about slum communities were changed, so the people could feel comfortable in their new places. Public transport and traffic in informal areas, was improved. Affordable housing market in informal areas was made available, making the housing rental



system more transparent and efficient. Human resources in informal areas were developed by supporting small and micro enterprises development.

- Level of Success

The infrastructure system designed and implemented as part of the slum control process, though made economic sense, the case of the newer fringe informal areas was the worst off in terms of levels of infrastructure services, especially waste management, water and roads. Accessibility and traffic into and within informal areas was deplorable.

## 2.8.2 Slum Development and Control in Singapore

The discussion in this section is about slum development in Singapore in the 1960s, and how it was successfully controlled. The causes and the physical characteristics of slums in Singapore are treated in this section.

- ✓ Slum Development in Singapore

Singapore was faced with a large and rapidly increasing number of slum dwellers, in the 1960s (Waugh, 1995). These slums were located in the central area of the city and were homes to migrants who had entered the city and could not afford decent accommodation.

- Causes of Slum Growth in Singapore

Singapore is an island city closer to heavily populated Asian countries like India and China. It has a free port and a very strong economy which attracts a lot of migrants from the mainland Asian Countries.

- Physical Characteristics of the Slums

The central area of the city was unplanned. It was home to so many immigrants from the neighbouring Asian countries. The place was therefore overcrowded, with only a limited access to services like water and electricity, and most of the buildings were dilapidated.

- ✓ Slum Control Programmes in Singapore

In order to get rid of slums in the central area of Singapore, the authorities rolled out a programme to eradicate slums in the city. The discussions at this stage look at what went into the programme and what it was able to achieve.

- Main Activities in the Programme

A Housing Development Board (HDB) was formed and a Central Pension Fund (CPF) was also created to see to the construction of houses to replace the slums and to see to the housing needs of all Singaporeans.

- Implementation Strategies and Processes

The HDB was given the responsibility to clear the slums near the CBD, especially in the Chinese, Arab, and Indian ethnic areas and to replace them with purpose-built estates which could accommodate between 10,000 to 30,000 people, within a series of new towns, each of them, up to 250,000 people. By 1994 there were 14 new towns all within 12 km of the CBD. In both cases, the HDB constructed housing units of 1-3 rooms in closely packed high-rise flats. The flats were initially for low-income families and rents were kept to the barest minimum.

- Sustainability

For the programme to be sustained, one-quarter of every wage-earner's salary was automatically deducted and individually credited by the government into a Central Pension Fund (CPF). The Singaporeans could use their CPF capital to buy their own apartment of flats, which were mostly built by the Housing and Development Boards, for the average and the higher income groups.

- Level of Success

By 1994, about 87% of Singaporeans lived in government - built housing and about 80% of them owned those houses. As at 1994, the HDB had built over 700,000 flats and was able to provide every householder with a minimum flat size of three rooms. The large estates were functional in design and were developed on the neighbourhood concept of British new town. Each estate contained much greenery and was well provided with amenities such as shops, schools, banks, medical, mass rapid transport and community centres. The target was to ensure that all Singaporeans had homes. As a result, today not even a single person lives in slums in Singapore.

Each estate had its own light industries, producing, usually, clothing, food products and high technology goods. The estates, like everywhere else in Singapore, are models of cleanliness with lawns trimmed and even the oldest apartments are constantly repainted.

## 2.9 Lessons from Case Studies

The factors which accounted for the success of Singapore and the failure of Cairo in their slum control efforts include the following:

### 2.9.1 Successes

- The building of high-rise flats in the original slum locations to accommodate many people in durable houses in an upgraded environment.
- Relocating migrants to the outskirts of the city with the provision of complementary and ancillary services and facilities.
- Provision of efficient transport systems and services to carry migrants to and fro the work places.
- Establishment of a comprehensive sustainability plan for the programme, through which, individuals could buy and own homes.

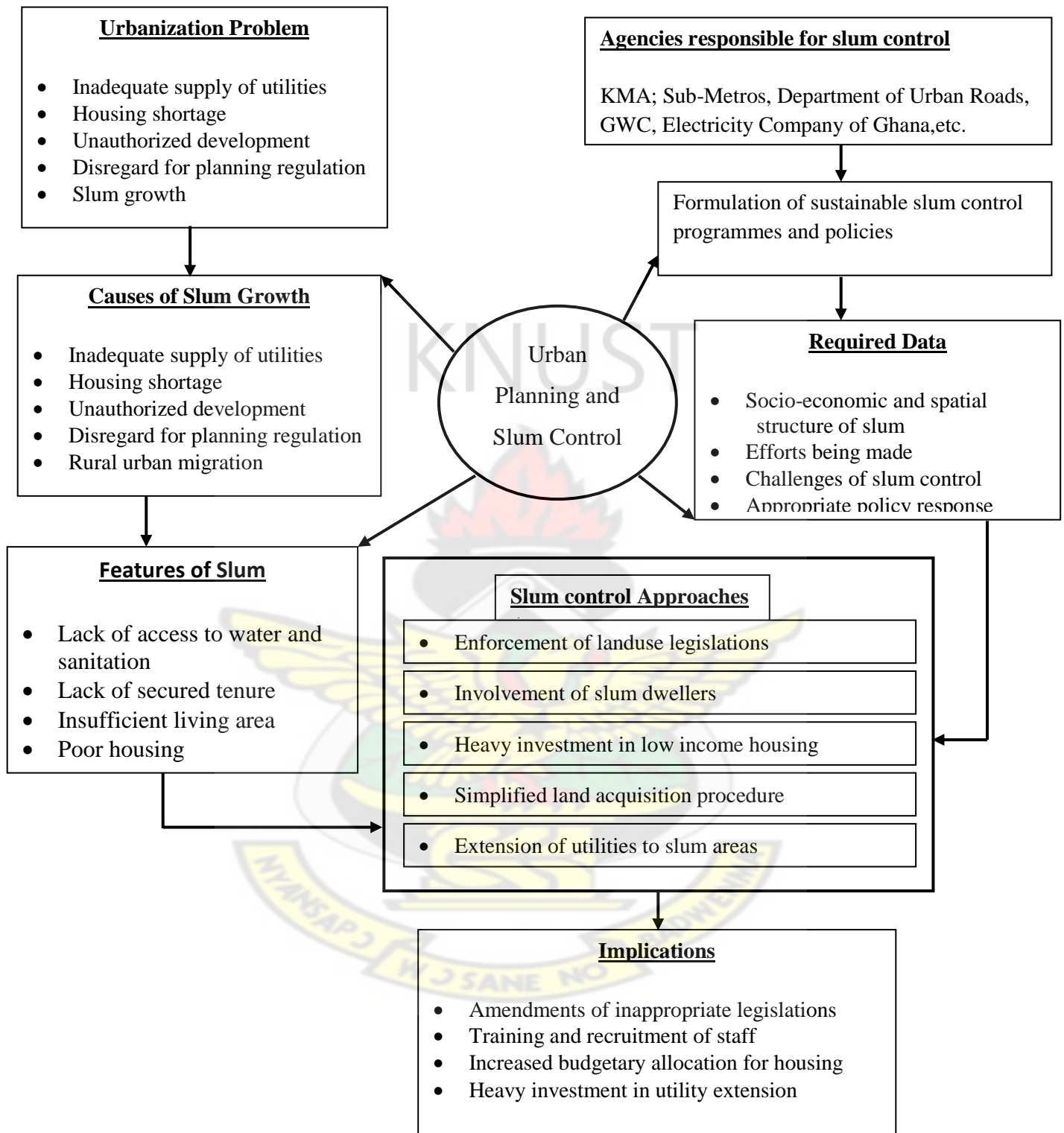
### 2.9.2 Failures

- ❖ Using the original slum sites for the construction of public facilities other than homes for the slum dwellers.
- ❖ Relocating slum dwellers far away from the city centre without any efficient means of transport to the city and without the necessary ancillary services to them.
- ❖ Removing slums without any clear-cut sustainability plan to cater for future slum growth in the city.
- ❖ Planning for the future of slum dwellers without involving them in the processes.

## 2.10 Slum Control as Urban Growth Management Strategy

The literature reviewed thus far has thrown light on the forms and characteristics of slums in urban areas. Again, the position of slum development within the urbanisation process has been discussed. The efforts and the implications of slum development on urban planning and growth management have thus been established from a conceptual point of view. A review of the slum control programmes by the United Nations between the 1950s and the 2000s have been presented and reviewed to show their levels of success in the removal of slums from the cities of developing countries. Literature has thus made it apparent that slum control should be a major strategy in urban growth management process. The position of slum control within the urban planning process is depicted in Figure 2.3.

**Fig 2.3: Slum Control in the Urban Planning Process**



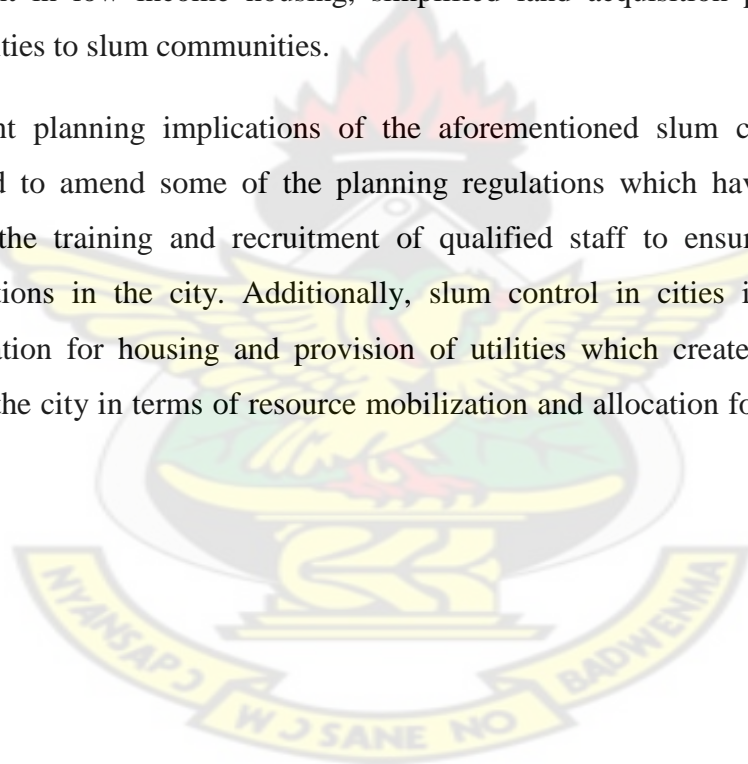
Source: Author's Construct, May 2009

Figure 2.3 presents the conceptual basis from the literature reviewed thus far. The figure indicates a relationship between urban planning and slum control as a central issue in urban growth management.

Again, the issues involved in slum development, characteristics and manifestations are seen as forces on one side of urban planning while the institutional arrangements and efforts are seen as forces on the other side of the urban planning process. The interplay of these gives rise to the approaches and programmes adopted towards urban slum control.

In Figure 2.3 the slum control approaches adopted by urban planners identified in the literature include enforcement of land use regulations and the involvement of the slum dwellers in slum control programmes to ensure success. Apart from this, there is the need for heavy investment in low income housing, simplified land acquisition procedure and the extension of utilities to slum communities.

The development planning implications of the aforementioned slum control approaches include the need to amend some of the planning regulations which have implementation challenges and the training and recruitment of qualified staff to ensure enforcement of planning regulations in the city. Additionally, slum control in cities involves increased budgetary allocation for housing and provision of utilities which creates difficulty in the management of the city in terms of resource mobilization and allocation for the development of the city.





## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The techniques and the procedures employed to carry out the research have been presented in this chapter. The chapter therefore explains the research design adopted, and identifies the data requirements of the research as well as the sampling procedure for data collection and analysis.

#### **3.2 Research Design**

The research methodology used for the study is a case study. A case study involves an observation of a single group or event at a single point in time, usually subsequent to some phenomenon that allegedly produced change, for instance a community, after an urban renewal programme (Nachmias, 1992). Again the case study is an empirical enquiry that allows for an investigation of the dynamics of a particular system (Haggett, 1977).

A case study method was adopted to carry out the research because, the phenomenon under investigation is a contemporary one and the study is based on a real life situation. In addition, the case study brings the investigator and the case being investigated into direct contact. This leads to a better conversance with the circumstances of a case and helps to assess the reactions of a group or a community to questions and issues raised in the cause of the investigation (Kumekpor, 2002).

Again the case study is an explanatory method which makes it easy to ask and seek answers for the necessary 'how', 'when' and 'why' questions associated with the research. Additionally, the intimacy of fieldwork relationships associated with case studies can be the greatest advantage (David and Sutton, 2004).

However, the case study method comes with some challenges, some of which includes, investigator related shortcomings such as biases and poor judgement of issues, difficulties related to the nature of the case study especially if the study has security or political implications. Linguistic challenges can also affect the outcome of a case study. Again, if the members of the case being studied refuse to cooperate, the investigator may not get the information that is required for the research. The solution to the challenges however, lies in proper planning and adequate preparation towards the field work.



### 3.3 Data Requirements and Sources

The data required for this study includes the population and the number of households in the selected slum communities of Oforikrom, Anloga, Asawase and Aboabo. In addition, data on the socio-economic characteristics, household characteristics, housing conditions and access to basic utility services in the slum areas were required for the study. Also data was required on the efforts of the city authorities towards slum control in the metropolis and the development planning implications of such efforts on the future planning of the city.

The population and the number of households in the selected slum communities were collected from the Ashanti Regional office of the Ghana Statistical Service. The data on the socio-economic characteristics of slum dwellers was available at the household level. The data on housing conditions, household characteristics and access to utility services were available both at the household level and also at the offices of the Directors of institutions such as the KMA, the Ghana Water Company, the Electricity Company of Ghana and the Department of Urban Roads. Table 3.1 below indicates the key data sources of the study.

**Table 3.1 Key Data Sources**

Level	Data Source	Officer	Data Required	Method of Data Collection
Regional	G.S.S.	The Regional Director	Population and the number of households	Interview Guide
Regional	G.W.C.L	The Regional Director	Water and sanitation Situation in Slum Areas	Interview Guide
Regional	Electricity Company of Ghana	The Regional Director	Problems of Electricity supply in Slum Areas	Interview Guide
Metropolitan	K.M.A.	Metro Planning Officer	Socio-economic, housing, slum control efforts and challenges	Interview Guide
Metropolitan	K.M.A.	Director T&CPD	land use regulations, maps and plans	Interview Guide
Metropolitan	Sub-Metropolitan Assemblies	Sub-Metro Planning Officer	Housing conditions and planning difficulties in slum communities.	Interview Guide
Metropolitan	Department of Urban Roads	Urban Roads Engineer	Condition of roads in slum areas	Interview Guide
Community	Households	Household heads	Socio-economic, housing and household data	Questionnaire Administration

Source: Author's Construct, May 2009.

### **3.4 Data Collection Tools and Instruments**

The data collection tools that were employed in the research include the use of structured questionnaire, interview guide, direct observation, a (photographic) camera, telephone interviews, a pen drive and a pocket notebook. These tools were used to facilitate the data collection as and when the use of any one of them became necessary.

The structured questionnaires were used for the collection of household data in the four selected slum communities. Under this, a set of close and open ended questions were set and administered through a random sampling technique targeting a household head in every thirtieth house in each of the four purposively sampled slum communities. The difficulty encountered was the unwillingness on the part of some respondents to provide the information for fear of the outcome of the research. Time was therefore spent to explain the purpose of the research to them.

Interview guides were also used during the institutional surveys. Different set of questions were set to be answered by the directors of institutions such as the Kumasi Metropolitan Assembly (KMA), Ghana Water Company (GWC), Electricity Company of Ghana (ECG), Department of Urban Roads (DUR) and the Sub-Metropolitan directors of Oforikrom and Asawase. In the course of these the opportunity was offered for some secondary data in their possession to be reviewed.

A direct observation was also applied as a tool to collect data from the slum dwellers in the four selected communities. This was possible due to the household survey that was conducted in all the four selected communities. The process offered the opportunity for the various communities to be directly observed in terms of their housing and environmental conditions.

Furthermore, a camera was used to take photographs of some scenes that were considered relevant to the research. Again, a pen drive was used to copy certain already recorded information during the institutional survey to facilitate easy acquisition of information. Finally, telephone calls were made to some of the respondents for further clarification of the already provided information.

### 3.5 Data Analysis

The data analysis was carried out during the research using both quantitative and qualitative methods. The data collected were subjected to statistical analysis, this included tabulations, percentages, calculation of averages and the drawing of graphs to show the appropriateness of the data to the problem under investigation. A qualitative method of analysis was also used to describe and interpret data mainly from the interview guide and data from secondary sources.

### 3.6 Sampling Technique

A purposive sampling technique was used to select Asawase, Aboabo, Oforikrom and Anloga in the Kumasi metropolis because these communities are information-rich in terms of slum manifestations. In addition, all the four selected communities have benefited from interventions such as the Urban Environmental Sanitation Programme, Community Infrastructure Up-grading and the Urban Poverty Reduction Project. The study therefore seeks to find out the extent to which these interventions have improved the slum conditions in the metropolis.

Again, the KMA, GWC, ECG, DUR and the Asawase and the Oforikrom Sub-metropolitan Assemblies were purposively selected because they are directly related to the development of Kumasi and are therefore related to the study.

A simple random sampling technique was used to select the houses from which the household heads in the four slum communities were selected for interview. The total number of households which represents the sample frame is 24,561. Table 3.2 provides the number of households in each of the communities.

Table 3.2: Number of Households in the Study Areas

No.	Community	No. of Households
1	Asawase	9,144
2	Aboabo	6,626
3	Oforikrom	7,694
4	Anloga	1,097
	<b>Total</b>	<b>24,561</b>

Source: Ghana Statistical Service (2000 Population Census)

The formula below given by Miller and Brewer (2003) was used to calculate the sample size.

$$n = \frac{N}{1+N(\alpha)^2}$$

Where 'N' is the sample frame, 'n' is the sample size and ' $\alpha$ ' is the margin of error (8%).

A sample size of 156 was arrived at as follows:  $n = \frac{24561}{1+24561(0.08)^2} = 156.24$

A simple proportion formula was then used to calculate for the number of households that were to be interviewed in each slum community as follows: SF  $\propto$  SS; where 'SF' is the sample frame, 'SS' is the sample size and ' $\alpha$ ' is a proportionality sign. The constant of proportionality then becomes the initial values of SS/SF. The number of households selected from each community was therefore calculated as follows:

If 24,561  $\propto$  156.24, then

$$\text{Asawase (9,144)} = \frac{156.24}{24561} \times 9144 = 58$$

The same procedure was used to calculate for the remaining three slum communities, based on which 42 household heads were interviewed in Aboabo, 49 in Oforikrom and 7 in Anloga. Together, 156 household heads were interviewed. Appendix I captures the details of the calculations.

To determine which households were to be selected, the total number of houses in the selected communities was divided by the sample size. Since there are 4,614 houses in the four slum communities, the sample size of 156 was used to divide 4,614, the result of which was 30. This meant that a household each was to be randomly selected from every thirtieth house in each of the four slum communities.

### 3.7 Key Data Variables for the Research

A variable is an empirical property which can take on two or more values. Miller and Brewer (2003) have indicated that variables help in moving a research from conceptual to empirical levels, using the variables as key elements of the research problem. In this research, the key data variables were:

- Household characteristics of slum communities
- Housing condition
- Household access to utilities in slum communities
- Slum control efforts and urban growth management
- Challenges associated with slum control efforts

### **3.8. Data Analysis and Reporting Framework**

Data were analyzed based on the understanding of the key concepts of the study, namely: slum, squatter and shanty towns. This informed the selection of respondents using both purposive and random sampling techniques from institutions and households in Kumasi.

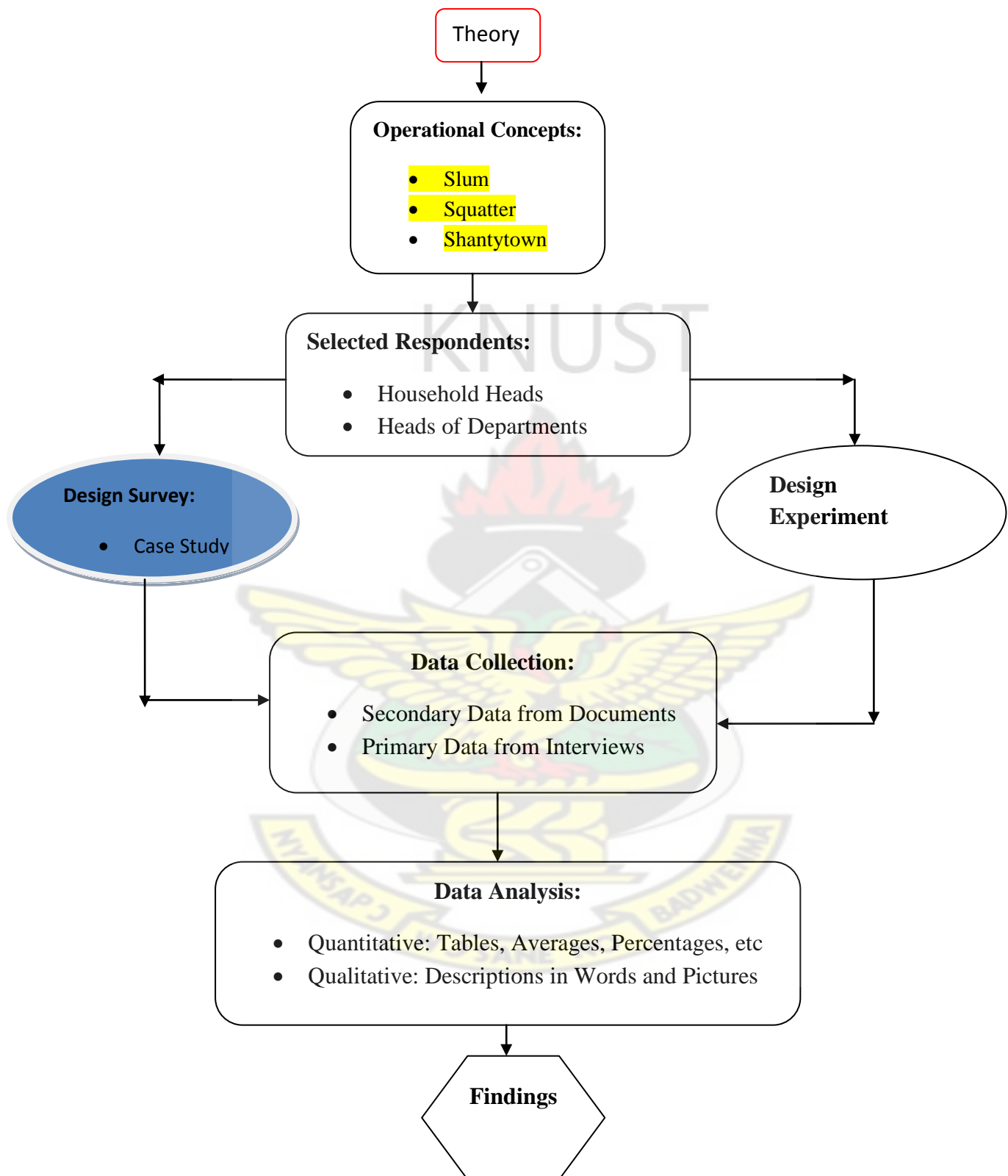
A case study method was adopted to facilitate the ease of data collection. Respondents were selected using both purposive and simple random sampling techniques. Household data was gathered using structured questionnaires, whilst interview guides were also used to collect data from the institutions.

Analysis of the data was done using both qualitative and quantitative analytical techniques. Tables, charts, percentages and graphs were used in the case of the quantitative technique, while description of tables and pictures were used in the case of the qualitative analysis.

The findings and the recommendations of the analysis then emerged as to what the implications of slums in Ghanaian cities are. Figure 3.1 below is a diagrammatic illustration of a data analysis and reporting mechanism adapted from Waugh (1995) which gives a summary of the key features of the analytical framework. Figure 3.1 therefore is a summary of the methodology and the analytical techniques adopted for the study. From the figure, the details of the stages of the research methodology adopted are shown.



**Fig. 3.1: Framework for Data Analysis and Reporting**



**Source:** Adapted from Waugh (1995), Geography, An Integrated Approach (2<sup>nd</sup> Ed):\_Page 40



## **CHAPTER FOUR**

### **CHARACTERISTICS AND PLANNING IMPLICATIONS OF SLUMS IN KUMASI**

#### **4.1 Introduction**

This chapter presents an analysis of the nature and manifestations of slums in Kumasi. The analysis discusses the characteristics of the four selected slum communities in Kumasi; their inhabitants, physical and social conditions, housing characteristics and developmental challenges. These characteristics were captured as household data and analyzed. Again the efforts being made towards slum control by the institutions directly involved with the development of the slum communities and the challenges they face were captured as part of the institutional survey and analyzed.

#### **4.2 Kumasi Metropolis in Context**

The discussion in this section is centered on the physical, social, demographic and economic characteristics of Kumasi. This is to help locate Kumasi in the national context and explain why it was chosen as a case study for the discussion of slums.

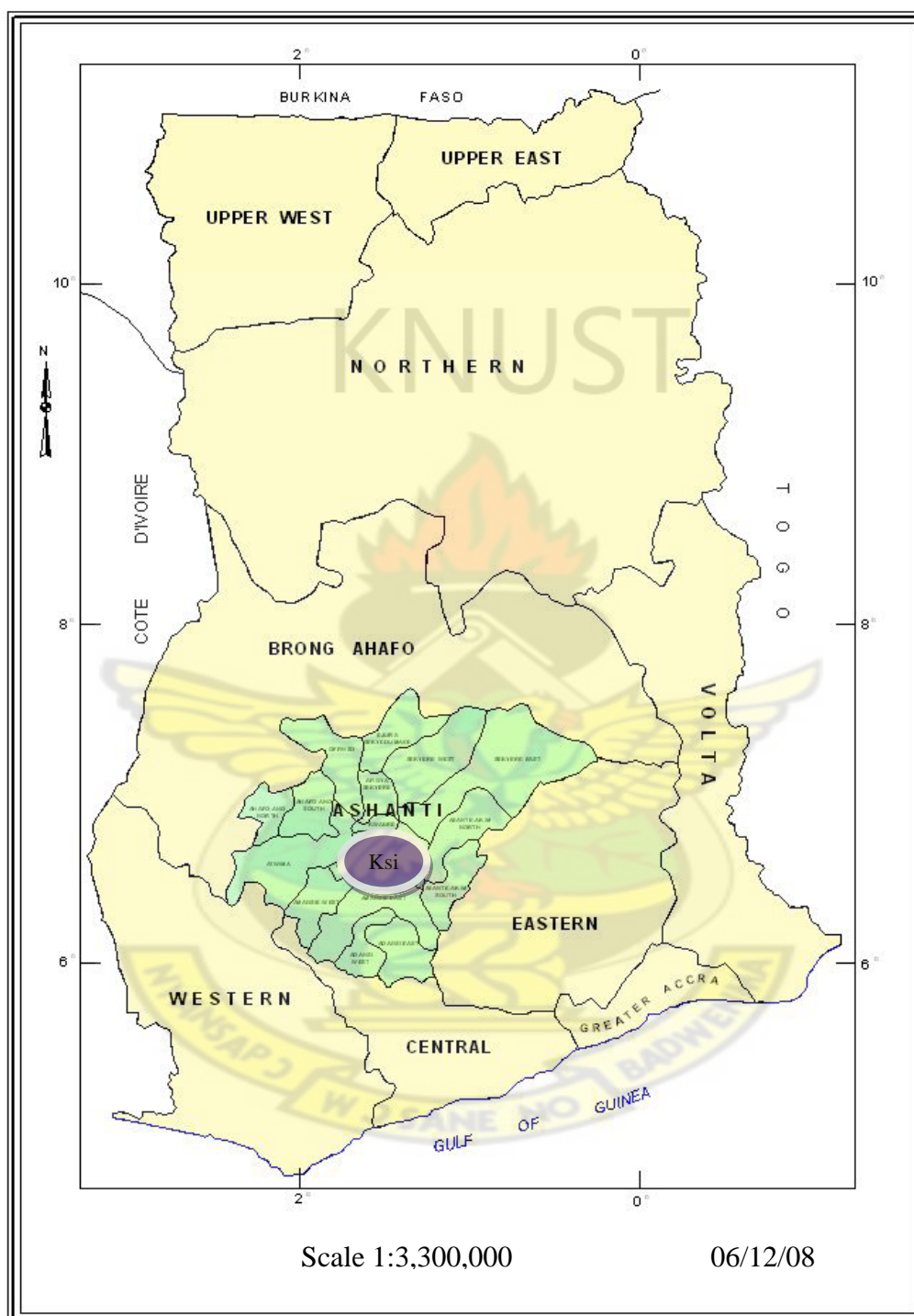
##### **4.2.1 Physical Characteristics**

Kumasi is about 270km north of the national capital, Accra. It is located between Latitude  $6^{\circ}.35''\text{N}$  and  $6^{\circ}.40''\text{N}$  and Longitude  $1^{\circ}.30''\text{W}$   $1^{\circ}.35''\text{W}$ . (Town and Country Planning Department-Kumasi, 2008). The topography of Kumasi ranges between 250 – 300 metres above sea level and is undulating. It covers an area of about 254 square kilometres. The average minimum temperature is about  $21.5^{\circ}\text{C}$  and a maximum average temperature of  $30.7^{\circ}\text{C}$ . The Metropolis enjoys a double maxima rainfall regime (214.3mm in June and 165.2mm in September). Figures 4.1 and 4.2, show Kumasi, both in the national and the regional context.

##### **4.2.2 Demographic Characteristics**

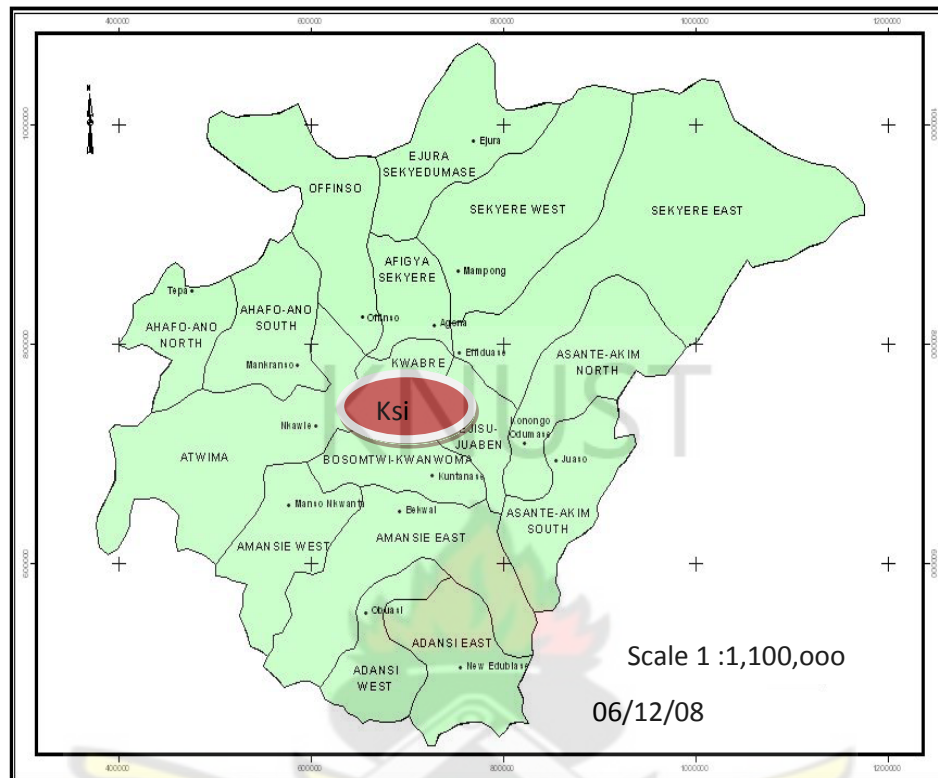
The Kumasi Metropolis has a population of 1,170,270 with a growth rate of 5.4% per annum. This accounts for about 32.4% of the population of the Ashanti region (Ghana Statistical Service, 2000). About 39.9% of the population is below 15 years, in contrast to other districts, which range from 40 to 47%. There are more males (51.2%) than females (48.8%) in the metropolis. It has a population density of 5,419 persons per a square kilometre.

Fig. 4.1 Kumasi Metropolis in National and Regional Context



Source: Town and Country Planning Department-Kumasi, Dec. 2008

Fig. 4.2 Ashanti Regional Map Showing Kumasi in Regional Context



Source: Town and Country Planning Department-Kumasi, Dec. 2008

#### 4.2.3 Social Characteristics

There are 219 health facilities and 13 private laboratories in the metropolis. The doctor patients ratio in the Metropolis is 1: 70,552 ( Metropolitan Health Directorate, 2006).

There are 633 Pre-Schools, 1,041 Basic Schools, 18 public Senior High Schools, 20 private senior high schools, three public Universities and one private university (Metropolitan Education Directorate, 2006). About 33% of households in the Metropolis lack access to water and electricity supply. Only 25% of households use water closet toilet facilities (Ghana Water Company, 2006).

#### 4.2.4 Economic Characteristics

About 86% of the people in Kumasi are engaged in one form of employment or the other. Out of these, 71% are in the Trade/Service sector. This shows that there is a very large informal sector in the Metropolis.

#### 4.2.5 Condition of the Built Environment

It is estimated that 48%, 46% and 6% of the Metropolis are urban, peri-urban and rural respectively. This gives an indication of a community that is experiencing a very fast rate of urbanization. As a result, many of the inhabitants of the city live in slum conditions. The CBD and all the principal streets have been taken over by hawkers. The erection of wooden structures including kiosks and metal containers along the streets and on any available space is a common sight and these have greatly blighted the beauty of the city.

### 4.3 Characteristics of the Selected Slum Communities in Kumasi

This section of the study discusses the physical and social characteristics of the four selected slum areas in the Kumasi Metropolis. The discussion shall be done in terms of their locations, sizes, population, social and physical characteristics to indicate in brief, the socio-economic and spatial structure of these slum communities.

#### 4.3.1 Oforikrom

Oforikrom is located about 4km east of the CBD on the main Kumasi- Accra trunk road. It covers an area of about 1.5 sq.km. It has a population of about 38,155 (Ghana Statistical Service, 2000) with 7,694 households. Traditionally, Oforikrom is part of Amakom but politically, it is the headquarters of the Oforikrom Sub-Metropolitan area. The people of Oforikrom have access to hospitals and educational facilities both in and outside the locality.

#### 4.3.2 Anloga

Anloga is located in about 4.2km east of the CBD off the Kumasi- Accra trunk road on the western by-pass. It covers an area of about 0.5 sq.km. It has a population of about 6,823 and 1,097 households (Ghana Statistical Service, 2000). Traditionally, like Oforikrom, Anloga is also part of Amakom, while politically, it is part of the Oforikrom Sub- Metropolitan area. Children can access educational facilities both within and outside the community. The community has a clinic and some maternity homes.

#### 4.3.3 Asawase

Asawase is located in about 1.5km east of the CBD. It is adjacent to the Manhyia Palace, the seat of the Asantehene. It has a population of about 46,243 and 9,144 households (Ghana Statistical Service, 2000). It occupies an area of about 2 sq. km. It is a Ministry of Works and Housing built estate for public servants. Traditionally, it is part of the Manhyia Stool Lands,



but politically, it is the Headquarters of the Asawase Sub- Metropolitan area. The community has a cluster of basic schools, and there is a hospital nearby at Manhyia.

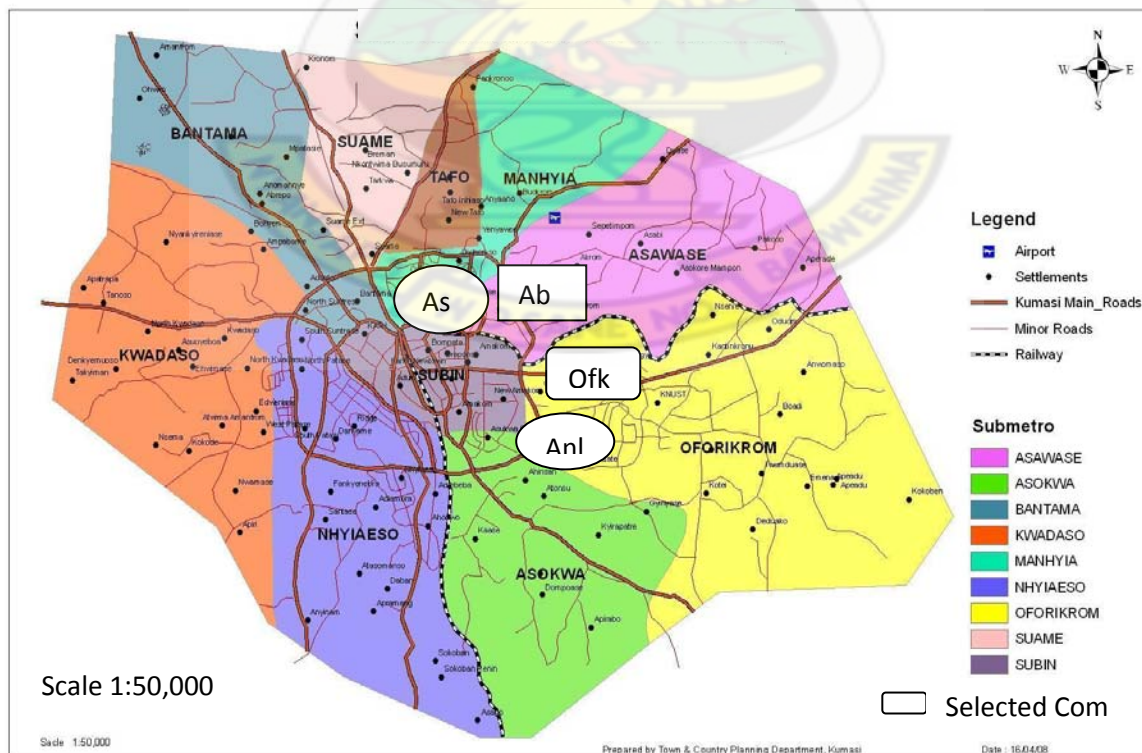
#### 4.3.4 Aboabo

Aboabo is located in about 4.5km east of the CBD off the Kumasi- Accra trunk road on the Eastern By-Pass. It covers an area of about 1.6 sq.km, with a population of about 34,206 and 6,626 households, (Ghana Statistical Service, 2000). It is part of the Asawase Sub-Metropolitan area. It has a cluster of schools within and outside.

Figure 4.3 below is a map of Kumasi showing the location of the selected slum communities in the Metropolis to aid the discussion. The four communities are located close to each other in low income residential areas. Again the four communities are close to the Central Business District which offers their inhabitants low income jobs.

The relative locations of the selected slum communities in the metropolis are in line with Waugh (1995) functional zones of the cities in developing countries. It was indicated that the slums in developing countries are mostly located in the Outer Zones of the cities. In the particular case of the Kumasi metropolis, the relative location of the selected slum communities with the exception of Asawase fall into the outer zone behind the ring road, in line with Waugh's functional zones as indicated in Figure 2.1.

Fig. 4.3 Sub-Metropolitan Map of the Kumasi Metropolitan Area



Source: Town and Country Planning Department- Kumasi, April 2008

#### 4.3.1 Manifestation of Slums in the Selected Communities

Slum development in the study communities manifests itself in several ways; both physical and socio-economic. Physically, slum development in these communities manifests through poor sanitation, sub-standard buildings and poor utility services provision among others. While most of these manifestations overlap, others are peculiar to the various study communities. The various communities and their slum manifestations are captured in Table 4.1 below.

Table 4.1 Manifestations of Slums in the Sampled Communities

No.	Area	Manifestation of Slums
1	Aboabo	Poor Sanitation, Large household sizes, Poor Provision of Utility Services, Sub-Standard Buildings, Congestion, Extension to buildings.
2	Anloga	Poor Planning Scheme, Blockage of Main Access Road (ie. The Western By-Pass from Anloga Junction to Asokwa), Flooding, Poor Sanitation, Extensions to Buildings, Poor Utility Services Provision.
3	Oforikrom	Keeping Cattle Among Humans, Poor Sanitation, Poor Access Roads, Sub-Standard Buildings, Poor Utility Services Provision.
4	Asawase	Animals and Human Cohabitation Leading to Diseases, Poor Utility Services Provision, Poor Sanitation, Extension to Buildings, Sub-Standard Buildings, Congestion and poor roads.

Source: K.M.A, Development Planning Department, May 2009

In Table 4.1 poor sanitation, poor utility services provision and sub-standard buildings were identified to be slum manifestations which were overlapping in all the selected slum communities. The Table indicates further that with the exception of Aboabo, the remaining communities have poor access roads. Similarly, apart from Oforikrom, the respondents in the rest of the communities mentioned unauthorized extension to buildings as a slum manifestation in their respective communities.

Some of the manifestations were peculiar to some of the communities studied. For instance, Anloga has a peculiar situation where the main access road to the community has been blocked at Anloga junction in Oforikrom by the operators of the wood village. Anloga again experiences perennial flooding as a peculiar manifestation. The study has further shown that Asawase and Oforikrom have peculiar problem of human co-habitation with animals, leading to the outbreak of diseases occasionally.



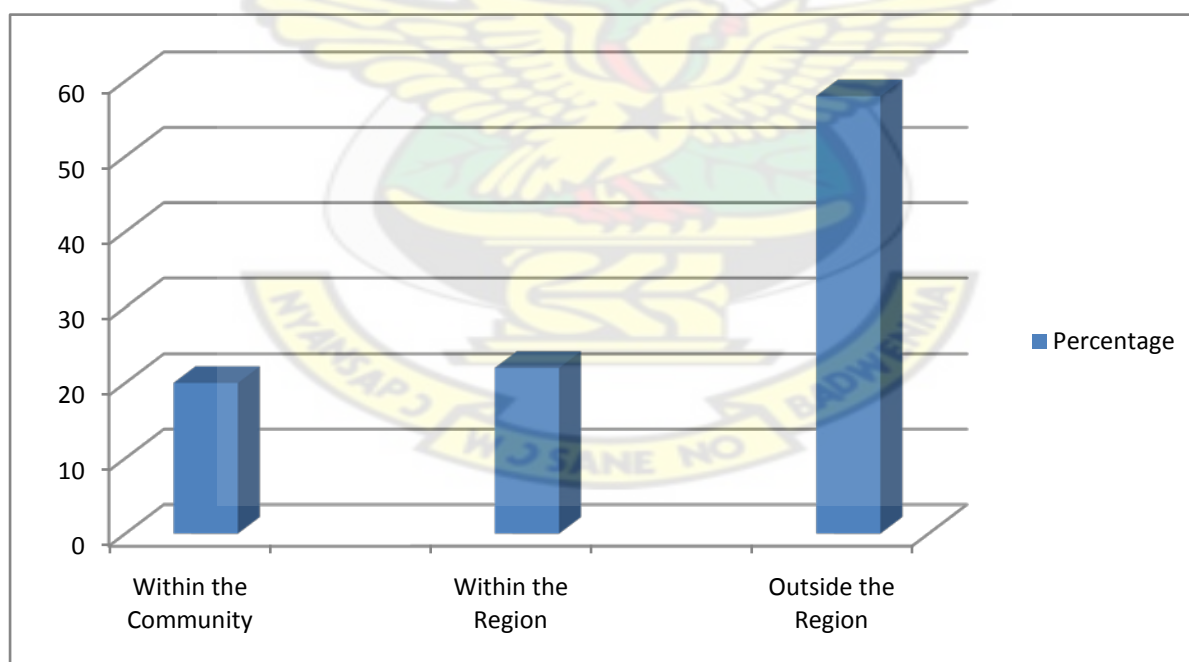
#### 4.4 Characteristics of Respondents in the Selected Slum Areas

The study identified that the respondents were mainly migrants. Many of them have very low educational attainments and employable skills. The various characteristics of residents interviewed in the selected slum communities have been discussed next.

##### 4.4.1 Origin and Length of Stay

It was revealed that 80 percent of the respondents interviewed in the four communities were migrants. Further investigations also revealed that 22 percent of these migrated from the rural parts of the Ashanti region, while 58 percent migrated from the other parts of the country. The remaining 20 percent of the respondents hailed from the slum communities. This means that the migrants far exceed the indigenes in the slum communities. This could be attributed to the rapid nature with which the migrant population increases, and the fact that many of the new arrivals are hosted in the slum communities by their relatives and friends who already have accommodation in these communities. The details of the origins of the respondents are captured in Figure 4.4.

Figure 4.4: Origin of Respondents



Source: Field Survey, May 2009

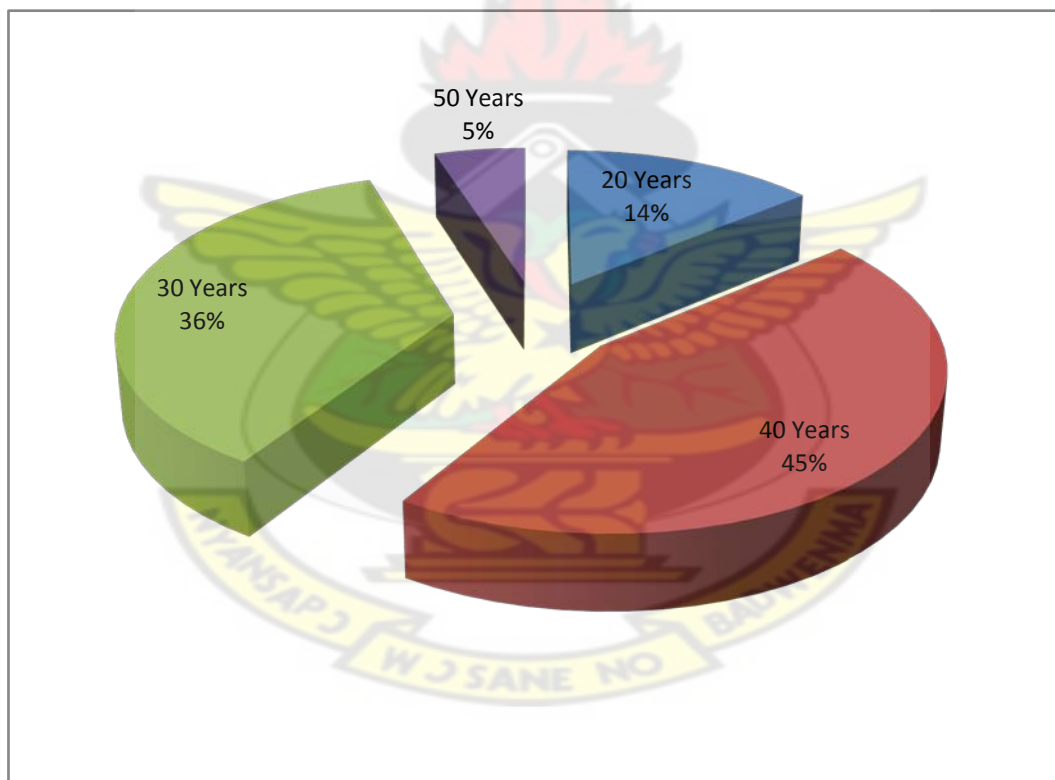
The Figure thus revealed that the slum communities are the home for rural-urban migrants. The figure further shows that migration is on the increase as 58 percent of the respondents

have their origins from outside their respective slum communities and even outside the Ashanti Region.

It was identified further that 45 percent of the respondents have spent about 40 years in their respective communities, 36 percent have stayed in the communities for about 30 years, 14 percent 20 years and the remaining 5 percent of the respondents from the four selected slum communities have stayed in the communities for over 50 years.

This is attributable to the fact that as household heads, they have entrenched their stay in the communities and many of them have no plans to relocate to anywhere in the future. This situation accounts in part for the difficulty the city planners face in controlling slums. The average length of stay in the various communities by the respondents is about 34 years. Figure 4.5 provides the details of the length of stay of respondents.

Figure 4.5: Length of Stay of Respondents



Source: Field Survey, May 2009

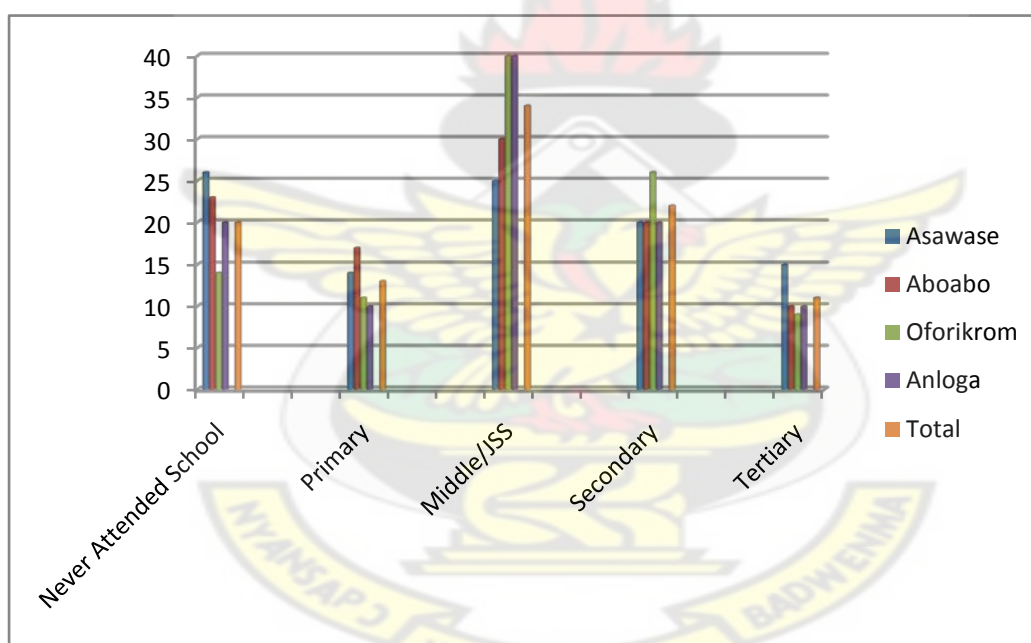
#### 4.4.2 Educational Levels of Respondents

The study identified that about 34 percent of the inhabitants of the slum communities ended their education either at the Middle School or the Junior High School. Again, as high as 20 percent of them never attended school, 13 percent ended their education at the Primary

School level while 22 percent ended theirs at the Senior High School level. Only 11 percent have any form of a tertiary education.

The survey further revealed that many people start to fend for themselves as soon as they complete the Middle School or the Junior High School. About 34 percent of the slum dwellers are in this category. Again the study gives an indication that many people who complete Senior High School but fail to further their education are likely to be in slum communities as they struggle to fend for themselves and their families. It is observed that only a few people live in slums after attaining a tertiary education (11%) and even majority of them were found in Asawase which is Government built estate for public servants. Figure 4.6 is a diagrammatic presentation of the educational levels of the respondents.

Figure 4.6 Educational Background of Respondents



Source: Field Survey, May 2009

#### 4.4.3 Occupational Structure

Satellite markets are located at Asawase and Oforikrom which by extension serve the traders in Aboabo and Anloga as well. These markets further serve as links between the selected communities on one hand and Adum and the Kumasi Central Market on the other hand. In addition, the study identified banking, transportation, hotels, restaurants and chop bars as other economic activities being undertaken in the selected communities on a limited scale.

Another group of service providers identified include hairdressers, dressmakers, woodworking businesses and handicraft. The informal sector is the most predominant, and it provides employment to about 71 per cent of the inhabitants. The study revealed however that over 60 per cent of those employed in the identified economic activities, earn very low incomes.

#### **4.5 Household Characteristics**

This section discusses the household characteristics of the study slum communities. The specific issues discussed under this section include the household size and composition as well as the number of rooms per households.

##### **4.5.1 Average Household Size and Composition**

The study identified that the slum households are relatively large in sizes. About 29 percent of the respondents have six people in a household, 25 percent have five members, 17 percent have seven members, 15 percent have four members, 8 percent have eight members while 6 percent of the respondents have three members. The average household size of 6.0 in the slum communities does not compare favourably with Kumasi's average of 5.1 per household.

Female population was identified to be slightly more than the male population in all the selected slum communities. It was thus revealed that the females constitute 51.8% in Asawase, 50.5% in Aboabo, 50.1% in Oforikrom and 51.3% in Anloga. This deviates from the population structure of the entire Kumasi metropolis in which males constitute 51.2%. This could be attributed to the nature of occupation the males in the study slum communities engage in which usually takes many of them out of home for a long time. It is therefore possible that many of the males were enumerated at their various working places.

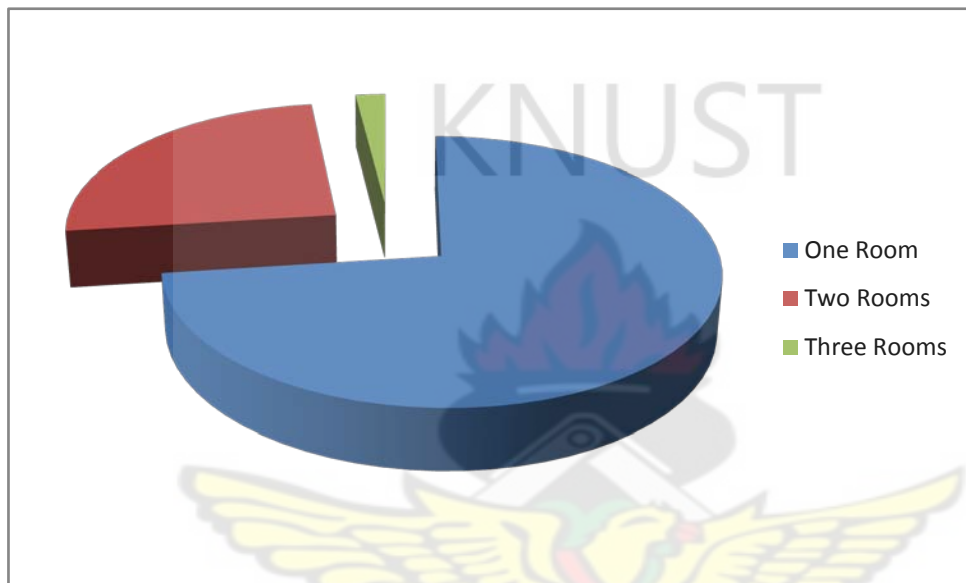
The study identified also that about 96 percent of the households in the slum communities are headed by males. The few female household heads that were identified were either widows or divorcees.

##### **4.5.2 Number of Rooms per Households**

The survey identified that about 73 percent of the households in the slum communities live in single rooms, 25 percent live in two rooms, while the remaining 2 percent live in three rooms. Figure 4.7 captures the details of the household room occupancy. The situation is however not entirely different from what pertains in the Kumasi Metropolis as a whole in the

sense that, the 2000 Population and Housing Census, report has indicated that about 70 percent of households in Kumasi live in single rooms. The characteristics of the households in the selected slum communities point to a housing shortage combined with large household sizes in the slum areas. The environment is therefore overcrowded and can be cited as a probable cause of the environmental degradation in the selected slum communities.

Figure 4.7 Number of Rooms Available to Households



Source: Field Survey, May 2009

#### 4.6 Housing Ownership Characteristics

The analysis made in this aspect of the discussion is based on the housing ownership characteristics of the selected slum communities. The issues discussed include the ownership types such as owner occupied, free occupancy and tenancy together with their manifestations in the slum communities.

##### 4.6.1 Owner Occupied

The study identified that 54 percent of the slum dwellers in the four communities own their houses. This is higher than the Kumasi's average of 33.6 percent. This is attributable to the fact that many of the rural-urban migrants do not have resources enough to rent accommodation for their families so they resort to the building of makeshift structures and occupy them as squatters at unauthorized locations, mostly without any authorization.



This partly explains why 64 percent of the house owners in the slum communities do not have building permits for their structures. Other reasons could be that the processes for the acquisition of building permits in the metropolitan area are too cumbersome and frustrating. However it is also possible that for many of them, the permit was not given because their locations were inappropriate. It was observed through the survey that 45 percent of the house owners in the study areas do not own the land because the land belongs to either the Stool, the State or have been left as river floodplains or simply unsuitable for building. This means that they are occupying those places due to the lapses and the weaknesses in the implementation of planning regulations in the metropolis.

#### 4.6.2 Tenants

The research revealed that 24 percent of the slum dwellers are tenants. This figure does not compare favourably with Kumasi's average of 74 percent as indicated by the Ghana Statistical Service (2000). This could be attributed to the fact that rural- urban migrants usually do not have enough resources to rent accommodations for their households in the metropolis. It could also be attributed to the fact that the slum communities are not attractive enough for many prospective tenants due to environmental degradation, weak structures, poor sanitation and poor provision of utility services among others.

#### 4.6.3 Free Occupants

The study revealed that 22 percent of the households interviewed in the selected slum communities are freely occupying their dwellings. It was further identified that 85 percent of the free occupant slum dwellers are the children of older slum house owners who continued to stay in their parents' houses even after they got married and had their own families. The study also revealed that 10 percent of the free occupant slum households are relatives of the slum house owners, while 5 percent are friends or hail from the same villages as those of the house owners, who were accommodated on their arrival to the city and have not been able to secure their own accommodations. Details of the housing ownership characteristics in the slum communities are captured in Table 4.2.

Table 4. 2 Housing Ownership Characteristics

Slum Area Ownership Type	Asawase		Aboabo		Oforikrom		Anloga		Total	%
	%	No.	%	N	%	N	%	N		
Owner	57	33	46	19	55	27	72	5	84	<b>54</b>
Free Occupancy	24	14	21	9	20	10	14	1	34	<b>22</b>
Tenant	19	11	33	14	25	12	14	1	38	<b>24</b>
<b>Total</b>	<b>100</b>	<b>58</b>	<b>100</b>	<b>42</b>	<b>100</b>	<b>49</b>	<b>100</b>	<b>7</b>	<b>156</b>	<b>100</b>

Source: Field Survey, May 2009

#### 4.7 Housing Conditions

The focus of the discussion in this section is centred on the housing conditions of the selected slum communities. Specifically, the issues discussed under this section include foundation and walling conditions, roofing environmental, roads and the provision of utilities in the study communities.

##### 4.7.1 Foundation and Walling

The study identified wood, mud, bricks, scrap materials and sandcrete blocks as the main materials used in building the walls of houses in the studied slum communities. It was revealed in the survey that 37 percent of the houses were built with sandcrete blocks which are considered to be durable housing materials. The remaining 63 percent of the houses were built with non-durable materials such as bricks (28%), wood (16%), mud (14%) and scrap materials (5%).

It was thus revealed that the use of non-durable materials for construction of houses is popular in the slum communities. This is attributable to the fact that as squatters, they need to assure their landlords that their stay on the land is temporary in order to avoid eviction. As a result of the fact that slum communities start as temporary settlements the structures are not durable. The houses mostly lack strong foundations and the walls are non-durable and weak. Those that have foundations still have them exposed due to erosion and other forms of environmental degradation. Table 4.3 as well as Plate 4.1 and 4.2 provide the details of the housing condition in the slum communities.

Table 4.3 Building Materials

Slum Areas	Asawase	Aboabo	Oforikrom	Anloga	Total	%
<b>Building Materials</b>						
Sandcrete Blocks	23	16	17	2	58	<b>37</b>
Bricks	18	14	10	1	43	<b>28</b>
Mud	9	6	6	1	22	<b>14</b>
Wood	6	5	12	2	25	<b>16</b>
Scrap Materials	2	1	4	1	8	<b>5</b>
<b>Total</b>	<b>58</b>	<b>42</b>	<b>49</b>	<b>7</b>	<b>156</b>	<b>100</b>

Source: Field Survey, May 2009

Plate 4.1 A Dilapidated House Located in Asawase



Source: Field Survey, May 2009

Plate 4.1 is a photograph taken from Asawase as part of the field survey. The plate captures a household in a dilapidated house with non-durable walls and weak foundation. This is just one example of the nature of the housing conditions in the studied slum communities.



Plate 4.2 A Household in a Wooden Structure at Oforikrom



**Source:** Field Survey, May 2009

Plate 4.2 is a photograph taken at Oforikrom of a household occupying a wooden structure. The roof, walls and the foundation are all sub-standard, as indicated by exposed foundation.

#### 4.7.2 Roofing

The study identified that the houses in the slum communities under study do not only have weak foundations and walls but also weak roofs. About 76 percent of the respondents were identified to be living in houses with weak and leaky roofs made of old corrugated iron sheets. Plates 4.3, 4.2 and 4.1 capture the details of the roofing condition of the slum houses.

Plate 4.3 Slum Houses Located in Aboabo



**Source:** Field Survey, May 2009

#### 4.7.3 Environmental Condition

The study identified that the environment of the four slum communities under study are degraded to a very large extent. The study identified encroachment on river banks and flood plains, throwing of household waste into water bodies and undeveloped lands. Plate 4.4 provides some details of the environmental condition in the study communities.

Plate 4.4 Environmentally Degraded Site at Anloga



**Source:** Field Survey, May 2009

#### 4.7. 4 Provision of Utilities

Electricity supply in the slum communities is not reliable, though the study revealed 70 percent coverage in the slum communities. It was identified that only 26 percent of the inhabitants enjoy regular flow of electricity. For 41 percent the electricity supply is bad, while 33 percent consider it as worse. This situation is attributable to the nature of dwellings in the slum communities. Many houses are illegally located and for that matter do not qualify to be connected to the electricity grid. Again the supply is erratic because many houses are not properly wired and are illegally looped to one source instead of each house connecting from separate sources. Figure 4.8 captures the details of the nature of electricity supply in the slum communities.

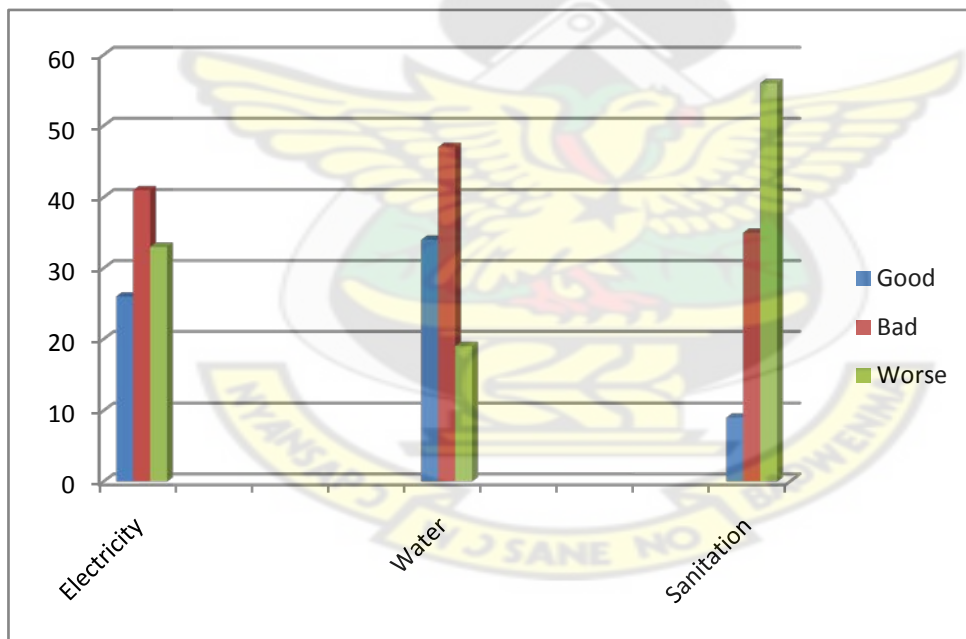
In terms of water supply, the study revealed that 47 percent of the slum dwellers in the study communities enjoy irregular water supply in their houses. Another 19 percent were identified to have even a worse situation where water does not flow in their houses at all. However 34 percent of the people in the study communities have regular flow of water in their homes. The irregular supply of water to the slum communities may be a result of the nature of housing in the slum communities which makes it difficult for all parts of the communities to be served.



On sanitation, 56 percent of the respondents were of the view that sanitation in their communities was worse. Again 35 percent considered sanitation as bad in their communities. Only 9 percent of the respondents considered sanitation as good in their communities. This is attributable to the overcrowding which contributes to too much waste generation and the haphazard siting of houses which makes waste collection very difficult in the communities.

The situation is not likely to change for the better because the communities lack local capacity to deal with the water and sanitation problems which confront them. Again the overreliance of the KMA on external sources of funding for most of its capital intensive projects like electricity extension, water supply and sanitation management makes it difficult for water and sanitation problems in the slum communities to be solved any time soon, especially the fact that the number of slum dwellers keep increasing. Figure 4.8 provides the details of utility supply in the slum communities.

Figure 4.8 Utility Supply in the Slum Communities



Source: Field Survey, May 2009

#### 4.7.5 Access Roads

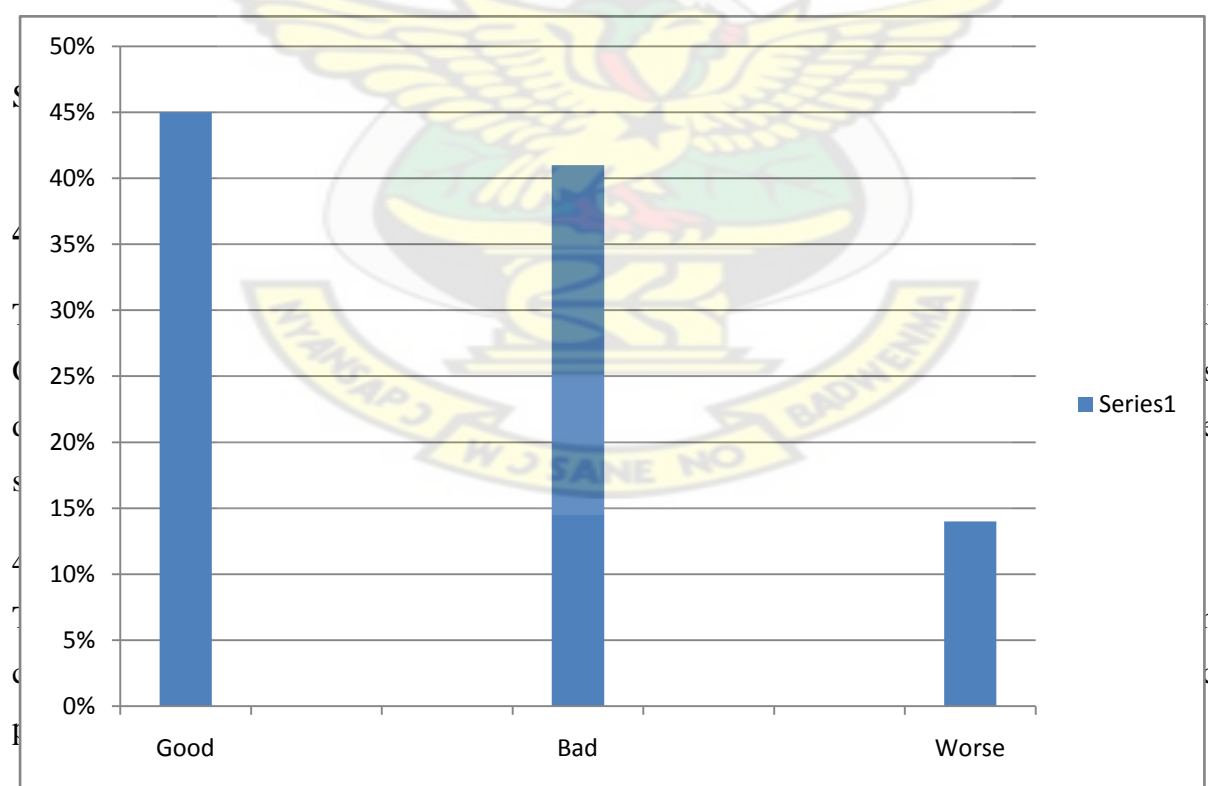
The study revealed that 45 percent of the local roads in the slum communities are good, which means that they are tarred, have smooth surfaces and are broad enough for both vehicular and pedestrian use. However, 41 percent of the local roads are bad, while the

remaining 14 percent are considered worse. Those that are in bad condition are those that are tarred but have developed pot holes and rough surfaces. Some of them are also too narrow. The worse roads are those that are not tarred and have deteriorated.

Asawase and Aboabo have good roads because they benefited from the Government Urban II Programme which took off in 1985. Through this programme, many of the local roads in these two communities were tarred.

Together the bad and worse roads constitute 55 percent of the local roads in the study communities. This is because road construction in slum communities is difficult and expensive which is attributed to the haphazard siting of structures some of which encroaches the right of way, yet compensation must be paid to their owners if they are demolished during road construction and this adds to the cost. In addition the process which leads to the payment of the compensation also delays the execution of road construction projects in slum communities. Figure 4.9 is a diagrammatic representation of the condition of local roads in the study communities.

Fig.4.9 Condition of Access Roads in Slum Communities



Implementation of the Urban Environmental and Sanitation Project (UESP) I&II in the study communities to help in slum control. The study identified that this is a World Bank/Ghana

Government/KMA/Beneficiaries' projects, which is focused on waste management and the construction of access roads. Under this programme, the study identified that local roads and waste management projects at various stages of completion were executed to help control slums in Aboabo and Asawase.

The study further revealed that the KMA implemented the Community Infrastructure Up-Grading Projects in all the four communities between 2000 and 2004 as part of her efforts to improve slums in the metropolis. This project was also a World Bank assisted project aimed at the construction of public places of convenience, drains and roads.

Also it was identified that through the assistance of the European Union, the KMA implemented the EU-Micro Project at Anloga and other poor communities in the metropolis between 1996 and 2002 as part of her efforts to control slum growth in the metropolis.

Again the study revealed that through the Government Accountability Improvement Trust (GAIT), the United States Agency for International Development (USAID) is assisting the KMA in a capacity building programme at Asawase. The aim of the programme is to equip the members of the community with skills that will empower them to hold their leaders accountable to ensure rapid development and slum control in the community.

In addition, the study identified that the KMA through the assistance of the African Development Fund (ADF), is implementing the Urban Poverty Reduction Project (UPRP) in the Kumasi metropolis of which Aboabo, Oforikrom and Anloga are beneficiaries. The project involves an institutional capacity building and human capital development as well as targeted pro-poor socio-economic investments in selected urban communities in Kumasi.

The study further revealed that the Slum Upgrading Facility (SUF) of the U.N. Habitat in collaboration with the Cities Alliance is in a discussion for the implementation of a project aimed at the eradication of slums and the prevention of the emergence of new slums in the Kumasi metropolis, as forming part of the U.N Millennium Development Goals (MDGs). The KMA upon a request from the U.N. Habitat team has carried out a survey identifying all slum communities in the Kumasi metropolis. The outcome was forwarded to the Head of the U. N. Habitat- Ghana in 2005 and a response is being awaited.

In spite of the numerous efforts made so far to upgrade and improve the slum conditions in the metropolis, the slums persist and new ones continue to spring up in the metropolis. The study however revealed that the K.M.A. does not have any specific policy for the control or improvement of slums in the metropolis. What it does is to roll out programmes and projects on ad-hoc bases in the metropolis which are not slum control specific, though some of them have the advantage of improving slums in the metropolis.

Table 4.4 provides the details of the efforts of the KMA and her development partners towards slum improvement in the study communities.

Table 4.4: Slum Improvement Programmes

No.	Programme	Duration	Areas Affected	Projects Implemented
1	Urban Environmental Sanitation Programme (UESP) I & II	1996-2002	Aboabo Asawase	Waste Management and Construction of Roads
2	(EU) Micro Projects	1996- 2002	Anloga	Construction of Public Places of Convenience
3	Community Infrastructure Up-Grading	2000-2004	Asawase Zongo	Construction of public places of convenience
4	Community Infrastructure Up-Grading	2000-2004	Oforikrom	Construction of roads and drains
5	Community Infrastructure Up-Grading	2000-2004	Anloga	Provision of water and electricity
6	Government Accountability Improvement Trust (GAIT)/KMA	2006-2009	Asawase	Community Education and Sensitization
7	Urban Poverty Reduction Project (UPRP)	2008- 2011	Aboabo, Oforikrom, Anloga	Social Capital Investment
8	U.N-Habitat Slum Up-Grading Facility (SUF)	2005-2009	Aboabo, Anloga, Oforikrom, Asawase	Eradication of Slums, Prevention of new ones

Source: K.M.A. Development Planning Department, May 2009

#### 4.8.2 The Central Government

The study has further identified that in order to help ease the traffic congestion in the metropolis the 3 km Oforikrom-Anloga Junction-Asokwa portions forming the western by-

pass of the ring road, is being resurfaced by the Central Government through the Department of Urban Roads. The study also revealed that as part of the effort to resurface the portion of the ring –road, the Ministry of Local Government and Rural Development has constructed a wood processing village at Sokoban where the artisans who have created a huge slum at Anloga Junction will be relocated.

#### 4.8.3 The Kumasi Sister City Partnerships

The study revealed that Kumasi is involved in a sister-city relationship with some cities in some developed countries. These relationships include: Kumasi-Almere (Netherlands) Sister Cities Agreement 2001 – 2006, signed in October, 2001 and the Kumasi – Atlanta Partnership (KAP) which is a partnership between Kumasi in Ghana and Atlanta in the State of Georgia, United States of America, which was signed in 2005.

The research revealed that some slum communities including Asawase and Aboabo benefited from community projects such as schools, training of street children, sanitation, Waste Management and gender advocacy programmes through the Kumasi-Almere relationship. The Kumasi-Atlanta partnership on the other hand, focused on the strengthening of the social and economic sector capacity of Kumasi to reduce urban poverty. The partnership enabled Kumasi to utilise Atlanta's institutional knowledge and experience in effectively expanding business, trade and employment in some poor communities in the Kumasi metropolis including Oforikrom, Anloga and Aboabo.

### 4.9 Challenges of Slum Control

This section discusses the challenges of slum control in the slum communities. The specific issues discussed include the institutional, socio-economic and housing challenges for slum control as well as the challenges associated with utility supply.

#### 4.9.1 Institutional

The institutional challenges identified by the study include weak enforcement of development control regulations. This is attributable to inadequate qualified and motivated personnel for the Town and Country Planning Department to carry out its mandate of ensuring orderly development of the city. This has created a situation where planning in the city is done mostly after development had taken place, instead of the latter following the former.



The study further revealed weak coordination/ collaboration among institutions responsible for directing physical development. For instance, the collaboration between the Town and Country Planning Unit, Development Planning Unit, Traditional Authorities and Assembly Members was identified to be a very weak one which allows developers to flout planning and building regulations with impunity.

#### 4.9.2 Socio-economic

Again, it was identified that capital financing of slum control projects in the slum communities is driven mainly by external sponsorship which makes it difficult for the KMA to function efficiently. This is attributable to inadequate internally generated fund for development in the slum communities. Table 4.4 captures the details of slum control projects being carried out in the slum communities.

It was also detected that the ever increasing number of rural-urban migrants to the city daily, makes slum control a complex issue for planners to deal with, since the unexpected increases in the number of slum dwellers renders plans outmoded even before they are implemented.

The overcrowding in the slum communities makes their management a complex phenomenon. The study identified that too many people packed in tiny makeshift structures creates anonymity which makes it easier for the inhabitants to disregard public order regulations and city by-laws with impunity.

Illiteracy and lack of employable skills in the slum communities makes slum control very challenging. The study identified that only 11 percent of the residents of the slum communities have attained any form of tertiary education. This situation increases the levels of poverty among the inhabitants of the slum communities and makes it difficult to control slums.

#### 4.9.3 Housing

Difficulty in land acquisition and high cost of building materials were identified to have led to inadequate housing units which does not compare favourably with the large household sizes in the slum communities. This creates difficulty for the city authorities to control slum growth since without the slum the people virtually have no alternative accommodation.

The study identified that 63 percent of the buildings in the study communities were built with sub-standard materials. Others were unauthorized extensions made to existing buildings. It

was therefore identified that the slum houses lack durability and therefore not amenable to rehabilitation and up-grading.

#### 4.9.4 Utility Services Provision

The study revealed that the city authorities face real difficulty in their quest to ensure efficient supply of utilities like water, electricity sanitation and roads to the slum communities due to their unauthorized locations and weak structures.

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## **CHAPTER FIVE**

### **SUMMARY OF KEY FINDINGS, RECOMMENDATIONS AND CONCLUSION**

#### **5.1 Introduction**

This Chapter is the concluding part of the study. It therefore summarizes the key findings of the research and indicates how the objectives of the research were achieved. It also provides recommendations for the control of slum growth.

#### **5.2 Summary of Key Findings**

The findings of the study are based on the objectives of the study. As a result, this section identifies issues of socio-economic and spatial structure of slums, strategies for slum control and the challenges associated with such strategies.

##### **5.2.1 Socio-Economic and Spatial Structure of Slums**

- The total population of the four slum communities was identified to be 125,427. It was thus revealed that 50.9 percent of them were females.
- Slum dwellers are mainly rural-urban migrants. The study identified 80 percent of the slum dwellers in the selected communities as rural- urban migrants. This means that most rural- urban migrants who enter the city end up in slums.
- The informal sector employs about 71 percent of the slum dwellers. The study revealed however that 60 percent of the people employed in this sector are poor due to low earnings.
- Illiteracy is high in the slum communities. The study identified that 20 percent of the inhabitants never attended school, 13 percent ended at the primary school, while 34 percent terminated their education at Middle/ Junior High school levels. Only 11 percent have any form of a tertiary education.
- Slum houses lack durability. The study revealed that only 37 percent of the buildings in the slum communities were built with sandcrete blocks considered to be durable. The rest constituting 63 percent were built with sub-standard materials such as mud, wood and bricks.
- The slum communities are overcrowded. This is so because the study identified that the average household size in the slum communities is 6.0 persons per household which is higher than the metropolitan average of 5.1 persons per household.

- Electricity supply in the slum communities is unreliable. This is because the study identified that only 26 percent of the inhabitants enjoy regular flow of electricity. The remaining 74 percent enjoy erratic supply of electricity.
- The slum communities in the metropolis are underserved with water and sanitation services. This stems from the disclosure through the study that 66 percent of the inhabitants of the slum communities have difficulty in accessing water, and 91 percent of the respondents considered sanitation as worse in their communities.
- Local roads in the slum communities are relatively bad. The study revealed that 55 percent of the local roads in the selected communities are either bad or worse. This is so because some of the roads are narrow due to encroachment, others have developed potholes and rough surfaces due to long period of neglect while the rest are unpaved.

#### 5.2.2 Strategies for Slum Improvement

- ✓ Through the Urban Poverty Reduction Project (UPRP), a capacity building for pro-poor urban development and management project is being implemented through Local Project Implementation Agency (LPIA) members in the slum communities. Additionally social capital investment support, and urban small scale enterprise development programmes are being carried out in the slum communities to help improve the earnings of the people in the slum communities.
- ✓ The KMA assisted by the World Bank has built and continues to build roads, water and sanitation facilities and schools in the slum communities under the Community Infrastructure Up- Grading Projects.
- ✓ The Urban Environmental and Sanitation Project (UESP I&II) is also being used by the KMA and her development partners for waste management and the construction of access roads in the slum communities.
- ✓ Through the USAID, the KMA is implementing the Government Accountability Improvement Trust (GAIT), at Asawase to educate and build the capacity of the people in accountable local governance system.
- ✓ The KMA has decentralized into 10 Sub-Metropolitan Assemblies from the initial four to ensure efficiency of her development control and monitoring efforts.

### 5.2.3 Challenges of Slum Control Efforts

- ◆ The institutional collaboration among the Town and Country Planning Unit, Development Planning Unit, Traditional Authorities and Assembly Members is weak and this leads to weak enforcement of development control regulations.
- ◆ Overreliance on external sources for capital financing of slum control projects in the slum communities makes it difficult for the KMA to function efficiently.
- ◆ Denied access to housing, due to the wide gap between demand and supply of housing units and high cost of rent.
- ◆ Inefficient utility supply to slum communities due to illegal connection of utilities to unauthorized homes, coupled with metre by-passing and non-payment of bills.
- ◆ Encroachment on the right of way and delay in the release of funds from development partners pose a challenge for the construction of local roads in the slum communities.

### 5.3 Recommendations

The experiences gained from literature and field surveys throughout the research have made it possible for the following recommendations to be made. Depending on the approach being recommended and the nature of problem to be solved, three categories of solutions covering short/medium and long terms have been recommended.

#### 5.3.1 Short/ Medium Term

a). The KMA should reduce her overreliance on the external sources of funding for slum control projects. This should be done by improving its local revenue mobilization. The Registrar General Department should be made to play a key role in the education and the registration of the informal sector businesses, and help bring them into the tax net. The financial institutions should also be involved to educate the informal sector business operators on the need to save with the banks and keep business records. This will help boost their businesses, improve their vibrancy and increase their profitability which will most likely translate into increased revenue for the K.M.A. Again punitive sanctions should be meted to the KMA's revenue collectors who engage in any form of corrupt practices.

b). Building of houses with sub-standard materials should be discouraged in the Metropolis. This should be done by strictly enforcing the building regulations of the KMA. All prospective developers must receive permits before they build and all who fail to secure



permits should have their structures demolished and the owners prosecuted. The Building Inspectorate Unit and the Town and Country Planning Departments of the KMA should be properly resourced, trained and empowered to carry out this responsibility.

c). Squatting on marshy areas and other unauthorized locations should be made a punishable offence. The Parks and Gardens Department should be resourced and empowered to take charge of such lands and protect them from squatters. Again, the heads of all institutions that have acquired lands should be mandated to protect such lands from squatters and encroachers or be sanctioned.

d). Adequate water should be supplied to the slum communities to improve the livelihood of the people. This is to help address the problem of inadequate supply of water to the slum communities due to unreliable data. The Ghana Water Company should update data on the number of households in the slum communities so that adequate water can be supplied to the people.

e). Intensify house-to-house waste collection in the slum communities to help address the worsening sanitation problem in these communities. Under this strategy, the KMA should contract private waste management firms, build their capacity to enable them enter into negotiations with slum community members on the modalities for efficient collection of waste and the best way by which payment for services rendered could be effected.

f). The Department of Urban Roads should be empowered by the Ministry of Roads and Highways to take full control over all lands earmarked for road construction and protect them from encroachers. Offenders of such regulations should be prosecuted. All structures which are in the right of way should be demolished to give way for the expansion of the narrow roads. Failed local roads in the slum communities should be repaired and the unpaved ones constructed.

g). Family planning should be promoted in the slum communities to help control the large household sizes and the overcrowding in the communities. The Ghana Health Service should be put in charge of the education and campaign on the importance of family planning in order to ease the congestion in the slum communities.

### 5.3.2 Long Term

a). The KMA should embark on urban upgrading as a policy agenda. This must aim at improving urban poverty and livelihoods, generating local economic growth, and preventing the growth of new squatter settlements by guiding development and growth. In doing this, the framework for improving living conditions in informal settlements should be designed in a participatory manner with the involvement of the slum inhabitants. Specific slum communities should be targeted for the implementation of specific budgeted programmes in the metropolis over a specific period of time to ensure the achievement of results.

b). At the national level secondary cities could be introduced by the Ministry of Local Government and Rural Development as a counterbalance to the large primate cities which have resulted in slum growth. This is meant to be achieved through a reduction of the rate of migration from rural to large primate cities by redirecting some of the migrant population to secondary cities. The envisaged impact of this redirection on primate cities is the reduction of unemployment and pressure on urban services.

c). The Ministry of Local Government and Rural Development in conjunction with the KMA should design a programme to enhance the affordability of new housing options by increasing access to housing finance through incentives for lenders in order to decrease the supply cost of housing and transaction costs of accessing it. This dual approach to improving affordability will minimize the size of public subsidies needed to make housing accessible to the poor.

### 5.4 Conclusion

In conclusion, the study has established that slum growth in Ghanaian cities is basically a result of rural- urban migration which has fuelled urbanization in the country. Unfortunately the urbanization in Ghana has led to the growth of primate cities. The ever-increasing urban population has resulted in housing shortage. This coupled with the authorities' inability to provide affordable housing for the low income urban dwellers has resulted in the creation of slums in the cities as part of the urbanization process.

There is the need therefore to deal with slum growth since it may not be possible to halt urbanization. The foregoing suggests therefore that slum control in Ghanaian cities require a holistic and an integrated planning approach that can reduce rural poverty and improve urban livelihoods since these appear to be the main causes of slum growth in Ghanaian cities.

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## APPENDIX I

### CALCULATION OF SAMPLE SIZE

The formula below given by Miller and Brewer (2003) was used to calculate the sample size.

$$n = \frac{N}{1+N(\alpha)^2}$$

Where 'N' is the sample frame, 'n' is the sample size and ' $\alpha$ ' is the margin of error (8%).

A sample size of 156 was arrived at as follows:  $n = \frac{24561}{1+24561(0.08)^2} = 156.24$

A simple proportion formula was then used to calculate for the number of households that were to be interviewed in each slum community as follows:  $SF \propto SS$ ; where 'SF' is the sample frame, 'SS' is the sample size and ' $\propto$ ' is a proportionality sign. The constant of proportionality then becomes the initial values of  $SS/SF$ . The number of households selected from each community was therefore calculated as follows:

If  $24,561 \propto 156.24$ , then

$$\text{Asawase (9,144)} = \frac{156.24}{24561} \times 9144 = 58$$

$$\text{Aboabo (6626)} = \frac{156.24}{24561} \times 6626 = 42$$

$$\text{Oforikrom (7694)} = \frac{156.24}{24561} \times 7694 = 49$$

$$\text{Anloga (1097)} = \frac{156.24}{24561} \times 1097 = 7$$

$$\text{Total} = 156$$



**AP.Table 1.1: Sample frame and sample size**

<b>Comm</b>	<b>Population</b>	<b>No. of Households</b>	<b>No. of Houses</b>	<b>Sample Frame</b>	<b>Sample Size</b>
Asawase	46,243	9,144	2,525	9,144	58
Aboabo	34,206	6,626	830	6,626	42
Oforikrom	38,155	7,694	1,057	7,694	49
Anloga	6823	1,097	202	1,097	7
<b>Total</b>	<b>125,427</b>	<b>24,561</b>	<b>4,614</b>	<b>24,561</b>	<b>156</b>

Source: Ghana Statistical Service (2000 Population Census)

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**APPENDIX II**  
**QUESTIONNAIRE ADMINISTRATION**

DEPARTMENT OF PLANNING  
FACULTY OF PLANNING AND LAND ECONOMY  
COLLEGE OF ARCHITECTURE AND PLANNING

KNUST:

**TOPIC: An Assessment of the Development Planning Implications of Slums in  
Ghanaian Cities. A Case Study of Kumasi Metropolitan Area**

**(A) HOUSEHOLD SURVEY**

1. Name of respondent .....
2. Name of community .....
3. Date of interview .....
4. Status of respondent .....

**(a) Socio-Economic Characteristics:**

5. Indicate on the table below, your .....

Sex	Length of stay	Marital status	Number of children	No. of Rooms	Household Size

6. Educational background:
  - (a) Never attended school {    } (b) Primary {    } (c) Adult literacy {    }
  - (d) Middle/JSS {    } (e) Secondary {    } (f) Tertiary {    }
7. Where do you come from? (a) Community {    } (b) Within the district {    }
  - (c) Within the region {    } (d) Outside the region {    }

**(b) Housing Characteristics**

8. Indicate on the table below the..... of the land on which the house is built.

Ownership status	Means of acquisition	Space availability	Suitability for building

9. Did you get building permit before you put up your structure? (a)Yes { } (b) No { }
10. If “yes”, was it difficult to get the building permit? (a) Yes { } (b) No { }
11. What materials did you use in building your house? (a) Sandcrete blocks { }  
(b) Bricks { } (c) Mud { } (d) Wood { } (e) Scrap materials { }
12. Do you think the city authorities are worried about your continuous stay here?  
(a) Yes { } (b) No { }
13. If “yes”, what do you think they are worried about?  
.....
14. What do you think should be done to improve the conditions of this area?  
.....
15. Has this community benefited from any government improvement programme before? (a) Yes { } (b) No { }

**(c) Water and Sanitation**

16. Does water flow continuously in your house?  
(a) Yes { } (b) No { } (c) Sometimes { }
17. How often does water run in your house? (a) Regularly { }  
(b) Weekly { } (c) Fortnightly { } (d) Not at all { }
18. Where do you access water if water does not flow? .....
19. How is the sanitation situation in the community?  
(a) Bad { } (b) Worse { } (c) Good { }

**(d) Access Roads and Drains**

20. How will you categorize the roads and drains in this community? (a) Good {    }  
(b) Bad {    } (c) Worse {    }
21. If 'bad' or 'worse' what have been the problems of road construction in this Community? .....
22. What do you suggest should be done to improve the road network of this community? .....

**(e) Electricity supply**

23. Is your house connected to the National Electricity Grid? (a) Yes {    }  
(b) No {    }
24. What is the nature of electricity flow in this community? (a) Regular {    }  
(b) Erratic {    }
25. If 'erratic' what do you consider to be the problem of electricity supply in the Community? .....

**(B) INSTITUTIONAL SURVEY: Kumasi Metropolitan Assembly**

1. Name of respondent .....
2. Date of interview .....
3. Status of respondent .....

**(a) Nature of Slums/Slum Areas**

4. Indicate on the table below the main slum areas in Kumasi

No.	Area	Manifestation of Slums
1		
2		
3		
4		
5		

**(b) Manifestation and Slum Control Approaches**

5. Indicate your slum control programmes (**past and present**) on the table below.

No.	Programme	Duration	Areas Affected	Problems of Implementation
1				
2				
3				

**(c) Problems of Slum Control**

6. What have been the problems of slum control in the Metropolis?

(i).....

(ii).....

(iii).....

**(d). Suggested Solutions to Slum Control Problems**

7. What solutions do you suggest to help mitigate the slum control problems in the Metropolis?

(i).....

(ii).....

(iii).....



**(C) INSTITUTIONAL SURVEY: Oforikrom Sub-Metropolitan Assembly**

1. Name of respondent .....
2. Date of interview .....
3. Status of respondent .....

**(a) Nature of slums/slum areas**

4. Indicate on the table below the main slum areas in this Sub- Metropolitan area

No.	Area	Manifestation of Slums
1		
2		
3		
4		
5		

**(b) Manifestation and Slum Control Approaches**

5. Indicate your slum control programmes (**Past and Present**) on the table below.

No.	Programme	Duration	Areas Affected	Problems of Implementation
1				
2				
3				

**(c) Problems of slum control**

6. What have been the problems of slum control in the Sub-Metropolitan area?

- (i).....
- (ii).....
- (iii).....

**(d). Suggested Solutions to Slum Control Problems**

7. What solutions do you suggest to help mitigate the slum control problems in the Metropolis?

(i).....

(ii).....

(iii).....

**(D) INSTITUTIONAL SURVEY: Asawase Sub-Metropolitan Assembly**

1. Name of respondent .....

2. Date of interview .....

3. Status of respondent .....

**(a) Nature of Slums/Slum Areas**

4. Indicate on the table below the main slum areas in this Sub- Metropolitan area

No.	Area	Manifestation of Slums
1		
2		
3		
4		
5		

**(b) Manifestation and Slum Control Approaches**

5. Indicate your slum control programmes (Past and Present) on the table below.

No.	Programme	Duration	Areas Affected	Problems of Implementation
1				
2				
3				

**(c) Problems of Slum Control**

6. What have been the problems of slum control in this Sub-Metropolitan area?

- (i).....
- (ii).....
- (iii).....

**(d). Suggested Solutions to Slum Control problems**

7. What solutions do you suggest to help mitigate the slum control problems in the Metropolis?

- (i).....
- (ii).....
- (iii).....

**(E) INSTITUTIONAL SURVEY: Ghana Water Company (GWC)**

1. Name of respondent .....
2. Date of interview .....
3. Status of respondent .....
4. Are you aware of the slum conditions and manifestations in the Metropolis?
- (a) Yes { } (b) No { }
5. Indicate on the table below, the nature of water situation in the slum areas

No.	Area	Water Supply Situation
1		
2		
3		
4		

6. What are the problems of supplying water in slum areas?

- (i) .....
- (ii) .....
- (iii) .....

7. What do you suggest as solutions to the problems of supplying water to slum areas so as to ensure improvement in water and sanitation of the slum areas?.....

.....

**(E) INSTITUTIONAL SURVEY: The Electricity Company of Ghana**

1. Name of respondent .....

2. Status of Respondent .....

3. Date of interview .....

4. Are you aware of the slum conditions and manifestations in the Metropolis?

(a) Yes { } (b) No { }

5. Indicate on the table below, the nature of electricity supply situation in the slum areas

No.	Area	Electricity Supply Situation
1		
2		
3		
4		

6. What are the problems of supplying electricity in the slum areas?

(i) .....

(ii) .....

(iii) .....

7. What do you suggest as solutions to the problems of supplying electricity to slum areas so as to ensure improvement in the energy needs of the slum areas?.....

.....

**(F) INSTITUTIONAL SURVEY: Department of Urban Roads**

1. Name of respondent .....
2. Status of Respondent .....
3. Date of interview .....
4. Are you aware of the slum conditions and manifestations in the Metropolis?
5. Indicate on the table below, the nature of access roads and drains in the slum areas

No.	Area	Nature of Access Roads and Drains
1		
2		
3		
4		

6. What are the problems of access roads and drains construction in the slum areas?
  - (i) .....
  - (ii) .....
  - (iii) .....
7. What do you suggest as solutions to the problems of road and drains construction to slum areas so as to ensure improvement in the road network of the slum areas?.....

.....