

**SLUM IMPROVEMENT IN GHANA: THE STUDY OF ABOABO AND ASAWASE  
IN KUMASI**

**BY**

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## **ABSTRACT**

Urbanization in the world has left much to be desired as slum dwellers are trapped in poverty, insecurity, deplorable housing conditions, inadequate provision of water, electrification and sanitation, poor health and education and low productivity (Jennervik, 2006). These conditions are as a result of the failure in existing urban, social and economic development policies. Governments are therefore challenged in addressing the issue of slum development and their further expansion. The growing incidence of slums has thus, resulted in new policies, programs and strategies by city authorities to improve the living conditions of slum dwellers.

The main objective of the study which focused on Aboabo and Asawase (the first estate to be built in Kumasi around 1947) in Kumasi was to analyze the nature, magnitude and the growth dynamics of selected slums in the metropolis and to come out with recommendations on how to improve slum conditions.

The study employed the cross sectional research design in which the case study method was used. The research made use of the participatory approach in order to have diverse views on the research topic.

The study observed that, the conditions in the study communities had deteriorated considerably leading to poor sanitation, encroachment on the land, poor housing and low income generating activities. It was further established that, although some attempts had been made to upgrade the communities, programmes and project were biased towards improvement in infrastructure services and gave less attention to housing development and income generating activities. This was attributed to the fact that the projects and programmes were not holistic and also lacked proper coordination.

As a remedy to reduce further slum expansions and formation in the study areas and the metropolis, it is recommended that, at the local level, the Kumasi Metropolitan Planning Unit as lead organization supported by other departments should develop holistic slum improvement packages and generate enough revenue for their smooth implementation. Local level efforts should be supported with national level decentralization of development programmes and projects to the less endowed regions especially the Northern and Upper regions to help reduce rural-urban drift. The proposed recommendations will help improve slum conditions in Ghana and the world at large.

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## LIST OF ABBREVIATION

Ab.	Aboabo
As.	Asawase
AMC	Ahmedabad Municipal Corporation
DFID	Department for International Development
DUR	Department of Urban Roads
EU	European Union
GAIT	Government Accountability Improvement Trust
GoG	Government of Ghana
GWCL	Ghana Water Company Limited
KMA	Kumasi Metropolitan Assembly
MDGs	Millennium Development Goals
NARC	National Rainbow Coalition
NGO	Non-Governmental Organization
U.N.	United Nations
UNFPA	United Nations Family Planning Association
PURC	Public Regulatory Commission
SAATH	A public charitable organization in Ahmedabad in India
SEWA	Self-Employed Women's Association,
SHARDA	Strategic Help Alliance for Relief of Distressed Areas
SNP	Slum Networking Program
TCPD	Town and Country Planning Department
UESP	Urban Environmental and Sanitation Project

## **CHAPTER ONE**

### **GENERAL OVERVIEW OF THE STUDY**

#### **1.1 Background to the Study**

The UN-HABITAT estimates indicate that in 2001, 924 million people, or 31.6% of the world's urban population, lived in slums. In developing regions, slum dwellers account for 43% of the urban population, compared to 6% of the urban population in developed regions (UN-HABITAT, 2001). Almost one billion people are living in urban slums around the world. Recent estimates reveal that there will be 1.4 billion slum dwellers in the world by 2020 (UN-Habitat, 2006).

In 2001, Asia had 570 million slum dwellers, or 60% of the world's total; Africa had 188 million slum dwellers (20% of the world's total), while Latin America and the Caribbean had 128 million slum dwellers (14% of the world's total). Europe and other developed countries had 54 million slum dwellers, or 6% of the world's total. It is projected that in the next 30 years, the number of slum dwellers worldwide will increase to 2 billion if no firm or concrete action is taken to arrest the situation (UN-Habitat, 2003).

Though the share of the urban population living in slums has declined from 39 per cent to 33 per cent over the last ten years, the absolute number of slum dwellers in the developing world is growing and will continue to increase in the near future (UN-Habitat, 2010). The number of urban residents living in slum conditions in the developing world is now estimated at 828 million, compared to 657 million in 1990 and 767 million in 2000. The global trend of rapid urbanization and population growth in Sub Saharan Africa has given rise to the emergence of new slums and expansion of existing ones (UN-Habitat, 2001). Slums are a physical and spatial manifestation of urban poverty. People living in slums have little or no access to services such as water, sanitation, and solid waste collection. It is estimated that about 400

million people in the world lacked “improved” sanitation in 2004. Africa is the only region with the lowest coverage of improved sanitation in urban areas (63%) as at 2004. In Sub-Saharan Africa the coverage dropped to 55% and the number of people lacking improved sanitation increased from 77 million in 1990 to 160 million in 2005 (UN-Habitat, 2001). Housing structures in slums are sub-standard and do not comply with local building codes. Often, slum dwellers lack legal ownership of the dwelling in which they reside or any other form of secure tenure. In addition, slums are often not recognized by public authorities as an integral part of the city. This is one of the reasons why there is so little data on slum settlements in many countries (Nahiduzzaman, 2006).

The Millennium Development Goals (MDGs) specifically target eleven (11), the international community agreed to take action to improve the lives of slum dwellers. This target recognizes the importance of improving upon the quality of life of slum dwellers globally (UN-Habitat, 2004). It is envisaged that by 2020, a significant improvement in the lives of at least 100 millions slum dwellers would be achieved (UN Habitat, 2009). The MDGs also sought to reduce the proportion of people without access to improved sanitation, and to achieve significant improvement in the lives of people living in slum areas under goal 7 (UN Habitat, 2009).

Despite these efforts, the lack of adequate housing to shelter the populace has led to overcrowding in slum areas, in the quest to prevent homelessness due to poverty and the expansion of existing slum settlements. It is therefore necessary to investigate into the nature, magnitude and the growth dynamics of slums in the rapidly urbanizing settlements in Ghana, specifically some selected slums in Kumasi and to come out with recommendations on slum improvement.

## **1.2 Problem Statement**

In developing Countries, “urbanization and slum formation go hand-in-hand in a context of mal-functioning housing sector” resulting in slums formation. Ghana has over the years experienced rapid slum formation as a result of rapid urbanization and reclassification of villages as towns and cities. These have contributed to the ever increasing homelessness and streetism as Ghana has an estimated housing deficit of 100,000 units annually (Ghana Statistical Service, 2002).

The inability of city authorities to plan effectively as well as enforce urban planning and land laws have given rise to haphazard development of settlements and the emergence of slums. The number of slum dwellers in Ghana was estimated to be 4, 993, 000 with a 1.8% growth rate per annum as at 2001 (UN-Habitat, 2001). The figure is predicted to rise to 5.8, 6.5, and 7.1 million by 2010, 2015, and 2020 respectively (GOG, 2005). Currently, there are about 25 slum settlements in Accra whereas Kumasi can has more than ten (10).

Slums are growing in line with the acute housing deficit. The trend seems frightening as "our housing problem is one of a national development crisis with a current annual need of 70,000 units and an accumulated delivery deficit of 250,000 units needed to decrowd urban units. An average annual delivery of 133,000 units will be needed to provide adequate housing within the next twenty years as against the current annual delivery of 28,000 units which yields a performance rate of 21%" (Ministry of Water Works and Housing, 2009).

In spite of the fact that Ghana is making frantic efforts to solve the housing crisis and to overcome the persistent deficit in housing delivery and expansion, through seeking for private capital to finance slum improvement projects focusing mainly on providing low cost houses for the low income brackets, there is still housing deficit (Clottey, 2007). The growth and expansion of slums is alarming and needs more attention.

Ghana can boast of four primate cities with a total population of 3,206,960 which accounts for 17% of the Ghanaian population. These are Accra, Kumasi, Tamale and Takoradi. Accra (1,658,937) and Kumasi (1,170,270) have population numbering over a million. Tamale (202,317) and Takoradi (175,436) are trying to catch up with Accra and Kumasi. (Ghana Statistical Service, 2002). Currently, with the population and housing census provisional results, Ashanti Region is leading with 4,725,046 followed by Greater Accra with 3,909,764, Eastern Region 2,596,013 and Northern Region 2,468,557. According to Dr. Grace Bediako Government Statistician, there is an increasing pressure on the land by the increasing population. This indicates that the number of persons per one square kilometer was almost doubled from 52 in 1984 to 102 in 2010 (Spectator, Feb 12, 2011). The continual increase in rural urban drift coupled with natural increase and the inadequacies of the Housing sector will invariably contribute to the development of slums and expansion of existing ones.

It is estimated that 48%, 46% and 6% of the Kumasi Metropolis are urban, peri-urban and rural respectively, confirming the fast rate of urbanization. The high rate of population growth as a result of natural increase and rural urban drift coupled with other factors has outstripped the rate of infrastructure development and service provision. Most of the facilities have exceeded their carrying capacities. Lands in the newly developing suburbs have not been serviced hence housing development precedes the provision of water, telephone facilities and electricity (KMA, 2010) thus leading to uncontrolled springing up of slums which block water ways leading to flooding during peak raining seasons. For instance, in 2004, 30 houses were destroyed in the Subin valley (Nsiah-Gyabaah, 2009).

There is therefore the urgent need to investigate into the dynamics of slum development, challenges and potentials of improving upon slum conditions at Aboabo and Asawase in the Kumasi Metropolitan so as to ameliorate the plight of slum dwellings.

### **1.3 Research Questions**

The under listed questions were examined and served as a guide to the study.

1. What are the scale, conditions and characteristics of slums in the study areas?
2. What are the causes, problems and the impact on people living in slums?
3. What efforts have been made to improve slum situations?
4. What opportunities and challenges are there to improve slums?
5. What policies and interventions can be developed to stem slum control?

### **1.4 The Objective of the Study**

The main objective of the study was to analyze the nature, magnitude and the growth dynamics of selected slums in Kumasi and to come out with recommendations to stem slum development.

1. To analyze the scale, conditions and characteristics of slums in the study area.
2. To examine the causes, problems and conditions of the people in the study area.
3. Identify efforts that have been made towards improving slum conditions in the study area.
4. To identify existing opportunities and challenges of improving slums in the study area.
5. To offer policy interventions on slum improvement in general and specifically for the study areas.

### **1.5 Justification of the study**

A central part of endemic poverty found across the developing world and the conditions of slum communities stems, in part, from a general denial of formal financial opportunities to large segments of the population because of their over dependence on the informal sector for their livelihoods. Slum dwellers suffer from insecure tenure, inadequate access to safe water,

sanitation and other infrastructure, as well as poor structural quality of housing construction and overcrowding. Solving the problems inherent to these informal housing communities represents a key part of improving the general quality of life of slum dwellers through improvement in water and sanitation conditions, drainage, access, garbage collection and electricity, primary health care and community development programmes (such as pre-school, non-formal education, adult literacy and economic development) for significant segments of the underserved population.

There is no doubt that, slums do provide a necessary housing option for poor rural urban migrants hence, the improvement and upgrading of existing slums and squatter settlements are necessary to relieve the hardships of the inhabitants who dwell in slums.

Since sound mind and good health of people in a country lead to higher productivity, the study will provide information on how slum dwellings could be improved for the poor rural migrants who come to the cities in search of jobs as well as all slum residents. This really needs to be done because these migrants contribute to revenue through payment of taxes which are used in developing the nation.

The findings and recommendations will be beneficial to the Kumasi Metropolitan Assembly (KMA), Town and Country Planning, Tema Development Corporation, development practitioners and other stakeholders who are interested in urban planning issues and improving upon the lives of people in slum dwellings as well as up lifting the faces of slum communities.

It is envisaged that, the research findings which will focus on measures in improving slums will serve as a planning guide for urban planners and stakeholders in dealing with slum issues. The findings will also add to the body of knowledge which can serve as a basis for further research on how to prevent urban sprawl and its adverse effects.

## **1.6 Scope of the Study**

Geographically, the study area is the Kumasi Metropolis. The study was conducted in two predominant slum communities in the metropolis; Aboabo and Asawase. These settlements were taken because they have characteristics of slum settlements and much effort is been undertaken to up lift the faces of these settlements.

Contextually, the state of the houses were critically examined looking at variables such as the size and growth dynamics, land tenure, housing conditions, housing services or infrastructure, existing policy interventions, community participation, projects and programs in slum communities. Issues on poverty, sanitary conditions and the existence of social services and infrastructure were also dealt with.

## **1.7 Research Design**

The study sought to analyze the nature, magnitude and the growth dynamics of selected slums in Kumasi and to come out with recommendations on improving slum dwellings. The study employed the cross sectional research design in which the case study method was used. The research also made use of the participatory approach in order to have diverse views on the research topic. The case study method was employed because of a number of reasons as will be outlined in detail in Chapter Three.

## **1.8 Organization of Work**

The study is organized into five chapters. Chapter one comprises the problem statement, research questions and objectives, scope, justification and the summary of methodology used. Chapter two delves into issues which have been discussed by different authors relating to the slum improvement. The issues looked at among many others included the concept of slum developments and slum improvement programmes undertaken.

Chapter three comprises definitions of relevant terms used in the study as well as a detailed description of the methodology used and limitations of the study.

Chapter four comprises the profile of the study area as well as a detailed analysis of data presentation of the findings based on the study objectives.

Chapter five is a summary of the findings, recommendations in line with the research objectives and finally, conclusion.

## **CHAPTER TWO**

### **THEORETICAL AND CONCEPTUAL FRAMEWORK**

#### **2.1 Introduction**

This chapter provides definitions of important relevant terms, review of issues with respect to urbanization and slums, magnitude of slums and typologies, conceptual and theoretical frameworks and some case studies on slum improvement interventions that have been successful. This is to help make inferences from successful slum improvement programmes and how they can be modified to suit the Ghanaian situation.

#### **2.2 Definition of Terms and Basic Issues on Slums**

The terminologies defined in this section include a slum, squatter and shanty town. These terms guided the understanding of the study. Slums or squatters are known by different names in different countries. Slums in India are referred to as Tugurios, Bustees/Chawls, Favelas in Brazil, Shanty towns in South Africa, Ghettos in the United States of America, Gers in Mongolia, Kampung in Indonesia, Gegekondur in Turkey and Bidonvilles in France, Burkina Faso, Gabon, Benin and others in West Africa refer to them as Zongos.

##### **2.2.1 Slum**

At an Expert Group Meeting in November 2002, UN-Habitat and its partners came up with a provisional definition of a slum as been: “a settlement in an urban area in which more than half of the inhabitants live in inadequate housing and lack basic services”. A slum household is a group of individuals living under the same roof in an urban area who lack one or more of the following five conditions: durable housing, sufficient living area, security of tenure, improved access to water and sanitation.

A slum is also defined as a run-down area of a city characterized by sub standard housing and squalor as well as contiguous settlements where inhabitants are having insecure residential

status, inadequate access to safe water; inadequate access to sanitation and other basic infrastructure and overcrowding (Rasna, 2003).

### 2.2.2 Squatter

A squatter settlement is “any housing which contravenes existing legislations on the occupation of land or the construction of dwellings (Carter, 1981).

### 2.2.3 Shanty Town

A shanty town is defined as a group of unplanned shelters constructed from cheap or waste materials such as cardboard, wood or cloth. These, many a time are located at the outskirts of cities in developing countries that are very poor (Hutchinson, 1997).

## **2.3 Urbanization and Slum Development**

Urbanization is the increasing proportion of people living in urban centres. Urbanization has assumed a global dimension. In 1990 the world’s urban population stood at 2.4 billion. It increased to 3.3 billion in 2008 which is equivalent to the world’s total population in 1960.

With this high urbanization milestone of 3.3 billion people in 2008, more than half of the world’s population is now residing in cities. It is estimated that by 2030, 5 billion people will be city dwellers, and more than 81% will be in developing countries. From 2000 to 2030, in one generation the urban population of Asia and Africa will double from 1.7 to 3.4 billion (UNFPA, 1998). This implies that if measures are not taken, majority of the world’s cities will be turned into slums.

## **2.4 Magnitude of slums: Global, Africa and Ghana**

The growth of slums in the last 15 years has been unprecedented. In 1990, there were about 715 million slum dwellers in the world. Current estimates show that, there are approximately

998 million slum dwellers in the world. UN-Habitat estimates that, if current trends continue, the slum population will reach 1.4 billion by 2020 (UN Habitat, 2007).

The annual slum and urban growth rates are highest in Sub-Saharan Africa, thus 4.53 per cent and 4.58 per cent respectively which is nearly twice those of Southern Asia, where slum and urban growth rates are 2.2 per cent and 2.89 percent respectively. In Western Asia, slums and cities are growing at a similar pace, 2.71 per cent and 2.96 per cent respectively. North Africa is the only sub-region where slum growth rates declined from 37.7 per cent to 25.4 per cent, with the absolute number of people living in slums decreasing by half a million, to just over 21 million between 1990 and 2005. The reduction may be attributed to the relatively low levels of slum prevalence in the region in general, as well as the implementation of policies aimed at reducing the number of slum dwellers within such countries (U.N-Habitat, 2005).

Further projections made by the UN reveal that the magnitude of slums will continue to increase if the trends dominant between 1990 and 2001 are projected into the future. In light of recent evidence, even if governments collectively manage to improve the lives of 100 million slum dwellers by 2020 as per the Millennium Development Goals and targets, this achievement will be insignificant in relation to creating “cities without slums”, a stated objective of the Millennium Declaration (UN Habitat, 2006/7).

Ghana’s situation is not different with respect to rapid urbanization. The population of Ghana increased from 18.9 million in 2000 to 23.6 million in 2005 with an annual growth rate of 2.7% between 1984 and 2002 then to 23.9 million in 2008 with an urban population of 11.9 million, thus 50% (U.N, 2008-2009).

Annual population growth rates between 2005 and 2010 stood at 1.9% for the country and urban centers 3.4% respectively. Thus 5.3% for greater Accra and 3.0% for other urban areas

in 2005 (Nsiah-Gyabaah, 2009). However, in 2008, the population of major cities such as Accra and Kumasi were 2.2 million and 1.7 million respectively (UN, 2008-2009).

Ghana has four primate cities. The fastest growing primate cities are Accra and Kumasi, with population of 1,658,937 and 1, 170,270 respectively. Tamale and Takoradi is keeping pace with Accra and Kumasi with populations of 202, 317 and 175,436 respectively. The four primate cities have a total population of 3, 206, 960 which constitute 17% of Ghana's total population of 18, 192,079 (Ghana Statistical Service, 2000).

The rapid urbanization in cities implies that, developing countries would have the difficulty of mobilizing adequate resources for development (Adarkwa and Post, 2001). The inability of government to mobilize sufficient resources has led to housing deficiency in Ghana (Nsiah-Gyabaah, 2009) and the result has been land ligation and development of slums as well as squatters in primate cities which are deficient in water and sanitation facilities as well as small living spaces.

## **2.5 Typologies of Slums**

Slums manifest in different ways and vary from country to country. Two major ones have been identified. These are Slums of hope or progressing settlements and Slums of despair or 'declining' neighborhoods. The first is made of 'Old' city center slums and 'New' slum estates whilst the latter is made of squatter settlements and semi-legal sub-divisions (UN-Habitat, 2003).

These two major ones are sub divided into four categories of slums. These are City Center/Inner City Slums, Slum Estates, Squatter Settlements and Illegal Sub divisions which differ in terms of their formation, condition and extent of deprivation.

### 2.5.1 City Center/Inner City Slums

These settlements emanate as the original owners move out and settled in more decent and classy environments. These are always near to the Central business district where access to good employment opportunities can be accessed with ease. These areas are always well planned and serviced settlements. However, with time, because the original inhabitants move out and the houses are rented out to low income earners, the returns can hardly maintain the houses and hence the structures deteriorate fast. As time goes by, immigrants come in and put up structures to serve as homes. Over time, as dwellings are increasingly subdivided and the level of overcrowding grows, strain on social amenities and services reach breaking points. A typical example is the inner city slums of Santa Fe and Martires in Bogota (UN-Habitat, 2003).

### 2.5.2 Slum Estates

Slum estates are privately owned and these settlements are newer than the inner city slums. However, just like the inner city slums, the inability of occupants to maintain the structures lead to their deterioration. Examples include both public housing estates and housing for industrial workers such as the hostels for mine workers of Southern Africa and the Chawls of Mumbai in India (U.N. Habitat, 2003).

### 2.5.3 Squatter Settlements

The term squatter connotes illegality and their inhabitants usually hide their identity. These people occupy lands or buildings without the prior knowledge of the owner. Squatters are non conventional housing constructed by the urban poor who predominantly are rural migrants. Squatter settlements are generally located near urban rivers and canals, beside railway tracks, on government or private vacant land, or on land with vague tenure status. The occupation and buildings on the land may be through self help processes, or gradual

occupation through incremental growth or organized invasions done over night as pertaining to some Latin American Countries (U.N. Habitat, 2003).

#### 2.5.4 Illegal Sub divisions

Illegal sub divisions refer to settlements where the land has either been sub divided, resold, rented or leased by its legal owner to prospective house owners who build their houses upon the plots they buy. The settlements are considered illegal owing to any combination of the following: low standard of services or infrastructure: breaches of land zoning: lack of planning and building permits: or the irregular nature of the land sub division. An example is Pianura in Naples, a neighborhood that sprung up in the 1970's and 1980's on an agricultural zoned land (U.N. Habitat, 2003). Such occupants like squatters go on to improve housing and other infrastructure and consider themselves owner occupiers which they are by de facto. From the above types of slums it can be seen that, a slum may be rented, owner occupied, legal or illegal.

#### 2.5.5 Types of slums in Ghana

In Ghana, three types of slums can be identified. These are the Indigenous Communities, Migrant Community 'Zongo' and the Newly Emerging Squatter Community. Table 2.1 shows the types of slums and their characteristics in Ghana

Table 2.1: Slum Typologies in Ghana

Typology	Land Status	Housing Quality	Infrastructure	Housing Status
Indigenous Communities	Traditional Homes	Mixed	Fairly good	Without permits
Migrant Community 'Zongo'	Released by owner	Poor	Poor-Good	Without Permits
Newly Emerging Squatter Community.	Illegal No title	Very poor	Non- existence	Without permits

Source: Slum Development in Ghana: Afrane, 2010.

From Table 2.1, indigenous communities have traditional homes with good infrastructure but without permits. The second group of slum typology is the migrant communities. Migrant in these areas usually have lands released to them by the owners of the lands. The infrastructures put up are not durable as they have a 'pilgrim mentality'. The third group is the newly emerging squatter communities who virtually have no title to the lands they occupy. The second and third group contributes immensely to rapid expansion of slums.

## 2.6 Conceptual and Theoretical Framework on Development of Slums

One important reason for the general movement to cities which is now the norm in developing countries is because conditions in the country side are as bad if not worse than those that migrants expect in the cities (Dwver, 1975). They however, realize it is a mirage upon arrival as they find themselves in living conditions that is considered as a menace to health (Abrams, 1966) and an affront to human dignity. These dwellings are characterized by different forms of degradation such as high population densities and minimal living spaces resulting in overcrowding. These dwellings are dominated by wooden and tin huts. The area

is also referred to as “a jungle of environmental problems, water supply being the most crucial. Apart from old established houses, no dwellings in the area have taps of their own” (Dwver, 1975). In Cairo, squatter settlements constitute a large proportion of the urban population (Payne, 1989). In Africa, 80% of all new housing units are squatter settlements whilst 33%, 36%, 61%, and 91% of the urban populations in Nairobi, Tanzania, Accra and Addis Ababa are either slums or squatter settlements respectively (Sietchiping, 2005). Since time immemorial attempts have been made to analyze the development of slums however, the issue of slums did not make “itself” felt that needed immediate attention (Huque, 1969). The solution of housing problems in Third World Cities is the development of spontaneous settlements linked essentially with security of tenure which is essential to the progressive improvement of the individual dwelling and the physical facilities (Turner and Goetz, 1967).

#### 2.6.1 Theory on Slum and Housing by Turner

John F. Charlewood Turner, from London was amongst the first to formulate a theory on the phenomenon of slums and squatter settlements drawing inferences from Latin America.

Turner describes two ways to define housing: Housing as a noun and housing as a verb. Housing as a noun refers to the physical structure: The house as a product or commodity. Housing as a verb focuses on the universal activity of housing. Housing primarily as a noun focuses on physical housing units whilst housing as a verb sees housing as an on-going process and concentrate on the role of housing within the context of the household's broader livelihood.

Turner further highlights the functional side of housing rather than the material side; in particular, a squatter can be considered as housing because he considers what is important about housing, he notes it is “not what it is.... but ..... what it does”. The observation is

particularly relevant in the cities of the third world where resources (especially finance) are extremely limited and the persons involved are in dire poverty.

An important thing about housing is not “what it is but what it does in people’s lives’ (Turner, 1976), thus, the real use or values of slum housing cannot be measured in terms of how well it conforms to the image of the dwellers standards but rather it must be measured in terms of how well the structure serves its inhabitants. Slum households whose building activities are not regulated by exogenous criteria, Turner proposes that, households if given the autonomy to design, build, and manage the maintenance process; prospective households are able to make their own arrangements for accommodation by supplementing their respective means of income by personal and local monetary resources such as their imagination, intuitiveness and capacity to use irregular sites, locally available building materials and tools, organizational capacities through self help initiatives.

Turner derives his theory by contrasting housing that emanate from a decentralized decision process where the occupants have the authority and that which results from a process where a large centralized authority controls major decisions. Turner substantiate his theory by observing the self help housing process in slums and squatter settlements and that of public housing programmes which produce large scale standardization (Turner, 1976).

In conclusion, turner points out that, when tenure of property is secured and individual households have the authority to control major decisions regards their accommodation arrangements with respect to standards, location and tenure, both the process and the environment produced are economically viable as well as will stimulate the well being of the residents which are necessary conditions to propel an orderly urban growth (Turner and Goetz, 1967).

## 2.6.2 Conceptual Framework

The reviewed literature depicts the impact of urbanization on slum development, the magnitude of slums as well as slum typologies. Case studies reviewed on successful slum improvement interventions and theories on slums and housing provided a guide for the construction of the conceptual framework which is figured 2.1.

**Fig.2.1: Conceptualization of slum Improvement**

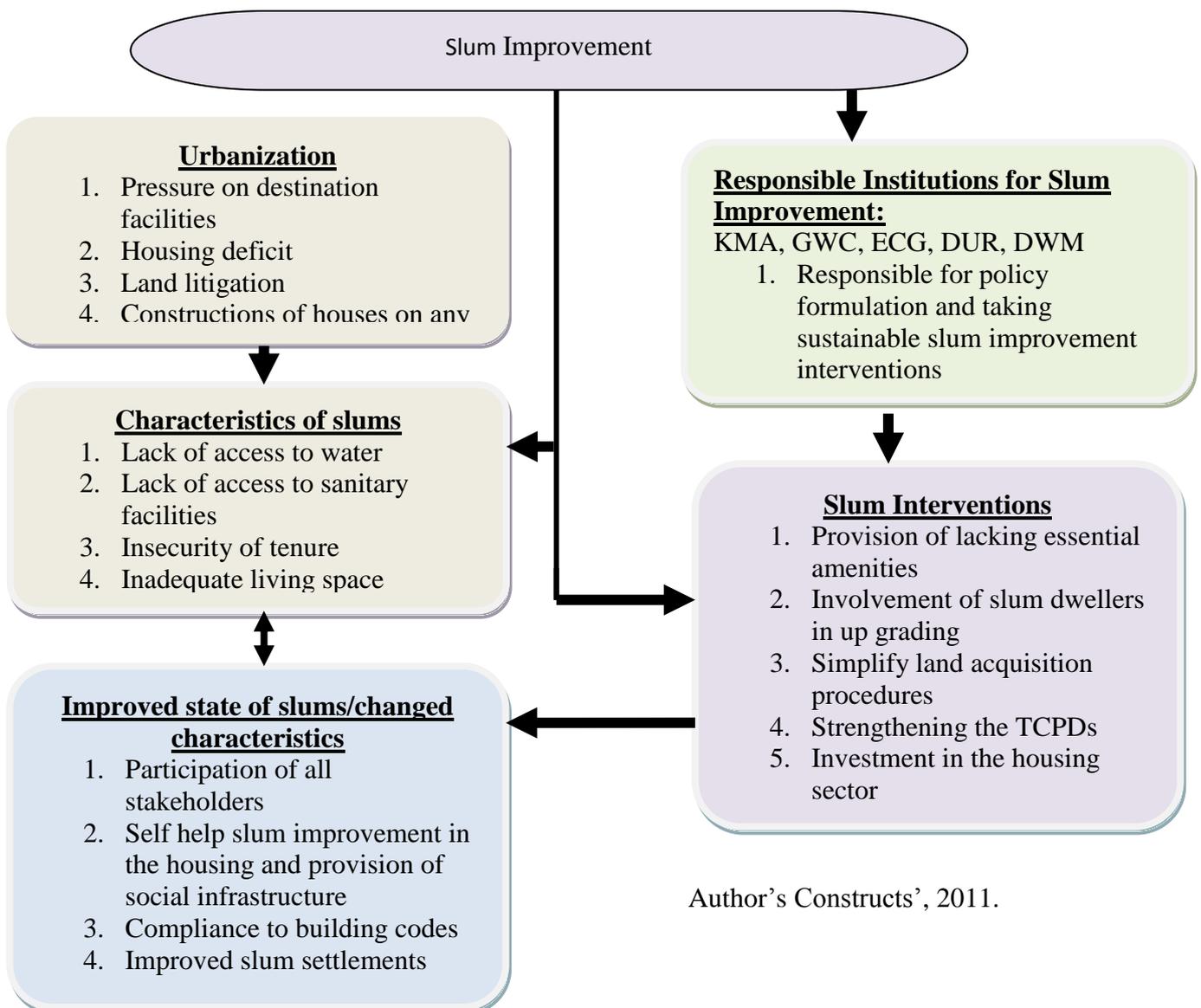


Figure 2.1 gives the conceptualization of slum improvement. As can be seen, urbanization is the driving force that leads to the creation of slums in cities. The ever increasing numbers are not commensurate with the provision of houses, facilities and services. As such, pressure is

mounted on the few and limited resources resulting in congestion, land litigation and putting up of an authorized buildings to serve as homes. When this is done, the cities are characterized by lack of access to social services such as water and sanitary facilities, insecurity of tenure and insufficient living spaces.

Institutions responsible for slum improvement seeing these characteristics begin to take actions to prevent the further spread of the slum or upgrade the settlement with the needed facilities and services.

Participatory methods have proved to be the best way of intervening in slums communities. Town and Country Planning Departments tend to relax their policies and regularize squatters to enable them get permits to build permanent structures. Public Private Partnership in housing and services provision has also proved to be fruitful in providing houses for low income earners.

A successful upgrading programme should involve all stakeholders and through the ‘self help’ concept, housing and other social infrastructure will be provided in slum settlements to up lift their faces.

## **2.7 Slum Interventions by Governments**

Governments over the last forty years have tried to intervene in the development of slums. Some of the interventions for addressing the problem of slums are presented below.

### **2.7.1 Negligence – Early 1970s**

Slums or squatters were seen as an illegal and a temporal problem that could be corrected with the gradual development of the city during the early 1970s. Despite their lackadaisical attitude to slum formation, some interventions were undertaken during this period. These included the construction of social housing for low income households in order to eradicate

slums. However, the management of projects or implementations of programmes were marred with corruption during the distribution of houses to the beneficiaries. This aggravated the formation and expansion of slums in many countries and cities (UN-Habitat, 2003).

### 2.7.2 Forced Evictions – 1970s and 1980s

During the 1970s and 1980s, various governments tried to deal with slum expansion and formation. These were in the form of forced evictions such as Sodom and Gomorrah in Ghana, settlement bulldozing and decongestion exercises to create space for the provision of infrastructure for health, educational and sanitation facilities (UN-Habitat, 2003).

The period was also characterized with policies that resulted in relocation to un-zoned lands that rather propelled the formation of slum settlements in the periphery. Slum dwellers settled in hazardous places such as close to rivers (Old Fadama which is located around the Korle Lagoon Ecological Restoration Project Site), flooding areas, on the border of mountains among others.

### 2.7.3 Self-Help and In-Situ Upgrading - Late 1970s

By the end of 1970s, Self-help implemented policies improved the condition in slum settlements by promoting the provision of basic services, secure land tenure and innovative access to credit as well as the participation of slum dwellers in the process of slum improvement. It required political will, improved local government, capacity building, government and community participation. In many cases, the lack of maintenance of the projects, poor governance, inadequate urban services provision and the failure to recover cost of projects were obstacles in the sustenance of upgrading programmes in slum settlements.

#### 2.7.4 Enabling Policies - Middle 1980s to middle 1990s

Integrated enabling policies that involved slum dwellers from the beginning, thus from decision making process through to project implementation as a way of empowering slum communities were employed. These enabling interventions coordinated various stakeholders in the decision-making process. However, this coordination was challenged since it required local government to support slum communities through local assistance, capacity building and financial advice (UN-Habitat, 2003).

#### 2.7.5 Resettlement - Middle 1990s

Attempts were made in the late 1990s to allocate lands to slum dwellers in planned places with the provision of basic services. The resettlement process involved moving slum communities to specific places to help them re-organize and build new settlements. The process of resettlement was an agreement between the government and slum residents. The process made provision for the social organizations created such as proximity to work site and markets, the availability of basic services and social networks that was created by slum residents were well taken care of. However, some of the new settlements were far from their work sites and thus propelled their movement back to their former places which worsen the situation (World Bank, 2008).

#### 2.7.6 Participatory Slum Improvement early 2000 till date

Since the beginning of the early 2000s, interventions geared towards slum improvement have taken a more advanced participatory dimension. Thus, there is more collaboration amongst all stakeholders such as slum dwellers, local governments and agencies in different social and economic programmes as a whole. Beneficiaries contribute to the process through provision of labour, economic resources and capacities. Participatory projects are carried out with improvement of services such as basic health, family planning, education, partnerships for

upgrading and affordable interest rates for housing development. Participatory policies have not been devoid of political influence. Sometimes, city local governments are enhanced to participate in the provision of basic services to their residents, including the urban poor. However, the funds from national budget are not increased to fulfill this new role (UN-Habitat, 2003).

## **2.8 Case Studies on Slum Improvement**

Slums and informal settlements are concomitant developments of urbanization all over the world. The process of making our cities devoid of slums is linked to the overall economic development processes. Even though the problems of slums in our cities are on the rise, considerable efforts made earlier, has addressed this problem to a varying degree of success. Citywide programmes initiated with support from international agencies and Government supports in the States of Ahmedabad, Mathare in Kenya, Maamobi East and Nima West have been reviewed to provide lessons on how slum settlements can be improved and redeveloped to support good urban planning.

### **2.8.1 Case Study 1: The Mathare 4A Slum Upgrading Programme in Nairobi –Kenya**

The Mathare 4A slum is located approximately 4.5 km North East of the Nairobi city centre. The area, a former quarry for production of building stones is part of the Mathare valley slum settlements. Mathare 4A slum has about 26,000 inhabitants consisting of 8,000 households. They are accommodated on a 17 hectares of residential area. The population density is in the range of 1300 inhabitants per hectare. During a social economic survey carried out in 1995 the average household size was found to be 3.2 persons per household. 50% of the households were singles and the rest were families or single women households with children. The environmental conditions in Mathare 4A were underlined by heavy pollution of the nearby Getathuru River caused by domestic liquid and solid waste discharged into it from

the slum area as well as from temporary overflow from a main sewer line passing near the river. The inhabitants generally belonged to the lowest urban income group with an average monthly household income of about US\$ 45. The income level of a single mother household was considerably lower. About 90% of the households were tenants and 10% were resident structure owners. The average rent level was in the range of US\$ 4 per month per room constructed of mud and wattle measuring roughly 3 meters x 3 meters. The Mathare 4A slum was then generally characterized by: Structures/houses built from temporary materials (mud and wattle), below any acceptable building standard, Infrastructure commodities and services like water supply, solid and liquid waste disposal, surface drainage, access roads were not in existent or on a hygienically unacceptable level. The settlement had poor coverage of community facilities like health centre's, nursery and primary schools (Kusienya, 2004).

#### 2.8.2 Development of Mathare 4A Slum Rehabilitation Programme

Participatory discussions following a 1995 field survey made it clear, that the target group's fear of being evicted by rent increase induced by the physical following three programme components were deduced for the project. Thus, the immediate fast developing of general infrastructure entailed relocation requirements. A number of dwellings had to be demolished to pave the way for the installation of roads and footpaths, construction of wet core etc. Shelter improvement, initiating the future formal housing component for which project sponsor insisted on substantial financial resources to be generated internally from rent, preservation and strengthening of the multi-functional residential and socio- economic character of the area.

#### 2.8.3 Challenges of Mathare 4A Slum Rehabilitation Programme

There have been media reports from time to time in the past that the residents of Mathare 4A were up in arms against the Mathare 4A slum upgrading Programme due to the following;

Slum lords; in order to take control of the settlements and to facilitate proper planning, it was necessary for the previous ‘slum lords’ to surrender their structures for project purposes. Approximately US\$800,000 had been paid out as compensation to the ‘slum lords’ for structures comprising 7,300 rooms built on lands they did not own in the first place. Slum rehabilitation is a sensitive issue and explosive situations often occur from time to time in the light of diverse interests of stakeholders

Rent defaulters and political interference; The area residents were required to contribute a nominal amount of rent to the project management, Amani Housing Trust based on the size and quality of the rooms they occupy. The rent revenue was to be used by the project management for the maintenance of installed facilities and to meet the operational costs of the project management. Any rent increments by the management in an effort to sustain maintenance and operations has been met by stiff resistance by the target group.

#### 2.8.4 The Success of Mathare 4A Slum Rehabilitation Programme

The Implementation of the Mathare 4A Slum Rehabilitation project resumed in February 2003, only two months after the National Rainbow Coalition (NARC) Government assumed power. This was after the project had been suspended following an outbreak of hostilities by some disgruntled tenants over a requirement to pay all outstanding rent arrears way back in October 2000. There is now progressive realization by stakeholders of the noble objective of improving the living conditions of the poor areas for the residents has been done. So far, rehabilitation work on the infrastructural facilities and the replacement of dilapidated housing structures has been done. There is an appreciable transformation in the area consisting of the availability of access roads and drainage, social amenities, improved security and sanitation facilities; all these have created a healthier living environment. It is expected that the enhanced participation of the residents in shelter improvement activities in the area under a

new development approach will help avoid the misunderstandings and confrontations of the past (Kusienya, 2004).

#### 2.9.5 Case Study 2: Ahmedabad Slum Improvement Intervention in India

Ahmedabad's Slum Networking Program commenced in 1995 as an adaptation of Britain's Department for International Development (DFID) funded Indore Habitat Project (Gautam, 2008). At its inception, approximately 3 million people called Ahmedabad home (AMC, 2001), 40 percent of whom were considered slum dwellers (Chauhan & Lal, 1999). To launch the SNP, Himanshu Parikh, the sanitation infrastructure engineer of the Indore Habitat Project, garnered the support of Arvind Mills, an emerging global corporation with headquarters in the city and the Ahmedabad Municipal Corporation (AMC). From this partnership emerged three objectives: to improve the physical and non-physical infrastructure facilities within selected slum areas; to facilitate the process of community development and to develop a city-level organization for slum networking and infrastructure improvement (Chauhan & Lal, 1999). The first venture undertaken by this partnership was a citywide pilot project that included the upgrade of four slum neighborhoods, affecting 3,300 households and 22,000 people. Physical upgrades in the project included implementation of roads and pavements, storm water and waste water management, individual water supply, toilets and plantings. In addition, the project had a social component, which involved the organization of community groups for women and children, educational activities for pre school aged children and linkages to the formal sector via vocational training and access to financing for starting up businesses. SAATH, a public charitable trust NGO that had been working with slums since 1989, developed a strategy with the Strategic Health Alliance for Relief to Distressed Areas (SHARDA) Trust.

### 2.8.6 Current Initiatives of the Ahmedabad Slum Networking Program

Since the completion of the 1995 project, Ahmedabad's Slum Networking Project (SNP) has evolved to become an infrastructure and public health program (Gautam, 2008), where basic infrastructure projects coupled with public health training sessions are held. As of May 2008, 45 slum communities, covering nearly 8,400 households and approximately 39,000 people, have benefitted from the project. The cost sharing structure has changed from a 40-30-30 split between public, private and community to a 80-20 public community split. While AMC covers 80 percent of the cost, individual households are required to contribute at least Rs 2,100 as a one time contribution. Families who do not possess these funds can take out a small loan from SEWA Bank, a microfinance establishment that now serves as a partner in the SNP. SAATH continues to be a key player in the program. More than 275 health training sessions covering basic health and hygiene have been held, 18,000 children immunized and nine child care establishments opened. In order to ensure sustainability of the program, AMC provides a written assurance that people will not be evicted for 10 years, providing at least some tenure security (Gautam, 2008). Moving forward, the city's SNP plans to expand from 45 to 120 slums, impacting more than 24,000 households and 120,000 people. Vadodora Municipal Corporation, another major city in the State of Gujarat, has adopted a similar program, including a required household contribution from affected residents. There is also discussion of integrating SNP into State policy as well as creating a Special Purpose Vehicle to enable scaling up of the project (Gautam, 2008).

### 2.8.7 Case Study 3: Maamobi East Up-Grading Project in Ghana

Maamobi covers an area of approximately 30 hectares with a population of more than 16,000. The government of Ghana was able to raise a loan with the support of IDA to take initiatives in the upgrading of the area through the "self-Help" concept. This was to help make the area a better place of abode since it was characterized by slum conditions such as poor drainage,

inadequate access to water, sanitary facilities, poor road accessibility and no street lights. The project began with intensive communication amongst the project officers and the community. The residents of the area were sensitized on the project and prioritization of needs was also done. Amongst the list of prioritized needs were the provisions of schools, health facilities, and police station, water and drainage facilities. The contractor built model was adopted. This meant that, there was not going to be collaborative integration of partners in the implementation stage. Hence the concept of community participation was deluded which greatly affected the success of the project as maintenance of the provided facilities became a mirage.

In spite of the absence of the community participation concept, there was improvement in the social and physical environment as upgrading took the form of improvement in housing quality, ensuring security of tenure as well as making extensions thereby reducing densities (Afrane, 1988).

#### 2.9.8 The Nima West Upgrading Project in Ghana

In 1973, the Nima West Portion of the Greater Accra region was declared a 'frozen Zone'. This was to enable the government find lasting solutions to the area as it was bedeviled with sub standard housing and continual land litigation. The high in-migrant figures increased the already populated area. With time, people acquired land and built houses that were close to each other without taking into consideration the availability of outside space for other facilities. As such, the area became congested and filled with filth. The lessons learnt from the piloted upgrading project of Maamobi East were brought on to Nima west. Community participation was key as project staff involved community members in the entire decision making process. Community members, aside making inputs on the design were also tasked with the responsibility of providing labour and mobilizing resources for the upgrading

process. Compensation was paid to owners of affected portions where roads and other social facilities were to pass through. This brought about security of tenure and rationalization of plots.

Efforts were made at mobilizing resources both external and internal to finance the project. As such, a conducive environment was created to attract private housing improvement into the area. The Housing improvement approach was adopted for the upgrading (Afrane, 1988).

## **2.9 Summary and Lessons learnt**

When tenure of property is secured and individual households have the authority to control major decisions regards their accommodation arrangements with respect to standards, location and tenure, both the process and the environment produced are economically viable as well as stimulate the well being of the residents which are necessary conditions to propel an orderly urban growth (Turner and Goetz, 1967).

From the case studies, three main lessons can be learnt. These are: all slum improvement projects or programmes should be holistic, the process of upgrading should be participatory and there should be sufficient funds for the upgrading.

Firstly, Slum upgrading offers a more acceptable option as improvements are made on the occupied land without moving away from the traditional sources of livelihood. Any successful upgrading project must seek to alleviate the poor living standards of the slum dwellers. Upgrading must consist of the physical, socio-economic, organizational and environmental improvements. It is important that, at the outset to forge a sense of partnership and solicit the commitment of all stakeholders comprising the community leaders, youth groups, community based organizations, non-governmental organizations, families, local government, national government and key financiers.

Secondly, the whole process should be participatory and inclusive of all stakeholders from the designing, planning, and implementation to evaluation. Preservation and strengthening of the multi-functional residential and social economic character of the area should all be participatory (Kusienya, 2004).

Thirdly, financing slum improvement programmes involves a cost component. The initial proposal of constructing formal houses was abandoned after a feasibility study in 1992 covering 2,500 households showed that the monthly tenant purchase rates were way beyond the average affordable rent per household per month in the Mathare 4A slum improvement programmes. As such the construction of Low- Cost housing units that utilize cheap and locally available materials entailing labour intensive building techniques should be employed (Kusienya, 2004).

In conclusion, slum improvement programmes should aim at improving all aspects of the dwellings; from infrastructure provision, improvement in income generating activities and improvement in the housing structures as was done in Ahmedabad in India, Nima and Maamobi in Ghana and Mathare 4A in Kenya. Slum improvement involves a cost component as such a meaningful slum improvement programme should source sufficient funds for a holistic improvement programme. The subsequent chapter is a detailed methodology on how the study was carried out.

## **CHAPTER THREE**

### **APPROACH AND METHODOLOGY**

#### **3.1 Introduction**

The chapter comprises the techniques and procedures employed in carrying out the study. It also gives a detailed description of the research design, data requirements for the study as well as sampling procedures for data collection and mode of analysis.

#### **3.2 Research Design**

The study analyzed the nature, magnitude and growth dynamics of selected slums in Kumasi and proposed recommendations towards improving slum dwellings. The study employed the cross sectional research design in which the case study method was used. The research made use of the participatory approach in order to have diverse views on the research topic. The case study method was employed because it answers key “What” “how” and “why” questions.

Firstly, the main objective of the study was to “analyze the nature, magnitude and the growth dynamics of selected slums in Kumasi” and to come out with recommendations on slum improvement. Thus the key questions are “What” “how” and “why”.

Secondly, slum dynamics and improvement is studied in the specific context of informal settlement. Thus it is important to emphasize the role of the context because slum improvements influences and are at the same time influenced by the context in which they occur. This means that, due to the primacy of the context, the study on slum improvement in slum settlements is likely to produce different results from a similar study that may be carried on planned settlements.

Thirdly, the study is taking place in a real- world situation, where it is impossible to separate the process (slum improvement) from the setting (slum dwellings) in which it is taking place.

The inability to separate the process from the context implies that, the researcher has no control over the behavior of events.

Fourthly, slum settlements as an on-going process means that, the process of slum improvement taking place in these slum settlements is relatively contemporary. These thus, unearthed the various development dimensions of the study as well as will allow lessons learnt from the research to be used in theory formulation.

### 3.3 Data Requirements and Sources

Both qualitative and quantitative data were used. Qualitative and quantitative methods were applied in the research in order to have a good representation of both methods. Variables identified included the growth dynamics in terms of size and the rate of expansion, extent of poverty in the slum areas, land issues regards security of tenure, planning regulations, housing conditions, housing services or infrastructure, existing policy interventions, projects and program as well as opportunities and the challenges for slum improvement. Table 3.1 shows the variables, data categories and sources of data.

Table 3.1: Variables, data categories and sources

<b>VARIABLES</b>	<b>DATA CTEGORIES</b>	<b>SOURCES OF DATA</b>
Land <ul style="list-style-type: none"> <li>• Land tenure</li> </ul>	<ul style="list-style-type: none"> <li>• Lease papers</li> <li>• Land Title papers</li> </ul>	<ul style="list-style-type: none"> <li>• KMA</li> <li>• Town and Country Planning</li> </ul>
Condition of Houses <ul style="list-style-type: none"> <li>• Tenancy agreement</li> <li>• Physical condition of houses</li> <li>• Building materials</li> </ul>	<ul style="list-style-type: none"> <li>• Rent Agreement papers</li> <li>• Materials used in building</li> </ul>	<ul style="list-style-type: none"> <li>• TMA</li> <li>• Households</li> <li>• Households</li> <li>• Households</li> <li>•</li> </ul>
Socio-economic <ul style="list-style-type: none"> <li>• Households</li> <li>• Educational levels</li> <li>• Income</li> </ul>	<ul style="list-style-type: none"> <li>• Headship and House hold size</li> <li>• Educational levels</li> <li>• Income levels</li> </ul>	<ul style="list-style-type: none"> <li>• Households</li> </ul>

Size and Growth Dynamics • Building permits	• Adherence to planning regulations	• KMA • Land lords
Housing services/facilities	• Drainage system • Presence of water and electricity • Places of convenience	• Households • Households • Households
Projects and programs in slums	• Rehabilitation works • Extension of water, electricity • Provision of social facilities- schools, roads, health care. • Community involvement in upgrading	• KMA • KMA/Stakeholders • Households/KMA
Existing Policy interventions	• Slum upgrading programmes • Slum interventions	• KMA • KMA

Source: Author's Field Survey, 2011

### 3.4 Selection of Study Areas

Approximately 25 settlements were identified during a reconnaissance survey for the preparation of slum profiles by UN Habitat in Kumasi Metropolis (KMA, 2005). Out of these 25 settlements, 6 were considered as predominant. Two settlements, Aboabo and Asawase were purposively selected from the 6 predominant slum settlements as appropriate for the study because they were information rich in terms of the study topic as both have benefited immensely from upgrading projects and programmes. Again, the Aboabo settlement was and still is a beneficiary of the Urban Environmental Sanitation Project (UESP) which is aimed at addressing sanitation infrastructure challenges in low-income communities in urban areas whilst Asawase is an estate built around 1947, but due to neglect is now characterized by slum characteristics and has been earmarked to benefit from the U.N Habitat Slum Upgrading Facility. Table 3.2 shows some of the predominant slum settlement in the Kumasi metropolis.

Table: 3.2: Predominant` Slum Settlements in the Kumasi Metropolis

LOCALITY	Population Figures							HOUSES	HH	HH SIZE
	2000	1984	1970	2007	2008	2009	2010			
Dakodwom	1,750	1,144	629	2,108	2,223	2,223	2,283	127	320	5.5
New Suame	16,881	14,164	2,595	18,228	18,429	18,632	18,838	725	3,197	5.3
Aboabo	34,206	22,636	16,724	40,978	42,049	43,148	44,276	830	6,626	5.2
Ayigya	30,283	13,148	8,548	43,624	45,959	48,419	51,011	1,181	5,966	5.1
Asawase	46,243	36,429	8,097	51,330	52,101	52,884	53,678	2,525	9,144	5.1
Adoato	6,493	1,002	-	14,707	16,529	18,576	20,878	413	1,348	4.8

Source: KMA, 2010

### 3.5 Sampling Technique

The study employed both probability and non probability sampling techniques as and when necessary. Non probability sampling was employed during the selection of the study areas as well as the selection of institutions. This was because they were directly related to the study topic. Probability sampling was used in selecting the respondents.

#### 3.5.1 Sample frame

Households in Aboabo and Asawase constituted the sample frame for the study. Table 3.3 below shows the selected slum settlements for the study and their respective household numbers as at 2000. Table 3.3 depicts the number of households and population of the study settlements.

Table 3.3: Households and Population of Study Settlements

<b>Name of Slum Settlement</b>	<b>Number of Households (HH)</b>	<b>Population</b>
Asawase	9,144	53, 678
Aboabo	6,626	44, 276
<b>Total</b>	<b>15,770</b>	<b>97954</b>

Source: KMA, 2010.

Aboabo and Asawase were chosen to represent the rest of the slum settlements because both settlements were beneficiaries of the Urban Environmental Sanitation Project I and are still beneficiaries of Component II of the same project (UESP I and II). Aboabo again was a beneficiary of the Urban Poverty Reduction Project (UPRP) whilst Asawase is to benefit from the U.N. Habitat Slum Upgrading Facility (SUF). The study areas have a total Household of 15, 770 and population of 97, 954 as at 2010.

### 3.5.2 Sample Size Determination

Sample size determination aims at selecting part of the population from which information will be drawn to form conclusions about the entire population.

The following formula was used to select the sample size for the study:

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

Where  $\alpha$  is the level of significance or margin of error,  $n$  is the sample size and big  $N$  is the sample frame. In order to have a fair representative sample size, the sample size was determined at a 91% confidence level (At a 0.09 significance level).

$$n = \frac{15,770}{1 + 15,770(0.09)^2}$$

$$n=122.49$$

The sample size is approximately 122 Households.

### 3.5.3 Sample size distribution

The sample size of each study area was determined using the proportional method of sample size distribution.

$$\text{Aboabo} = 6,626 \div 15,770 \times 122 = 51.2 \approx 51$$

$$\text{Asawase} = 9,144 \div 15,770 \times 122 = 70.7 \approx 71$$

Table 3.4 shows how the sample size is distribution

**Table 3.4: Sample Size Distribution**

<b>Name of slum settlement</b>	<b>Number of Households (HH)</b>	<b>Sample Size</b>
Aboabo	6,626	51
Asawase	9,144	71
<b>Total</b>	<b>15,770</b>	<b>122</b>

Source: Source: KMA, 2010 and Author's construct for sample size

From Table 3.4, 51 and 71 questionnaires were administered in Aboabo and Asawase respectively. The systematic sampling method was used in selecting the required households for interview.

### **3.6 Data collection**

The research made use of both secondary and primary sources. Secondary data were obtained from journals, books, articles, newsletters, magazines, the internet, published and unpublished materials. These comprised implemented urban upgrading schemes, reports on; settlement planning, housing needs, housing issues, slum settlement development. These were obtained from departments, companies and units such as Waste management Department, Electricity Company of Ghana, Ghana Water Company, Kumasi Metropolitan Assembly Development Planning Unit, Town and Country Planning Department, and Department of Urban Roads.

Primary data was observed or collected directly from first-hand experience. Yin, (1994) provides an overview of six methods; Interviews, direct observation, documentation, archival records, participant observation and physical artifacts. The first three coupled with focus group discussions (FGD) and taking of still photographs were used in collecting data on slum dynamics and improvements in the study areas.

### 3.6.1 Data collection Tools

Structured interviews were employed in gathering household data. Both closed and opened ended questions were administered through systematic sampling techniques. These were administered to household heads in the study settlements. Questions focused on the dynamics, housing characteristics and conditions, socio economic ventures among others. Institutional interviews were conducted in selected institutions such as the Kumasi Metropolitan Town and Country Department, Development Planning Unit, Waste Management Department, Ghana Water Company Limited, Department of Urban Roads and Electricity Company of Ghana to assess their efforts and capacities in addressing the resultant slum development.

In qualitative research, experience has shown that, observation and interviews are particularly mutually reinforcing research methods. Besides, they all depend on a face to face communication (Marshall and Rossman, 1999). As such field visits to slum communities were done to have in-depth knowledge and understanding of the situation. This gave first hand information and impression on the dynamics and characteristics of slum dwellings.

Focus group discussions were held with community leaders of both study areas. In these discussions, each focused group discussed pre selected topics that were aimed at generating ideas and information on security of tenure, access to water, sanitation, slum dynamics and size as well as livelihood options.

Due to the nature of the study, observations and interviews were complemented with the taking of still photographs. Thus, still photographs depicting housing characteristics and conditions, surrounding environments, materials used in construction and solid waste disposal were taken. These were used in validating the responses from the interview.

### **3.7 Data analysis and presentation**

In terms of data analysis, both qualitative and quantitative techniques were used. Thus, descriptive analyses of slum situations were complimented with figures. Data collected were presented using illustrative presentation tools such comparison tables to depict situations in slum dwellings. Photographs and maps were also used to give a clearer understanding on slum areas and how they look like. Qualitatively, description and interpretation of issues under the study was done based on the information gathered at the focused group discussions and key informants interview as well as issues observed.

### **3.8 Limitation of the study**

Major limitations of the study included unavailability of data and unavailability of household occupants.

*Unwillingness of Household Heads to provide data:* Household heads who were reluctant to provide information regards tenancy and building permits for the fear of been questioned were assured of confidentiality of every information that they gave. Again, questionnaires did not capture the names of respondents; thus their safety had been catered for.

*Unavailability of Household Heads to answer questionnaires:* Household heads were the target respondents. However in the absence of household heads, the next in command was interviewed based on co operation from the other occupants of the household. In situations where household heads were unwilling to answer the questionnaires, other households within the house willing to answer the questionnaires were interviewed.

## **CHAPTER FOUR**

### **PROFILE AND ANALYSIS OF SLUMS IN THE STUDY AREAS**

#### **4.1 Introduction**

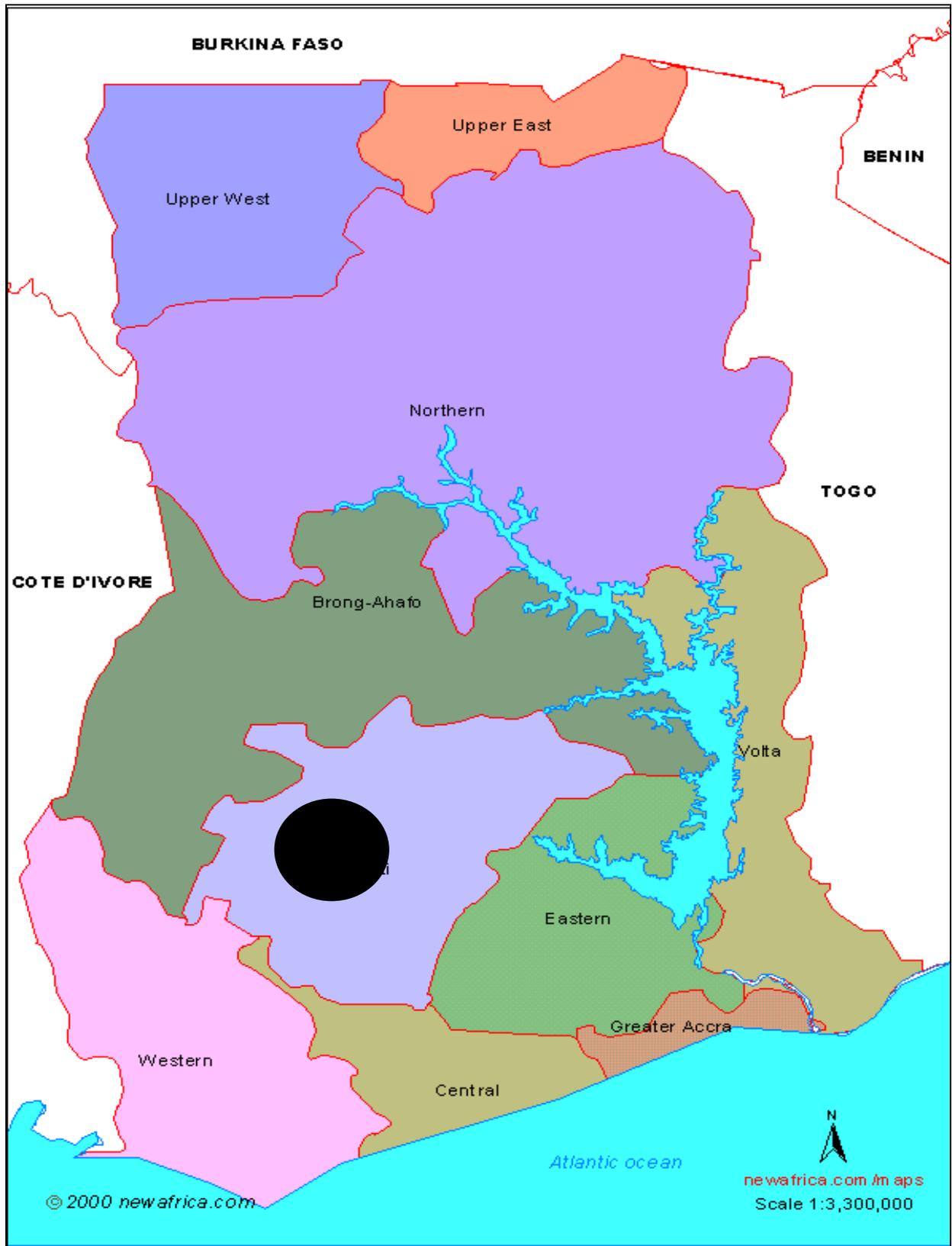
The chapter comprises the profile of the Kumasi metropolis as well as a brief description of the two study areas and a detailed analysis of the current situation of the study areas in line with the study objectives.

#### **4.2 Brief Profile of Kumasi Metropolis**

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

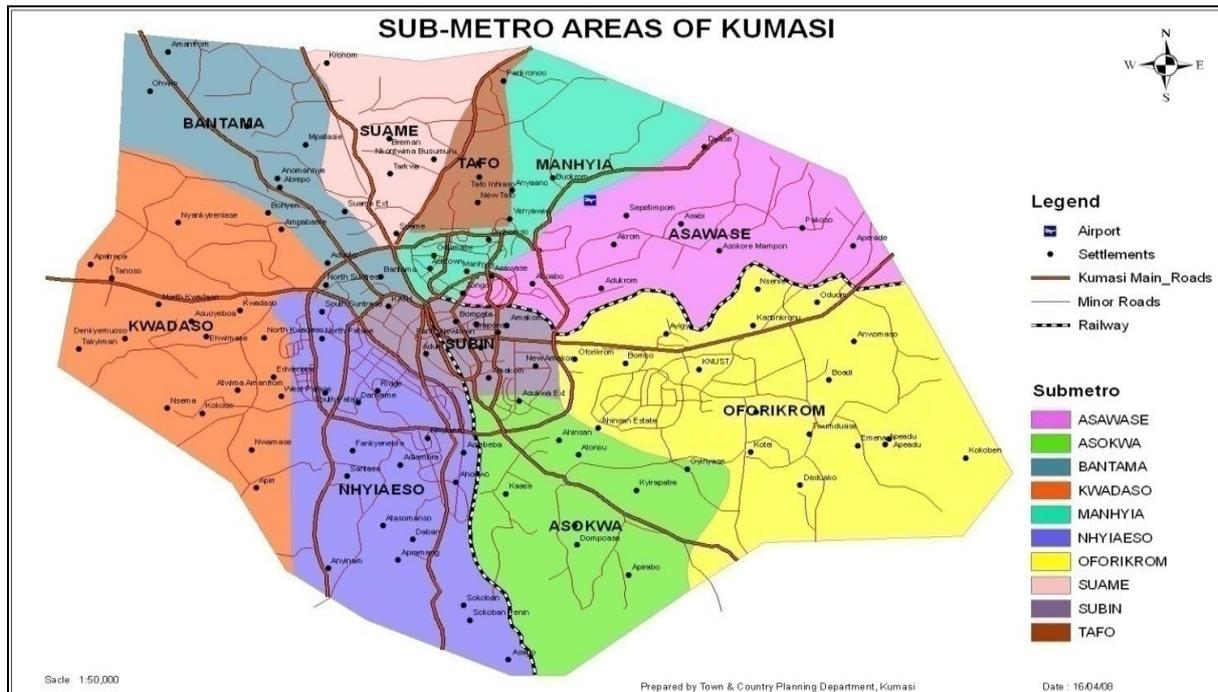
Kumasi is located in the transitional forest zone, about 270km north of the national capital, Accra. It covers a total land area of 254 square kilometer, stretching between latitude  $6.35^{\circ}$  –  $6.40^{\circ}$  and longitude  $1.30^{\circ}$  –  $1.35^{\circ}$ , with an elevation which ranges between 250 – 300 metres above sea level. Kumasi is bounded to the north by Kwabre District, to the east by Ejisu Juabeng District, to the west by Atwima Nwabiagya District and to the south by Bosomtwe-Atwima Kwanwoma District. The average minimum temperature is about  $21.5^{\circ}\text{C}$  and a maximum average temperature of about  $30.7^{\circ}\text{C}$ . The metropolis enjoys a double maxima rainfall regime thus 214.3mm in June and 165.2mm in September. Figure 4.1 shows the Administrative Map of Ghana, Figure 4.2 the Sub- Metropolitan Map of the Kumasi Metropolitan Area and Figure 4.3 being the electoral units in Asawase.

Figure 4.1: Administrative Map of Ghana



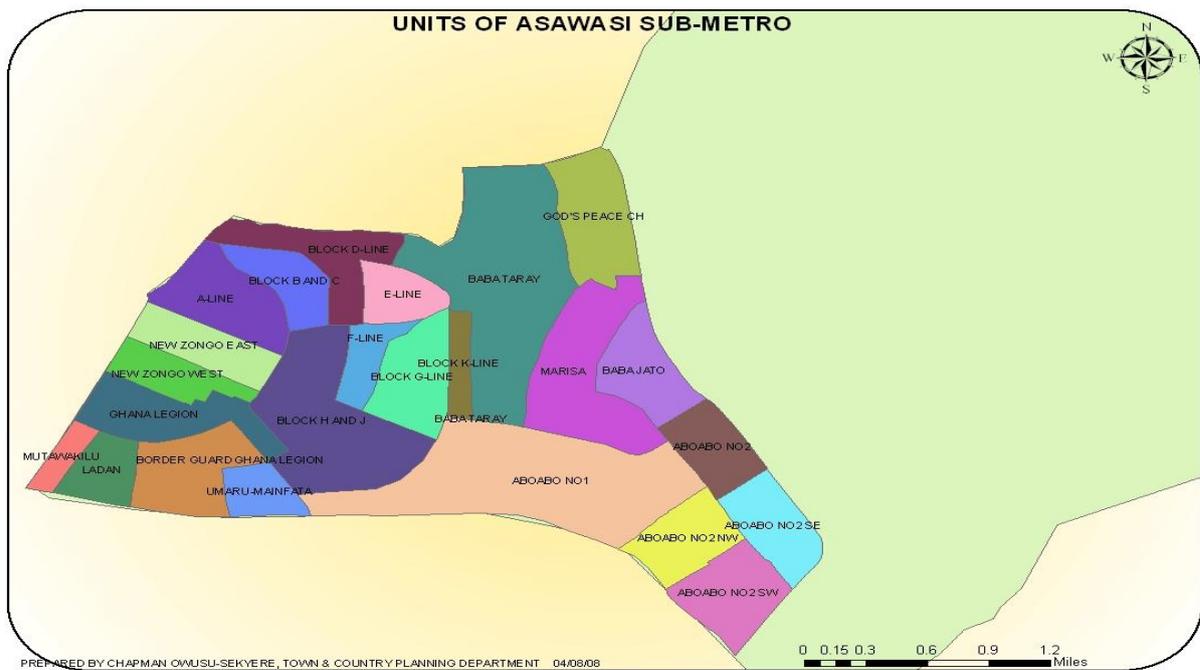
Source: KMA DPU, 2010

Fig. 4.2: Sub- Metropolitan Map of the Kumasi Metropolitan Area



Source: Town and Country Planning Department, 2008

Figure 4.3 The electoral units in Asawase.



Source: Town and Country Planning Department, 2008

#### 4.2.2 Demographic Characteristics

According to the 2000 Population and Housing Census Report, Kumasi accommodated a total of 1,170,270 people as at 2000, reflecting an inter-censal growth of 5.4% between 1984 and 2000. It has been projected to a population of 1,915,179 in 2009 based on the inter-censal growth rate of 5.4%. This unprecedented growth of the population between 1984 and 2000 has made Kumasi the most populous district in the Ashanti Region in that it accounts for almost a third (32.4%) of the region's population. Compared to the national and regional growth rate of 3.4% and 2.7% respectively, the Metropolis is growing at a faster rate indicating the attractiveness of Kumasi in the region. The metropolis has a youthful population having about 39.9% of the total population below 15 years.

The Kumasi Metropolitan Area has a total surface area of 254 sq km (2000 population census) with a population density of 7,540 persons per sq. km. The Kumasi Metropolis is second to Accra Metropolis in terms of population density. This phenomenon partly explains the cause of traffic congestion in the Metropolis and the charging of exorbitant rents for accommodation which has a potentially negative effect of reducing residents' ability to save as a means of capital formation for sustainable productive employment creation.

#### 4.2.3 Migration Trends and Religious Affiliation

Migration is one of the three factors that influence population increase. Birth and death are the other factors that influence population changes. An appreciable size (65.7%) of the residents in Ashanti Region was born at the place of their enumeration. This partly explains the homogeneity of the region and their strong traditional affiliation.

Nevertheless, it is worth noting that over a third (34.3) of the population in the Metropolis is migrants. The strategic location of Kumasi and its status as a fast-growing administrative and commercial hub has significantly accounted for the attraction of both internal and

international migrants. The Metropolis has attracted a number of migrants from several parts of Ghana and neighbouring African countries such as Togo, Burkina Faso, Mali, Nigeria, Ivory Coast and abroad especially, Europe. This has contributed significantly to the phenomenal growth of the population in the city.

Three main religious groups can be identified. The dominance of Christians in the Metropolis is profound (78.8 %). Islam (16%) and Traditional (0.3%) religion are also fairly represented. Nevertheless, about 4.2 percent of the population does not associate with any of these religious organizations.

#### 4.2.4 Economy

The economy in the metropolis comprises- the informal, formal and industrial sectors. However, the metropolis has a larger percent of its populace employed in the informal sector. In 1970, the informal sector employed about 54% of the total labour force in the Metropolis. There was an increase to 65% in 1990. The informal sector currently employs about 75% of the total populace in the Metropolise of which the self employed is about 65% (Boepeah, 2001; King and Dinye, 2002). Projections are that, the informal sector will continue to dominate because of the emphasis been placed on private sector – led economy (Adarkwa and Post, 2001).

#### 4.2.5 Housing

The 2000 Population Census and Housing reports revealed that the housing stock in the Metropolis was 67,434, constituting 20.5 percent of the regional housing stock of 328,751. Growing at an annual rate of 2.4 percent, the housing stock in the Metropolis was projected to be 83,693 by 2009. The housing stock in the Metropolis is relatively fairly distributed among the ten Sub Metropolitan Councils. The housing stock in Kumasi has a total room of 820,

192. On the average each house has 9.8 rooms. Statistics available indicates that over 70 percent of the households in the Metropolis sleep in a single room while 2 percent have nine rooms at their disposal as sleeping rooms. The metropolis has an average household size of 5.1, this phenomenon needs comprehensive and strategic integrated efforts to mitigate the looming potential overcrowding crisis.

Majority (53%) of the households in the Metropolis are housed by compound housing facilities lacking necessary housing amenities for decent living. Even, the houses that have such facilities are not able to meet the pressing needs of occupants efficiently and effectively due to the large number of occupants (averagely 18 persons per house). Another area of concern, with regard to access to housing units, is the inability of about 8 percent of households in the Metropolis to afford decent dwelling units. This phenomenon has compelled these households to seek shelter from make-shift structures such as huts, tents and kiosk/container. This is another cause for concern because these 8 percent households comprised 82,742 members. This implies that, this huge number of residents in the Metropolis sleep in structures that are not decent thus adversely affecting their productivity to national development.

#### 4.2.5 Governance

The administration and management of Kumasi Metropolis is entrusted with the Kumasi Metropolitan Assembly while the custodianship of the land is held with the Traditional Authority. Traditionally, Kumasi Metropolis is the seat of the ‘Otumfuo’, the king of the Asante Kingdom. It also serves as capital of the Asante Kingdom, which was founded in 1680’s by King Osei Tutu I, as well as the Ashanti Region. The Local Government Act 462, 1993 and Local Government Legislative Instrument LI 1614, 1989 established the Kumasi Metropolitan Assembly (KMA) to manage the city. Furthermore, these legal frameworks have empowered KMA with legislative responsibilities to promulgate rules and by-laws,

giving legal effect to its decisions. The Local Government Act 462 (1993) and legislative instrument LI (1614) has also given authority to KMA to become a Planning Authority to formulate policies, programmes and projects as well as to mobilize resources within its jurisdiction to undertake development projects.

Kumasi has 10 sub metros (Refer to Figure 4.2) which are Bantama, Subin, Manhyia, Oforikrom, Tafo-Pankrono, Nhyiaeso, Kwadaso, Suame, Asokwa and Asawase which serve as a link between the community and the Metropolitan Assembly. They bring the process of decision making to the door steps of the grass roots in society. The Sub Metropolitan District Councils are further sub divided into 24 Town Councils and have a total of 419 Unit Committees. The study areas are under the Asawase Sub Metropolitan Councils.

#### 4.2.7 Asawase in Context

Asawase is located in about 1.5km east of the central business district (refer to Figure 4.2). It is adjacent the Manhyia Palace. It has a projected population of 52,884 as at 2010 and 9, 144 households (KMA DPU, 2010). Asawase occupies an area of about 2 square kilometers. It was the first estate built in Kumasi by the Ministry of Works and Housing around 1947 for public servants. Traditionally, it is part of the Manhyia stool lands but politically, it is the head quarters of the Asawase sub Metropolitan area.

Although a planned settlement, Asawase has transformed considerably from housing humans to now housing both humans and animals (Sheep and goats). This has resulted in the high rate of diseases notable amongst them are cholera and malaria. Poor utility service provision, poor sanitation, extension of estate buildings, congestion and poor roads as well as sub standard buildings are the manifestation of slum characteristics in Asawase. (KMA DPU, 2009)

#### 4.2.8 Aboabo in Context

Aboabo is located in about 4.5 km east of the central business district off the Kumasi Accra trunk road on the eastern by-pass. It has a projected total population of about 43, 148 as at 2010 and 6,626 households; occupying an area of about 1.6 kilometer square (KMA DPU, 2010) and forms part of the Asawase sub metropolitan area (Refer to Figure 4.2).

Aboabo is challenged with poor sanitation, large household sizes, sub standard buildings congestion, extension of buildings, and poor provision of utility services. All these are forms of manifestation of slums.

### **4.3 Characteristics of Respondents in the study area.**

#### 4.3.1 Religion and Migration

The study revealed two main religious groupings in the settlements. These are Christianity and Islam with 22.95 and 77.05 percent respectively. Majority of the Muslims are found in Aboabo. This partly explains the reason for the high room densities in the study areas.

The ethnicities of the dwellers are a mixture of all the ethnic groups in Ghana with majority been born in the study areas. The northern region of Ghana records the highest percentage of 31.97 followed by people from the Upper East Region with 18.85%, Ashanti 13.11%, foreigners 9.05%, people from Central region 8.19% respectively. The rest come from the remaining regions in Ghana. This implies that migrants account for 77.87% of the residents in the study settlements and therefore have ‘pilgrim mentality’.

#### 4.3.2 Educational Status of the Respondents

The study sought to establish a relationship between slum dwellers and their level of education. Table 4.1 shows the level of education of respondents from the two settlements.

Table 4.1: Level of Education of respondents

<b>Level of Education</b>	<b>Aboabo</b>	<b>Asawase</b>	<b>Number of Respondents</b>	<b>Percentage</b>
No Formal Education	21	27	48	39.34
Primary	9	14	23	18.85
JHS/Middle	13	21	34	27.87
SHS/Voc/Tech	7	8	15	12.30
Tertiary	1	1	2	1.64
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>

Source: Author's Field Survey, 2011

From Table 4.1, 18.85% of the total respondents have had some sort of primary level education even though majority ended up in class four. Majority of the respondents were middle form four leavers and that accounts for the high percentage in the Junior High School/ Middle school. The Middle school leavers were middle aged.

The study further revealed that, just two of the respondents had tertiary education (university level). These two were found to also to be employed in the public sector as administrators.

Being predominately Muslim settlements, 39.34% which was the highest percentage was found not to have had any form of formal education. These however, had some Arabic teaching knowledge.

#### 4.3.3 Livelihoods and Monthly Income

The income of the residents of the study area was examined. Table 4.2 indicates the respondents' income and occupation.

Table 4.2: Occupation and Income Levels of Respondents

Occupation	Average Monthly Income								Number of Respondents	%
	Income Range in (GH ¢)									
	0-50		51-100		101-150		151+			
	Ab.	As.	Ab.	As.	Ab.	As.	Ab.	As.		
<b>Trading</b>	17	16	3	2	4	8	3	3	56	45.90
<b>Handiwork/Technical</b>	11	19	0	1	0	1	1	0	33	27.05
<b>Managerial Positions</b>	1	2	0	1	2	2	0	0	8	6.56
<b>Unemployed (Pensioners/ students)</b>	6	13	2	3	0	0	1	0	25	20.49
<b>Total</b>	35	50	5	7	6	11	5	3	122	100
<b>Average Income</b>	20.35		86.6		139.4		250			

Source: Author's Field Survey, 2011 As.: Asawase; Ab.: Aboabo

Looking at the Table 4.2, 45.90% of the respondents earned income from trading activities. This explains the reason why there are stores dotted along the roads and within the settlements. Respondents who were employed in handiworks ranged from tailoring, carpentry, light engineering works and dress making to shoe making accounted for 27.05%. With the new daily minimum national wage of GH¢3.11, amounting to GH¢93.3 as minimum average monthly income, the average monthly income for groups 0-50, 51-100, 101-150 and 150+ are GH¢ 20.25, GH¢ 86.6, GH¢ 139.4 and GH¢ 250 to GH¢ 63.03 respectively. It can be seen that the average incomes of approximately 80% of the respondents are below the national minimum monthly average income and are from income groups 0-50 and 51-100. The low incomes of the respondents can be attributed to the fact that they have low levels of education due to high drop outs at the SHS level and that of tertiary education. However, the 101 to 150 and 151+ groups average monthly incomes are above the national average

minimum monthly income; this can be attributed to the fact that they have large trading activities. The unemployed who are composed of students and pensioners accounted for 20.29% of the total respondents.

#### 4.4 Physical Characteristics and Condition of Houses

##### 4.4.1 Classifications of Houses in Slums Settlements

The study sought to find out the types of houses in the study areas. Table 4.3 shows the classifications of the houses in the study areas.

Table 4.3: Classification of Houses in Slum Settlements

Type of House	Aboabo	Asawase	Total Number of Respondents	Percentage
Compound House	33	3	36	29.51
Single Family House	3	51	54	44.26
Temporal Structure	4	4	8	6.56
Storey Building	5	4	9	7.38
Flat	6	9	15	12.29
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>

Source: Author's Field Survey, 2011

With reference to Table 4.3 on the classification of houses in the settlements, the single family house dominates with 44.26%. Thus 51 respondents were from Asawase because the buildings there are the single family houses. The situation is however different in Aboabo which was first housed by the Yoruba's. The settlement has 33 compound houses. Flats were almost the same amongst the two settlements with 6 and 9 in Aboabo and Asawase respectively. Temporal structures were common as some houses were extended with wood and salvaged materials in both settlements.

#### 4.4.2 Housing Conditions and Characteristics

Slum dwellings have been connoted with deplorable housing structures as well as high densities leading to congestion. The situation in the Aboabo and Asawase is not different.

Plate 1 shows just a sample of the housing condition, characteristics and housing density.

Plate 1: Housing Condition, characteristics and density in Aboabo



Source: Author's Field Survey, 2011

Plate 1 shows just one of the many houses in Aboabo and Asawase that is made of wooden and salvaged materials. The people seen in Plate sleep together in the wooden structure.

Plate 2 and 3, shows sample of extensions made on the original estate housing. Majority of the buildings has extensions to the original buildings with sandcrete and aluminum roofs coupled with blockage of access paths. The original building materials were landcrete and slate. This shows the “self help’ initiatives” (Turner, 1976).

Plate 2: A house in Asawase showing extensions made with little space for access



Source: Author's Field Survey, 2011

Plate 3: Extensions made to a house in Asawase



Source: Author's Field Survey, 2011

The extensions made in Asawase with durable materials can be attributed to the fact that majority of the occupants have tenurial security and hence can invest in cement and sandcrete blocks to do their extensions.

#### 4.4.3 Types of Materials used for Building

The study further analyzed the types of materials used for the building. The results were that, 54.55% of the houses in both settlements were constructed with landcrete and slate roof. In Asawase however, there were a lot of extensions made with sandcrete and aluminum roof, hence Sandcrete placed second with a percentage of 19.32. Respondents that had their houses made of rammed earth were 14 in number, whilst those with salvaged and wooden materials were 11 and 21 respectively.

Plate 4: Shows cracked buildings, and types of building materials with bad drains in Aboabo



Source: Author's Field Survey, 2011

Plate 4 is a sample of the state of the houses in Aboabo. Majority of the buildings are constructed with landcrete and aluminum/slate roofing and are now deteriorating as well as are characterized by poor drainage facilities. The buildings which were constructed since the 1960s have not seen any major form of rehabilitation. The outer cement plastering on most of the buildings have been washed away by heavy down pours over the years leaving the bases

bare and at the verge of collapse. This can be attributed to the unavailability of proper drainage systems in Aboabo and inability of the house owners to maintain their houses.

#### 4.4.4 Housing Densities

Slums are believed to be congested with high densities. Table 4.5 shows the densities by the settlements.

Table 4.4: Housing and Room Densities

<b>Settlement Densities</b>	<b>Aboabo</b>	<b>Asawase</b>	<b>Average</b>
<b>Rooms /HH</b>	1	1	1
<b>Rooms/House</b>	7	4	5.5
<b>HH Size</b>	7	5	6
<b>Occupancy Rate</b>	7	5	6.0

Source: Author's Field Survey, 2011

From Table 4.4 the number of rooms per household was the same for both settlements averaging one (1). This situation is not different in the entire metropolis which has about 70% of its household living in single rooms (Population and Housing Census, 2000). However, rooms per house were higher in Aboabo with 7 whilst that of Asawase was 4. This is partly because, the estate formerly had two rooms and with new extensions made, increased to four. Again comparing the occupancy rate of 6.0, in the study areas; this is far above the UN (2.5) and Ghana (3.0) standards. This comes to confirm that overcrowding in the study areas is high.

#### 4.4.5 Security of Tenure/Tenorial Status

Security of tenure is a very important factor if there is to be any meaningful upgrading. As such, the security of tenure as well as the tenorial statuses in the two settlements was examined. Table 4.5 shows Security of Tenure/Tenorial Status in the study areas.

Table 4.5: Security of Tenure/Tenurial Status

<b>Tenurial Status</b>	<b>Aboabo</b>	<b>Asawase</b>	<b>Total Number of Respondents</b>	<b>Percentage</b>
House Owners	25	40	65	53.28
Tenant	18	25	43	35.25
No formal Arrangement (Insecure group)	2	3	5	4.09
Non Renting Occupant	6	3	9	7.38
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>

Source: Author's Field Survey, 2011

As can be seen from Table 4.5, 53.28% of the total respondents were the owners or landlords of the houses whilst 35.25% were tenants. This means that, improving the area will not be much of a problem as the owners are more than half of the total respondents. Tenants were mostly migrants from other regions who have come in search of greener pastures and therefore have a 'pilgrim mentality'. The 4.09 % of respondents who do not have any formal arrangement for the land on which their structure is situated, live with the fear of coming home one day not to meet their places of abode. These however are paying for the space occupied by their structures to the owners of the land. These are mostly 'kayayee' from the Northern part of the country. Non renting occupants comprising 7.38% are squatting on lands given them by their owners. These squatters have put up wooden structures which are not permanent.

#### 4.4.6 Drainage Problems in the Settlements

The study revealed that drainage in the settlements is in a deplorable state whilst some portions of the settlements lack drains. Table 4.6 shows the drainage situation in the settlements.

Table 4.6: Drainage Problems in the Settlements

<b>Drainage Problems</b>	<b>Aboabo</b>	<b>Asawase</b>	<b>Total Number of Respondents</b>	<b>Percentage</b>
<u>Household Drainage</u>				
Blocked Gutters	28	49	77	90.58
Stagnant Waters in the Yard	3	5	8	9.42
<b>Total</b>	<b>31</b>	<b>54</b>	<b>85</b>	<b>100</b>
<u>Community Drainage Problems</u>				
Stagnant Waters during Heavy Down pours	14	10	24	45.28
Muddy during Heavy Down Pours	4	7	11	20.75
Blockage of gutters	6	12	18	33.97
<b>Total</b>	<b>24</b>	<b>29</b>	<b>53</b>	<b>100</b>

Source: Author's Field Survey, 2011

As can be seen from the Table 4.6, about 90.58% of the houses in the study areas which were built to accommodate just a few number of people especially Asawase had drains sufficient to accommodate the liquid waste that would be created, but as a result of the increment in the number of people now residing in the buildings, the gutters created can no longer accommodate the waste water created. About 9.42% of the respondents say they have stagnant waters in their yards during heavy down pours which many a times flows into their rooms.

At the community level, 45.28% of the respondents say water is collected at points during heavy down pours because the gutters are choked with waste materials and fecal matter. In reality, the settlements lack proper drainage systems. Matter that is collected out of gutters are not carried away, they are thus, are washed back into the gutters by erosion agents. Plate 5 shows matter that is being washed backed into the desilted gutter.

Plate 5; Shows a gutter in Aboabo where matter is left by the banks to be washed back



Source: Author's Field Survey, 2011

#### 4.4.7 Availability and Access to basic services and facilities

The existence of facilities and services are to make life comfortable for inhabitants. About 54.92% of the households in Asawase and Aboabo have household pipe connections while 44.26% depend on water vendors. Only one house in Aboabo had a mechanized borehole. Despite their availability, respondents who have household pipe connections do not have their taps flowing all the time. The taps are closed based on their sections. In Asawase, taps are closed in the evening and opened at 10am in the morning. This affects households who do not have enough storage facilities for domestic activities in the night and early in the morning. Table 4.7 shows the availability and accessibility of services and infrastructure in the study areas.

Table 4.7: Availability and Accessibility of Services and Infrastructure

<b>Service/Infrastructure</b>	<b>Aboabo</b>	<b>Asawase</b>	<b>Total Number of Respondents</b>	<b>Percentage Distribution of Services to HH</b>
<u>Water</u>				
House Hold Pipe connection	30	37	67	54.92
Bole Hole	1		1	0.82
Buy from Vendor	20	34	54	44.26
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>
<u>Electricity</u>				
Home Connection	51	71	122	100
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>
<u>Bath House</u>				
Public Bath House	18	24	42	34.43
Private Bath House	19	25	44	36.06
Communal Bath House	14	22	36	29.51
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>
<u>Sanitary Facilities</u>				
Private Toilet	19	26	45	36.88
Public Toilet	30	45	75	61.48
Free Range	2		2	1.64
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>
<u>Refuse Disposal</u>				
Container	39	49	88	72.13
Open Space	12	22	34	27.87
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>

Source: Author's Field Survey, 2011

From Table 4.7, there was 100% electricity connection in all the houses sampled. Despite the fact that all households including those with temporal structures have got electricity connection, they experience frequent power fluctuations which do affect their electrical gadgets such as iron and fridges. Electricians who are classified under handicraft occupations are unable to work smoothly as a result of the power fluctuations.

With regards to bath houses, 34.43%, 36.06 % and 29.51% have access to public bath house, private bath house and communal bath house respectively. Respondents who access the public baths are not happy about the cleanliness of the bath house. Respondents have to wait till it is their turn to take their baths be it private, public or communal bath houses.

With respect to sanitary facilities, 36.88%, 61.48% and 1.64% of the respondents have access to private toilet, public toilet and free range respectively. The number of existing public toilets was limited as the toilets are always crowded. In spite of their availability, residents do queue in the morning for their turn which implies that facilities are not enough. The old public toilets have not been evacuated and make portions of the settlements stinky. Plate 6 shows a public toilet that because of the smell, black polythene has been used to tie the air pipes to reduce the smell in the environment.

Plate 6: A toilet that has been tied with black polythene because its stinks



Source: Author's Field Survey, 2011

Again from Table 4.7, 72.13% have access to communal refuse bins. The remaining 27.87% disposed their refuse in the open space simply because they cannot afford the user fee. Residents living besides gutters wake up to see waste in the gutters. These range from human excreta to baby pampers.

From the forgone discussions it can be seen that, the slum communities are challenged and readily need interventions to improve upon the situations.

#### 4.5 Interventions in the Slum Settlements

A lot of efforts have been made towards improving slums in the Metropolis and the country at large. Programmes and projects embarked upon by KMA and Civil Society Groups are discussed in the following section.

There has been the smooth implementation of Urban Environmental and Sanitation Project (UESP) phase I which ended in 2002 and phase II which started in 2006, will end December 2011. UESP I and II is a World Bank/ Government of Ghana/KMA/ Beneficiaries' project. The programme components were local roads construction and waste management. Under the local roads, access roads were constructed to aid access in times of challenges such as emergencies (fire outbreaks). The waste management included the provision of household waste bins and provision of communal waste containers as well as refuse collection.

There is an on- going capacity building programme at Asawase by KMA aimed at equipping beneficiaries with skills that will empower them to hold community leaders responsible and accountable to ensure rapid development and control slum expansion. The Metropolis is implementing it through the Government Accountability Improvement Trust (GAIT), the United State Agency for International Development (USAID).

Aboabo is also a beneficiary of the Urban Poverty Reduction Project (UPRP) which is being funded by the African Development Bank. The aim of the project is to build the capacity of the human capital as well as pro-poor socio economic investments.

KMA as part of her slum improvement efforts through a World Bank assisted project aimed at provision of public places of convenience, drains and roads, implemented the Community Infrastructure Up-Grading projects in Asawase and Aboabo between 2000 and 2004. Table 4.9 shows some slum improvement efforts in the study areas.

The study revealed that, the UN Habitat in collaboration with the Cities Alliance through the Slum Up – Grading Facility (SUF) which is aimed at eradicating slums and preventing the emergence of new slums in the Metropolis, a component of the U. N. Millennium Development Goals (MDGs), has identified slum communities that should benefit from Upgrading. Among the list is Asawase. Further actions are being awaited. Table 4.8 show slums interventions in the study communities.

Table 4.8: Slum interventions in study the Communities

<b>Slum Interventions</b>	<b>Duration</b>	<b>Beneficiaries</b>	<b>Project Components'</b>	<b>Work Done</b>
Urban Environmental Sanitation Programme (UESP I/II)	1996-2002 2006-2011	Aboabo/ Asawase Aboabo/ Asawase	Sanitation	Provision of Household waste bins, communal waste bins and waste collection.
Urban Poverty Reduction Project (UPRP)	2008-2011	Aboabo	Social inclusion transfer	Beneficiaries selected
Street Lightening/ Decongestion	Yearly	Aboabo Asawase	Street lightening Demolition of an authorized structures	Demolition of an authorized buildings Street lightening
Government Accountability Improvement Trust (GAIT/KMA)	2006-2009	Asawase	Sensitization on cleanliness	Community education and sensitization on holding their local leaders accountable for development
U.N. Habitat Slum Up- Grading Facility (SUF)	2005-2009	Asawase	Slum upgrading	Reconnaissance survey
Community Infrastructure Up-Grading	2002-2004	Asawase zongo	KVIP construction	Construction of public places of convenience

Source: KMA DPU, 2010

#### 4.5.1 Needs, opportunities and Challenges

The study further examined the challenges and opportunities to slum interventions. Table 4.9 shows the needs, opportunities and challenges in relation to an upgrading programme.

Table 4.9: Challenges, Opportunities and Needs of Slum Communities.

<b>Slum Improvement</b>	<b>Aboabo</b>	<b>Asawase</b>	<b>Number of Respondents</b>	<b>Percentage</b>
<u>Challenges in Improving Slums</u>				
Bad Attitude	16	16	32	26.23
Conflict	9	21	30	24.59
Lack of space for relocation and provision of new ones	26	34	60	49.18
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>
<u>Needs of Settlements</u>				
Public toilets	22	36	58	47.54
Public Baths	-	-	-	-
Communal Waste Bins	5	8	13	10.66
Creation of open Space	13	14	27	22.13
Provision of Access roads	8	10	18	14.75
Evacuation of Fecal matter	3	3	6	4.92
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>
<u>Existing opportunities</u>				
Contribution through Labour	26	49	75	61.48
Money	9	14	23	18.85
Education on Cleanliness	5	3	8	6.56
Others (Food, Cement, Technical Expertise etc.)	11	5	16	13.11
<b>Total</b>	<b>51</b>	<b>71</b>	<b>122</b>	<b>100</b>

Source: Author's Field Survey, 2011

From Table 4.9, the study reveals that, 59.84%, 13.11%, 14.75% and 12.30% were aware of the sanitation projects: street lightening projects, road construction/up grading alongside gutter construction and decongestion exercise. The sanitation project is however on-going along-side the construction of a storm drains in Aboabo and the continual provision of household waste bins in the two settlements-UESP II. Please refer to Table 4.8 for more detail on the projects and implementation status. From Table 4.8 and 4.9, slum improvement efforts have not been holistic as was done in Nima West, Maamobi East, Mathare 4A and Ahmedabad. The four case studies had a holistic package which included the improvement in social infrastructure provision, income generating activities as well as improvement in housing, thus these efforts undertaken have left essential components of slum improvement out which are improvement in housing and income generating activities. This partially accounts for the reason why inhabitants are unable to maintain the social infrastructure provided since their income levels are still low.

Major needs of the settlements are that, 47.54% of the respondent need more public toilets, 10.66% need additional communal waste bins, 22.13%, and 14.7% need open space and provision of access roads to access houses in times of emergency such as fire out breaks and 4.92% stressed on the need to evacuate the old public toilets to stop them from smelling. The need for more public toilets is however in contrary with KMA's policy of promoting household toilets.

On challenges that are likely to hinder the improvement of the settlements, the study revealed that, 32 of the respondents envisaged that there is likely to be a lackadaisical attitude towards change to keeping their environment clean. Thirty of the respondents fore saw conflict as to whose structure should be demolished to create space as well as unwillingness to give out land for provision of facilities and services. Sixty of the respondents released that the unavailability of space for relocation of some facilities will be a challenge should there be

any interventions. Despite the above challenges the dwellers hoped that whatever be the case, KMA would manage to provide the intended facilities earmarked for the two settlements without hindrances from any community member.

The two settlements are ever willing to contribute towards any up-coming project through labour, money and other means.

Interactions with the unit committee members revealed that, their presence in the settlements augurs well for development. With the initiatives of community leaders, the two settlements do organize periodic clean up exercise. These exercises involved all dwellers coming out to clean their surroundings as well as desilting the gutters and cleaning the streets. However, with regards to building up physical structures, no initiative has been undertaken. Community leaders think it is the responsibility of KMA to provide infrastructure and build up the area.

#### 4.5.2 Institutional Support

The Town and Country Planning Department is tasked with the responsibility of developing layouts and zoning under the Local Government Act 462. Their task which includes zoning of already developed areas to meeting planning codes seems to have been relaxed. This is attributed to inadequate funds and personnel's. The interview conducted revealed that, the department was very much aware of the congestion in Aboabo and Asawase as a result of "building in unauthorized areas, unauthorized extension to buildings and blocking of access roads". They however, did not have plans on improving upon the settlements but however, contribute to decision making by serving on committees at KMA Planning Unit on the UESP project. The Department however, envisages that if any improvement is to be undertaken, major challenges would be lack of space for new facilities and relocation of existing facilities.

Ghana Water Company Limited has undertaken improvement projects through the provision of some household piping as well as the provision of communal stand pipes. However, further household piping cannot be done in both settlements as there has been a lot of building up in the areas as well as encroaching on the land, hence there is no space left for laying of pipe lines. Ghana Water Company Limited recommends that the KMA Planning Unit should see to it that space is created for complete household piping of the two settlements as well as enforcing by-laws in terms of strict adherence to building codes. Water for the Poor is a new project being implemented in the two settlements. The project packages are extension of communal stand pipes at affordable prices and the implementation of the 'Life line tariff' (Public Regulatory Commission-PURC) for a fee of 80 pesewas per 1000 liters of water fetched.

However, observations from the field revealed that Ghana Water Company Limited was not up and doing when it comes to maintenance of their facilities. Many of the pipe lines were cracked and tied with polythene bags to reduce the flow, thus the assurance of the provision of wholesome water is to be questioned. Plate 7 depicts a cracked pipe line that is wasting whilst Plate 8 shows exposed pipe lines due to erosion which has been left unattended to.

Plate 7: Shows a cracked Pipe Line that has not been attended to



Source: Author's Field Survey, 2011

Plate 8 : Shows bare pipe lines that have not been attended to



Source: Author's Field Survey, 2011

The Department of Urban Roads (DUR) seems to be satisfied with the road network in the two settlements with the exception of a few roads that need up-grading and tarring. The

situation however is different when it comes to drains. The Department is challenged with regards to finances to help implement its drainage package to the two settlements as well as unavailability of space for the construction of bigger drains to accommodate waste water created and heavy down pours. The department recommends that “the City authorities (KMA) should demolish all encroached structures”. The Department has future plans of providing more access roads and drainage facilities.

Waste Management Department which is tasked with maintaining clean environments in the metropolis is disappointed with the environmental situation in the two study settlements. This is because despite the provision of communal waste containers, residents litter the environment because they do not want to pay the realistic user fee before dumping their waste into the communal waste containers. The department has on-going projects in both settlements. There is the city-wide and solid waste projects in Asawase and Aboabo respectively. Their major challenge is that, they are unable to recover their operational cost of 40% as a result of defaulters and lack of access roads to collect refuse and fees. Their major challenge in the past has been the inability of the central government to contribute its share of 60% operational cost and the attitudes of beneficiaries have been unhelpful to proper waste collection and disposal. The Department recommends that, to keep Asawase and Aboabo clean, there should be massive education and sensitization to develop good attitude towards proper waste disposal and encourage them to pay the user fee at the communal refuse container point to enable them dispose their waste rather than throwing them into gutters and littering the environment. The Department however is not discouraged as they still have plans on making full cost recovery and implementation of revised public toilets facilities. They however expect the two settlements to organize regular clean up exercises and source financial support from other development partners. Interactions with the community leaders revealed that, Waste Management Department though has provided household bins come

three times in a month to collect the refuse which is not sufficient because much waste is created and the bins cannot contain them. Again, the community members are unable to pay for the user fee at the communal refuse collection point, as such, many come back home with their refuse and devise alternative ways of disposing of it.

The study revealed that, the institutions work in isolation. The Town and Country Department, Department of Urban Roads, KMA Development Planning Unit, Ghana Water Company Limited all do their plans separately. There is therefore lack of coordination amongst the city authorities.

#### **4.6 Conclusion**

From the foregoing discussions, the phenomenon of slum expansion is alarming despite the fact that some efforts have already been undertaken to curb the growth. There has not been a holistic approach towards slum improvement. Only a part of slum improvement has been carried out thereby relegating improvement in income generating activities and housing to the background. Thus, housing conditions are in a deplorable state and income levels are still below the minimum average because KMA has not created an enabling environment for slum residents to improve upon their living conditions.

City authorities are finding solutions to slum problems but however, much impact has not been achieved or even, felt by the beneficiaries. Asawase which was formerly an estate has deteriorated gradually into a slum.

## CHAPTER FIVE

### SUMMARY FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

#### 5.1 Introduction

Chapter five comprises the summary of the findings from the study as well as recommendations based on the findings.

#### 5.2 Summary of Findings

##### 5.2.1 Socio Economic Characteristics

1. With the new daily minimum national wage of GH¢3.11, amounting to GH¢93.3 as minimum average monthly income, income groups 0-50 ( 85 respondents) and 51-100 (12 respondents) earn GH¢ 20.35 and GH¢ 86.6 respectively which are below the minimum average monthly income. The low incomes of the respondents can be attributed to the fact that they have low levels of education due to high drop outs from SHS and that of tertiary education and thus find themselves in the informal sector. Majority of the respondents earning GH¢ 20.35 are found within the informal sector.
2. Christianity and Islam were found to be dominating with 22.95 and 77.05 percentages respectively. Thus migrant Muslim communities are characterized by high densities. There was a mixture of all the ethnic groups but those from northern region outnumbered the rest with 31.11%.
3. Foreigners accounted for 9.05%. Many of the respondents were born in the two settlements, however, 13.11 where from the Ashanti region; the remaining 77.87% were in migrants from other neighboring regions.

4. The Occupancy rate for the slum settlements was 6.0 which is far above the U.N. and Ghana standards of 2.5 and 3.0 respectively. As such an out break in any communicable diseases in the study areas will affect almost all its inhabitants.
5. Respondents sampled had access to electricity. However, they experience erratic light outs which affect their livelihood options. With respect to access to water, 54.92% of the total respondents have household pipe connections and 44.26% bought from vendors. Water vendors take advantage of customers and charge exorbitant prices during water shortages.
6. With access to sanitary facilities, 61.64% still resort to the use of public toilets with only 36.85 having household toilet facilities. There is the need to encourage household toilets construction as the provision of public toilets is no more in line with KMAs policies.
7. With respect to drainage problems in the house, 90.58% of respondents have their gutters blocked and have to collect waste water and throw away manually.
8. The inability of dwellers to rehabilitate their dwellings was largely due to the fact that they lacked the necessary capital to rehabilitate their homes because they were engaged in low income generating jobs. As such much of their earnings were devoted to feeding.

#### 5.2.2 Slum Improvement Efforts

1. KMA, in collaboration with the World Bank under the Community Infrastructure Up-Grading Projects has provided the settlements with public toilets and schools.
2. In collaboration with USAID, KMA is implementing the Government Accountability Improvement Trust in Asawase which is geared towards capacity building of the Human Capital to hold community leaders responsible for slum improvement.

3. KMA, in collaboration with the U.N. a reconnaissance survey on slum communities that will benefit from the SUF programme was done and Asawase was one of the communities that needed attention.
4. KMA has a yearly budget for provision of access roads and street lightening in all its settlements. The two settlements have been beneficiaries.
5. There are isolated upgrading projects that are biased towards improvement in housing and income generating activities. These poses a challenge as upgrading is not holistic.

### 5.2.3 Challenges encountered during slum up-grading

1. There is no available space for the provision of communal infrastructure or for relocation. For instance, Asawase was to have a police station; however, the resident could not come to a consensus as to where to locate the facility.
2. Residents have defaulted with respect to payment of user fees for waste disposal. This makes cost recovery by the Waste Management Department very difficult and challenging.
3. Town and Country Planning Department, KMA planning Unit, Department of Urban Roads, Ghana Water Company Limited are all challenged with inadequate finances and delay in the release of funds from the Government of Ghana for slum up grading projects.
4. Slum residents' attitude to cleanliness is bad and any projects undertaken do not last.
5. Lack of coordination among the institutions leads to duplication of efforts as well as funds.
6. KMA has not created a conducive environment to promote upgrading by slum residents. They therefore wait for interventions rather than initiating their own upgrading projects.

### **5.3 Recommendation**

The following are recommendations on how the slums could be improved upon based on the findings. Any effort towards slum improvement should be holistic incorporating all the three-components thus, infrastructure provision, improving on income generating activities as well as the housing structures. The following are recommendations on how a holistic improvement of slums should be planned and implemented in the study areas.

#### 5.3.1 Medium Term improvement measures (Local interventions)

1. There should be a properly planned upgrading programme with inputs from all stakeholders; KMA, Institutions, Civil Societies, and residents. The plan should spell out specific projects to be implemented, the time frame and the actors.
2. Regards inadequate funding and over reliance on central government transfers, KMA, should strengthen its methods of revenue collection so as to raise enough funds for holistic slum improvement projects. This can be done by making sure that all business operational within their jurisdiction are duly registered and recognized by the Registrar Generals Department.
3. Town and Country Planning Department should re enforce building codes so as to prevent residents of slum settlements from expansions and again undertake demolition exercises together with other City authorities based on their planning codes and regulations.
4. Community leaders should form strong neighborhood volunteers to undertake sensitization on cleanliness and to prevent resident from pouring refuse into gutters. Again, these groups should be empowered by T&CPD to prevent residents from erecting new structures without due authorization

5. KMA and Town and country planning Department should issue laws on housing maintenance to make sure that buildings that have not been rehabilitated be habilitated within a specified period of time. They can do this by designing a housing improvement programme as part of their upgrading projects and encourage slum residents to take advantage of the package. This will go a long way to improve the housing infrastructure in the study areas.
6. Ghana Water Company Limited should be empowered to go to the field and rehabilitate all broken pipe lines and cover up the ones that have been left bare due to erosion and other factors to make sure that treated water is not wasted and is wholesome for consumption. This will go a long way to reduce malaria and cholera prevalence in the settlements.

#### 5.3.2 Long Term (National Level Interventions)

1. The Ministry of Water, Works and Housing should plan for low income houses for slum residents, through site and service schemes. This housing strategy will combine or utilize financial resources from both governments and individuals.
2. To help reduce rural urban drift, government should aim at decentralizing development programmes and projects to the less privileged regions especially the northern and the two upper regions. This will go a long way in retaining the youth who mostly have the desire of leaving rural life behind them and coming to cities in search white collar jobs.
3. KMA with support from the Central Government should embark on urban Slum control and upgrading. This should be a holistic package (livelihood improvement,

improvement in the houses and provision of infrastructure). The process should be participatory.

#### **5.4 Conclusion**

The main objective of the study was to analyze the nature, magnitude and the growth dynamics of selected slums in Kumasi and to come out with recommendations on slum improvement. The study revealed that the magnitude and growth dynamics of slums vary from settlement to settlement as in the case of an estate (Asawase) and a normal settlement (Aboabo). The study further revealed that migrants are mostly slum dwellers and occupied by the low income groups and less professional workers.

On the conditions and characteristics, the housing conditions are in a deplorable state and need urgent attention. Conditions prevailing in slums are very appalling as public toilets stink and are not emptied. Road access is closed as in the case of Asawase where many of their inner tarred lanes are blocked.

The study revealed that improvement programmes which had taken place were not holistic slum improvement projects. Programmes and projects were all geared towards infrastructure provision to the neglect of improving upon income generating activities and housing infrastructure. Infrastructure Improvement packages already benefited from are sanitation projects, road up grading and street lightening. Utility service providers for instance GWC has implemented projects for the poor. These included the provision of communal stand pipes.

On existing opportunities and challenges to improving slums, slum dwellers, are ever willing to contribute their quota towards improving their dwellings. Residents are willing to provide labour, and cement during construction of facilities. However, envisaged challenges are lack

of available space, conflict during demolition exercises and residents attitude to change to be clean and do things rightly.

In order to rightly reduce the rapid growth of slums, government should develop rural packages to curb the rural urban drift. On improving already existing slums and reducing the rate of expansion, it is recommended that, a more holistic and participatory approach should be employed in the planning and implementation of upgrading. Town and Country planning should regularize lands that are been occupied without building permits so that security of tenure can be secured so as to enable builders put up permanent structures .

In conclusion, the above under listed recommendations if employed will contribute to reducing rural urban drift as well as leading to sustainable slum improvement programmes.

## **REFERENCES:**

Bijlani, H. and R. Prodipto, (1991). Slum improvement Project Council for Social Development, New Delhi.

Chris Benjamin The statesman, 23/01/2007: A brief history of housing in Ghana,

Cities Alliance (1999) Cities Alliance for Cities Without Slums: Action Plan for Moving Slum Upgrading to Scale, Washington DC:

Clotey, B. (2007). "A brief History of Housing in Ghana". The Statesman 9th, January, 2007.

Dwvyer, D. I. (1975) People and Housing in Third world Cities, Longman Group Limited  
Housing Process (New York, 1972).

Huchzermeyer, M. (2006). Slum upgrading initiatives in Kenya within the basic services and wider housing market: A housing rights concern. Discussion Paper No.1/2006. Kenya Housing Rights Project, COHRE-Africa Programme Centre on Housing Rights and Evictions, Geneva.

Jennervik, A. (2006). Improving Slum Conditions through Innovative Financing. Shaping the Change. In: TS 27 – Upgrading Informal Settlements: Access to Human Rights and Finance Congress. International Federation of Surveyors (FIG) and United Nations Human Settlement Programme. Munich, Germany

Kusienya C.M 'The perpetuating challenge of informal settlements' 2004 'The Mathare 4A experience and the Kenya slum Upgrading programme.

Sheuya, S. (2004). Housing Transformation and Urban Livelihoods in informal settlements. SPRING Research Series No. 45 University of Dortmund.

The Guardian, Wednesday 24 November 2010. Africa warned of 'slum' cities danger as its population passes 1bn.

Tipple, A.G. (1987): The Development Of Housing Policy In Kumasi, Ghana, 1901-1981: with analysis of the current housing stock. University of Newcastle Upon Tyne.

Turner, J. (1976). Housing by People: Towards Autonomy in Building environment. London. Labyrinth Publication Ltd.

Turner, J. F.C. and Geotze, Rolf (1967) Environmental Security, and Housing input

UN Human Settlements Programme publication- the 'Rental Housing: an essential option for the urban poor in developing countries.' 1970. VCGBFH

UN-Habitat (2006 & 2001) Report on Housing deficit in sub-Saharan Africa.

UN-HABITAT (2003): Guide to Monitoring Target 11: Improving the lives of 100 million slum dwellers. Nairobi.

UN-HABITAT (2003); Slums of the World: the face of urban poverty in the new millennium. Nairobi. <http://www.unhabitat.org/publication/slumreport.pdf>

UN-HABITAT (2003); The Challenge of Slums, Global report on Human Settlements 2003. Nairobi. <http://hq.unhabitat.org/register/shop.asp>

UN-HABITAT (2003a), About UN-HABITAT Overview: History, United Nations Human Settlements Programme. <http://ww2.unhabitat.org/about/history.asp>

UN-HABITAT (2003a), About UN-HABITAT Overview: History, United Nations Human Settlements Programme. <http://ww2.unhabitat.org/about/history.asp>

UN-HABITAT (2003b), The Challenge of Slums: Global Report on Human Settlements, Nairobi: United Nations Human Settlements Programme.

UN-HABITAT (2003b), The Challenge of Slums: Global Report on Human Settlements, Nairobi: United Nations Human Settlements Programme.

UN-HABITAT (2004) Dialogue on the urban poor: improving the lives of slum-dwellers, Paper presented at World Urban Forum, Barcelona, 13–17 September 2004.

UN-HABITAT (2004); Urban Poverty and slums, intra-city differential study of Nairobi, internal; report UN-HABITAT. Nairobi.

United Nations Center for Human Settlements (2008/2009). State of the World's Cities: Harmonious Cities. London, Earth scan publications.

United Nations Development Programme. Improving the lives of slum dwellers: a home in the city. United Nations Millennium Project. London: Earthscan, 2005. - HYDERABAD SLUM IMPROVEMENT PROJECT: INDIA

United Nations Development Programme. Improving the lives of slum dwellers: a home in the city. United Nations Millennium Project. London: Earthscan, 2005. - HYDERABAD SLUM IMPROVEMENT PROJECT: INDIA

World Bank (2008). Approaches to urban slums. A Multimedia Sourcebook on Adaptive and Proactive Strategies. Washington D.C.

APPENDIX 1

DEPARTMENT OF PLANNING

FACULTY OF PLANNING AND LAND ECONOMY

SAMPLE QUESTIONNAIRE: SLUM IMPROVEMENT IN GHANA

(THE STUDY OF ABOABO AND ASAWASE IN KUMASI)

(A) HOUSEHOLD SURVEYS

(a) Personal Data of Respondent

1. Name of settlement.....
2. Date of interview.....
3. Marital status? (a) Married { } (b) Single { } (c) Co habituating { } (d) Divorced { }
4. Are you an indigene? (a) Yes { } (b) No { }
5. Home Town.....
6. Ethnicity..... 7. Religion.....
8. How long have you settled here? .....

(b) Socio Economic Characteristics of Respondent

9. Age.....
10. Educational Background (a) Basic level { } (b) JHS { } (c) SHS { } (d) Tertiary { }  
(e) others.....
11. Are you employed? (a) Yes { } (b) No { }
12. If yes, indicate if (a) Full Time { } (b) Part Time { }
13. Please specify if (a) Public { } (b) private { }
14. Occupation.....
15. How much do you earn on the average per month?.....
16. What do you mostly spend your earnings on? (a) food { } (b) Clothing { }

(c) medicals { } (d) school fees { } (e) rent { } others.....

17 Please provide household data on the following

Head of HH (Sex)	No. of rooms in the house	Number of children	No. of rooms occupied	Household size

**(c) Housing Characteristics**

18 Type of house (a) Compound House Single { } (b) storey House { } (c) Flat { }

(d) Temporal structure { } (e) Semi-Permanent Structure { }

19 What materials is your house made of? (a) Sand Crete blocks with aluminum roof { }

(b) Land Crete and aluminum roof { } (c) Rammed earth and aluminum roof { }

(d) Wood { } (e) Salvaged materials { } (f) wooden materials { }

20 Who gave you the Land?.....

21 Do you have any documentation to show ownership? (a) Yes { } (b) No { }

22 If yes, please specify (a) sub lease { } (b) Allocation paper { }

(c) Land title deed { } (d) Lease { } (e) Squatting { } (f) others { }

23 Do you have security of tenure?.....

24 Housing tenure status? (a) House owner { } (b) Renter { }

(c) No formal arrangements { } (d) non renting occupant { }

25 Means of acquisition?.....

26 What is the size of the plot?.....

27 Is the house suitable for the plot?.....

28 Any problem with the site or location of the house? .....

29 Have you encountered problems with city authorities regards your stay here?

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

30 If yes what kind of encounter? (a) Force evictions { }

(b) destruction of housing { } (c) others?.....

**(d) Water and Sanitation**

31 Do you have access to water? (a) Yes { } (b) No { }

32 If yes from where? (a) stand pipe { } (b) Borehole { } (c) well { } (d) buy from vendors { }

33 How regular is the source of water?.....

34 Do you have access to bath houses? (a) Yes { } (b) No { }

35 If yes, indicate type? (a) Public bath { } (b) Private indoor bath { }  
(e) communal outdoor bathhouse { }

36 Do you have access to sanitary facilities? (a) Yes { } (b) No { }

37 If yes, indicate type (a) private toilet { } (b) Pit latrine/Public toilet KVIP { }  
(c) Flying toilet/Free range { }

38 Do you have access to a refuse dump? (a) Yes { } (b) No { }

39 If yes what type ?.....

40 If no, where do you dispose off your refuse? .....

41 What is the distance to the refuse dump site?.....

**(e) Presence of facilities and infrastructure**

42 Do you have roads in the settlement? (a) Yes { } (b) No { }

43 Are they accessible to your house? (a) Yes { } (b) No { }

44 If no, why?.....

45 What should be done to make the road accessible to your house? .....

46 Are you connected to the national electricity grid? (a) Yes { } (b) No { }

47 If yes, is it regular? (a) Yes { } (b) No { }

48 If no what is your source of lightening (a) Lantern { } (b) rechargeable lamps { }

(c) Solar energy { }

**(f) Drainage system**

49 Identify three key drainage related problems in

i. Your House

i).....

(ii).....

(iii).....

(b) Your Community

(i).....

(ii).....

(iii).....

50 What do you know about the up-grading programme in your community?.....

51 What are the components?.....

52 What specific improvement projects have been executed? .....

53 What do you like or dislike about the improvement project.....

54 What are your expectations of KMA? .....

55 Are there any community initiated programmes to address the problems?

56 Have you ever participated or contributed to any of the community initiatives towards up grading?

i. Yes { } (b) No { }

57 If yes, which improvement projects? .....

58 Are you satisfied with the environment you reside in? .....

59 If no, what should be done to make you satisfied? .....

60 State three key problems regard improving upon your area?

i)..... (ii).....

(iii).....

61 State three key needs or priorities in your settlements.

(i)..... (ii).....

(iii).....

62 What can you contribute to improve the settlement?

(i)..... (ii).....

(iii).....

APENDIX 2

**(B) INSTITUTIONAL SURVEY: KMA**

1. Date of interview.....

2. Status of respondent.....

**(a) Size and dynamics of slums**

5. Please provide the following data below.

No.	Name of settlement	Signs of slum manifestation (Nature)
1		
2		

**(b) Slum interventions**

6. Please provide the data below on slum improvement interventions

No.	Name of settlement	Project/programme of intervention	Duration	status of implementation	Challenges in implementation
1					
2					

**(c) Challenges and opportunities of slum improvement interventions**

7. What has been some challenges encountered in the past regards slum improvement?

(i).....

(ii).....

(iii).....

(iv).....

8. How was it overcome?.....

9. What do you recommend to help mitigate the expansion of slums and emergence of new ones?

(i).....

(ii).....

(iii).....

10. Does your office have plans on improving slums in the metropolis? Yes { } No { }

11. If yes, in which aspects?

(i).....

(ii).....

12. Has there been any efforts to promote community participation in respect to up grading?

(a) Aboabo? (a) Yes { } (b) No { } (b) Asawase? (a) Yes { } (b) No { }

13. What are the key problems in the following communities?

(a)Aboabo (i)..... (ii).....

(iii)..... (iv).....

(a)Asawase (i)..... (ii).....

(iii)..... (iv).....

14. Does your department have an integrative plan with other departments such as GWC, ECG, WMD, and DUR? (a) Yes { } (b) No { }

15. If yes, in which aspects?

(i).....

(ii).....

(iii).....

APENDIX 3

**(C) INSTITUTIONAL SURVEY: WASTE MANAGEMENT DEPARTMENT**

1. Date of interview.....

2. Status of respondent.....

**(a) Size and dynamics of slums**

3. Please provide the following data below.

No.	Name of settlement	Waste Management problems/system	Magnitude of waste
1			
2			

**(b) Slum interventions**

4. Please provide the data below on waste management interventions regards up grading

No.	Name of settlement	Project/programme of intervention	Duration	status of implementation	Challenges in implementation
1					
2					

**(c) Challenges and opportunities of waste management interventions**

5. What has been some challenges encountered in the past regards waste management improvement?

(i)..... (ii).....

6. How was it mitigated?.....

7. What do you recommend to help mitigate the waste management problems in the Aboabo and Asawase?

(i)..... (ii).....

(iii).....

8. Does your office have plans on improving regards waste management situation in the metropolis? Yes { } No { }

11. If yes, what strategies?

(i).....

9. what role(s) are expected from the settlement?.....

APENDIX 4

**(C) INSTITUTIONAL SURVEY: METROPOLITAN TOWN AND COUNTRY  
PALNNING DEPARTMENT**

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

**(a) Size and dynamics of slums**

3. Please provide the following data below.

No.	Name of settlement	Problems associated with spatial planning/layout
1		
2		

**(b) Slum interventions**

4. Please provide the data below on slum housing improvement interventions under up grading projects.

No.	Name of settlement	Project/programme of intervention	Duration	status of implementation	Challenges in implementation
1					
2					

5. How did community members participate in the up grading project?.....

6. Has your outfit played any role in the up grading projects?

**(c) Challenges and opportunities of slum housing interventions**

7. What has been some challenges encountered in improving slum dwellings the past regards slum improvement?

(i)..... (ii).....

8. How was it mitigated?.....

9. What do you recommend to help mitigate the expansion of slums and emergence of new ones?

(i).....(ii).....

(iii).....

10. Does your office have plans on improving slums in the metropolis? Yes { } No { }

11. If yes, what improvement strategies are they?

(i).....

(ii).....

APENDIX 5

**(D) INSTITUTIONAL SURVEY: DEPARTMENT OF URBAN ROADS**

1. Date of interview.....
2. Status of respondent.....
3. What is the state of access roads in Aboabo and Asawase?

No.	Name of settlement	Nature of roads and drains	How is the problem been solved?
1			
2			...

4. What are the challenges in providing access roads and drains to the two slum settlements?
  - (i).....
  - (ii).....
5. What do you recommend to help alleviate the problem of accessibility and drainage in the two slum settlements?
  - (i).....
  - (ii).....
6. What are your plans for Aboabo and Asawase?.....

APENDIX 6

**INSTITUTIONAL SURVEY: ELECTRICITY COMPANY OF GHANA**

1. Date of interview.....

2. Status of respondent.....

3. What is the power supply situation in Aboabo and Asawase?

No.	Name of settlement	Power supply situation	How is the problem been solved?
1			
2			

4. What are the challenges in supplying power to slum settlements?

(i).....

(ii).....

5. What do you recommend to help alleviate the problem of power supply in slum settlements?

(i).....

(ii).....

APENDIX 7

**F) INSTITUTIONAL SURVEY: GHANA WATER COMPANY**

1. Date of interview.....
2. Status of respondent.....
4. Does Aboabo and Asawase have water connection (a) Yes { } (b) No { }
5. What is the water situation in settlement with slum manifestation?

No.	Name of settlement	Water supply situation	How is the problem been solved?
1			
2			

6. What are the challenges in supplying water to slum settlements?
  - (i).....
  - (ii).....
7. What do you recommend to help alleviate the problem of water supply in slum settlements?
  - (i).....
  - (ii).....
8. What are your plans for Aboabo and Asawase? .....

APENDIX 8

**(G) COMMUNITY LEADERS-UNIT COMMITTEES, ZONAL COUNCILS**

1. Do you partake in decision making regards development in your area?

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

2. If yes, what decision making process have you been involved in respect to up grading projects?

(i).....

(ii).....

(iii).....

3.How beneficial was the decision to your area?

(i).....

(ii).....

4. Have you been involved in taking up local initiatives in the community over the last 3 years? (a) Yes { } (b) No { }

5. If yes what ways?

(i).....

(ii).....

(iii).....

6. Was it beneficial to the community? (a) Yes { } (b) No { }

7. If yes, do you intend to undertake more of such activities? (a) Yes { } (b) No { }

8. If no state reasons why?.....

9. Any form of community mobilization for the up grading project? .....