

**FINANCING HOUSING IMPROVEMENTS IN SLUM
COMMUNITIES IN GHANA: THE CASE OF
THE KUMASI METROPOLIS**

BY:

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DECLARATION

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

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DEDICATION

To my Mom.

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I would like to thank God for being with me during my studies.

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ABSTRACT

The main objective of this study was to analyse financing schemes available for improving housing conditions in the Ayigya-Zongo and Dakodwom communities in Kumasi. The study examined the socio-economic and housing characteristics of slum dwellers. In addition, it investigated the main sources of funds for improving slum housing and the financing schemes available in the two communities.

The study adopted the case study method as a way to understand the peculiar situation in the two communities. Based on that, the study provided actions to shape urban development policies in the city. During the research process, questionnaires were administered in these communities. This allowed the researcher to understand the characteristics of slum dwellers as well as their desires for improving their housing conditions. In addition, interviews conducted with the traditional leaders allowed the researcher to identify the major problems faced by the whole community. Furthermore, interviews with officials from relevant institutions such as the Kumasi Metropolitan Assembly, Town and Country Planning Department, Kumasi Waste Management Department, Ghana Water Company and Electricity Company of Ghana increased the knowledge of the researcher about local efforts to improve the conditions of slum dwellers in Kumasi.

The study revealed that, slum communities suffer from socio-economic problems as well as poor sanitation conditions. These improper conditions challenge the development of communities which may affect the quality life to its residents. From the study, it was clear that the sanitation problem in slum communities is very pronounced. However, this problem was not a priority for either slum dwellers or city authorities. With regards to housing financing, the study showed that slum dwellers use their own resources to finance housing improvements or acquisition of land. This is because housing financing schemes are almost nonexistent for slum dwellers. Additionally, residents in Ayigya-Zongo and Dakodwom indicated their interest in participating in financial schemes for housing improvement if they are introduced in their respective communities. These may

include the use of personal or communal savings and communal labour. Again, it was revealed that the high social cohesion within the communities could facilitate the implementation of government projects for developing affordable housing schemes. This could however be disadvantaged by the low income status of slum dwellers in the Metropolis.

The study also found that there are limited interventions for slum development in Kumasi by city authorities. Furthermore, government actions have demonstrated that Kumasi is still in a transition between negligence and forced evictions policies for slum control. This is also worsened by the limited recognition of slum communities as a permanent problem by some government authorities and the unclear responsibilities faced by providers of basic services such as water and electricity. The lack of coordination among city agencies was also confirmed during the research process.

The study recommends the importance of strengthening local government to lead slum upgrading programmes in the Metropolis. This requires participation of all major stakeholders and capacity building in government institutions and communities. These actions could provide quality living conditions to hundreds of slum dwellers and to turn Kumasi into a city which offers equal opportunities to its inhabitants.

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LIST OF ACRONYMS

ACHR -	Asian Coalition for Housing Rights
ADB -	Asian Development Bank
CBO -	Community Based Organisation
ECG -	Electricity Company of Ghana
GH -	Ghana Cedis
GIS -	Geographic and Spatial Information
GWC -	Ghana Water Company
IMF -	International Monetary Fund
KNUST-	Kwame Nkrumah University of Science and Technology
KMA -	Kumasi Metropolitan Assembly
KVIP -	Kumasi Ventilated Improved Pit Latrine
MDG -	Millennium Development Goals
MIVAH -	Ministerio de Vivienda y Asentamientos Humanos
MTDPF-	Medium-Term Development Policy Framework
NGO -	Non-Governmental Organisation
SUF -	Slum Upgrading Facility
TCPD -	Town and Country Planning Department
UESP -	Urban Environmental and Sanitation Project
UN-Habitat-	United Nations Human Settlements Programme, formerly UNCHS

CHAPTER ONE

HOUSING CONDITIONS IN SLUM COMMUNITIES: PROBLEMS AND KEY ISSUES

1.1 Introduction

Slum conditions are as a result of rapid urbanization processes, natural population growth, rural to urban migration, ineffective urban development policies and inadequate planning. It is estimated that the world's urban population will reach 5 billion people in 2030. It is also expected that this urban growth will be mostly generated in developing countries (Baker, 2008; World Bank, 2008).

A considerable proportion of this urban population lives in slum conditions. According to estimates of the United Nations, one billion people live in urban slums and this number will increase to two billion people in the next twenty years (World Bank, 2008). These areas are within the urban environment confronted with housing and other living challenges which should be addressed by urban planning and management.

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 a result of the failure in existing urban social and economic development policies. Urban governments are therefore challenged to address the issue of slum development in slum areas. 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.

Governments have approached the problem with five main policy interventions according to UN-Habitat (2008c). These policies started with slum clearance through violent forced evictions and large scale slum demolition. The second main intervention was the clearance and on-site redevelopment through self-help improving of existing infrastructure and facilities up to satisfactory standards. Later on, some policies were focused on the removal of slum residents from the central city to resettlement sites. The

fourth intervention was the implementation of enabling policies focused on the integration of communities in the decision making processes. The last policy is slum upgrading which implemented participatory slum improvement interventions that integrated slum dwellers, government and agencies (World Bank, 2008; UN-Habitat, 2003). This policy is more recommended due to its lower disturbance of socio-economic life in slum communities.

It must however be noted that most of the above approaches were not very successful. In many cases, the interventions did not consider the characteristics of slum dwellers and did not integrate them into the urban planning and decision making processes (UN-Habitat, 2008c). For instance, government authorities did not think about the relevant social networks created in such communities. Again slum dwellers were mostly not part of the solutions adopted. Additionally, poor governance, inadequate urban planning and local capacity building, lack of coordination and financial support accompanied the policies adopted.

As a result of the failure of the interventions adopted, governments did not only face the problem of controlling the existing slums but the proliferation of more settlements of that nature. Programs or strategies that were quite successful were those with many actors involved. The participation of slum households, Community Based Organisations (CBO's), Non Governmental Organisations (NGO's), local governments and private sector proved successful as a result of major compromises made by all the actors.

The aim of this study is investigate into the various possible financing schemes for improving housing conditions in slum communities.

1.2 Problem Statement

Access to adequate housing, infrastructure and services is a major concern for people living in slums. Again, slum dwellers have limited or no access to basic housing facilities and services. The situation is worsened as people in slums find alternative ways to obtain such basic services like water and electricity and sometimes incur higher cost to access the facilities. Most times the access of slum dwellers is threatened by lower quality service while the main city dwellers enjoy relatively better services (Baker, 2008).

A study about informality and slums in Nairobi by the World Bank in 2006 showed that the main development priorities of slum communities are focused on infrastructure. The priority areas were toilets provision which constituted 24 percent, with water supply, health services and electricity having 19 percent, 13 percent and 12 percent respectively (World Bank, 2006).

In addition to already stated problems, others include hazardous and overcrowded spaces, poor durability of housing materials, poor waste management practices and pollution (UN-Habitat, 2006a). These problems expose slum dwellers to unhealthy conditions that generate both communicable and non communicable diseases which affect some members or the whole community gradually.

The problem of slum development results from rapid urbanization processes which have not been addressed through effective urban planning, provision of adequate and affordable housing and urban housing financing schemes. Consequently, slum dwellers appear to have been neglected in the urban development system. In addition to the physical deprivation faced by slum dwellers, the informal status or illegality of tenure generates physical and psychological uncertainty. These problems create fear of violent clearance or bulldozing practices by local authorities, poor integration with the rest of the city and the social stigma attached to an inferior residential location (Lall et al., 2005).

In response, urban authorities as well as international organizations have analyzed, proposed and implemented policies and strategies aimed at improving the conditions of

slum communities such as access to land, housing and basic services. These strategies include upgrading of slum areas, on-site redevelopment, improvement of existing infrastructure and facilities up to satisfactory standards, and effective, participatory and comprehensive city management (World Bank, 2008). Others include the use of local building materials and appropriate technologies in housing (IMF, 2006). The rest are microfinance development and building of financial systems for low income households (ADB, 2000).

An example of successful slum upgrading through participatory processes was the Pamoja Trust Savings and Housing Project in Nairobi in 2004. The objectives of the Pamoja project were to upgrade the slum area, reduce overcrowding spaces and to improve household privacy. Thus, tenants and resident structure owners were involved in the upgrading process and three-storey attached houses were constructed for them with intimate internal access in the houses. In addition, the slum dwellers were also involved in saving schemes and agreed on getting loans to afford the housing project with a repayment period of six years and four months that was adequate to their income levels (Huchzermeyer, 2006).

New options in slum areas should ensure the participation of major stakeholders such as local authorities, line agencies, private sector and slum dwellers during all the decision making process and the implementation of projects. Moreover, these projects should promote saving schemes and investment in affordable housing for low income groups. Thus financing housing should be adapted to the needs and financial capacities of slum dwellers in order to integrate them into the housing system and improve the satisfaction of their basic needs.

This study investigates possible options for financing housing improvements of slum dwellers through financing schemes in urban areas. The study adopts two communities in the Kumasi Metropolitan Area; Dakodwom and Ayigya-Zongo.

1.3 Research Questions

Evolving from the problem stated in the above section, the main concern of this study is to improve the existing knowledge about the housing conditions in slum communities in the Kumasi Metropolis as well as the financing options that these slum communities could use for improving their housing units.

Specifically, the study is interested in providing appropriate answers to the questions below:

- What are the socio-economic and housing characteristics of slum communities in the Kumasi Metropolis?
- What are the sources of financial resources for housing improvements in slum communities?
- What are the housing financing schemes available for slum dwellers in the Kumasi Metropolis?
- How can the existing housing finance schemes be improved to benefit poor slum dwellers?
- What are the existing collaborations among actors in slum upgrading?
- What should be the policy response to housing improvements and financing in slum communities?

1.4 Study Objectives

The general objective of the study is to analyze financing schemes available for improving housing conditions in slum communities in the Kumasi Metropolis. The study also aims at providing policy recommendations to address the problems identified.

Specifically, the study will achieve the following objectives:

- To examine the socio-economic and housing characteristics of slum dwellers in the Kumasi Metropolis;
- To identify and analyse the sources of funds for improving slum housing in the Kumasi Metropolis;
- To examine the housing financing options available for slum dwellers in the Kumasi Metropolis;
- To investigate how current housing financing schemes for slum dwellers can be improved,
- To examine the existing collaboration among different actors in the provision of basic services to slum communities in the Kumasi Metropolis; and
- To make recommendations to shape urban development policies to inform city authorities of options available for improving the housing in low income communities.

1.5 Justification of the Research

The study of slum housing financing provides contributions in the following ways;

- The research would provide fresh reliable data about particular characteristics of slum communities in the Kumasi Metropolis. Thus, the information generated would provide a better understanding of the urbanization phenomenon in Ghana.
- The study would provide updated data about slum dwellers which is useful for future interventions and planning.
- The study would provide information for further evaluation of existing policies in Ghana.
- The research would contribute to the shaping and design of future slum upgrading programmes.
- The study also has the tendency of fostering the achievement of the goal number 7, target 11 of the Millennium Development Goals (MDG) which is “the achievement by 2020 of a significant improvement in the lives of at least 100 million slum dwellers”. The study therefore has a significant role to play in urban planning and development in Ghana.
- Specifically in Ghana, the research would contribute to the implementation of strategies of the Medium-Term Development Policy Framework 2010 to 2013 (MTDPF 2010-2013). Its second theme (Expanded Development of Production Infrastructure) considers the upgrading of existing slums and prevention of occurrence of new slum areas.

1.6 Scope of Research

This study is an investigation into the financial opportunities for housing improvements in slum communities in the Kumasi Metropolis in Ghana. The study is focused on slum communities located in Dakodwom and Ayigya-Zongo. In this study, the examination of the existing housing conditions in each slum community is carried out, and complemented with possible financial options in both communities.

The selection of Dakodwom and Ayigya-Zongo is based on their formation processes. Dakodwom is located on the southern part of the Kumasi Metropolis in the Nhyiaeso Sub-Metro. Dakodwom is the only suburban area which initiated as a slum community from its creation. On the other hand, Ayigya-Zongo is located on the eastern part of the Metropolis in the Oforikrom Sub-Metro. Ayigya-Zongo which was part of a suburban area that was planned but degenerated into a slum due to rapid urbanisation and migration process without corresponding planning response. Thus, the study takes two settlements with different formation processes and examines similar and peculiar problems facing these communities.

Therefore, the study examines and analyses socio-economic, housing and finance characteristics of the slum communities in order to improve the understanding related to housing of low income groups. In addition, the knowledge on local initiatives and institutional efforts towards housing improvements in the area are also part of the interest of the study.

1.7 Limitations of the Study

The use of enumerators for the collection of the primary data was necessary due to the limited time. However, the perception of enumerators could affect the collection of answers, particularly in the open questions of the questionnaire. To reduce this limitation, enumerators from communities close to the study area were selected. In one side, enumerators understood better the background of study area and were more prudent with the community dwellers. On the other side, respondents felt more comfortable to answer

questions put to them. In addition, enumerators were trained about the objectives of every question, the different ways to ask for the information and they participated as observant in a previous pilot for the questionnaire administration in the communities.

The majority of the respondents in the two communities selected were able to understand the local language “Twi”. However the author required the assistance of native speakers who translated the information into English. This limitation could affect the interpretation of the information given by the respondents. To reduce this problem, a close communication with the assistants was implemented. In some cases, the answers of respondents were discussed with the assistants to obtain a better interpretation of the information given by the community dwellers.

The reluctance of slum dwellers or officers of the relevant institutions to provide information was another limitation to the study. Thus, the use of an introductory letter given by the Planning Department of the Kwame Nkrumah University of Science and Technology (KNUST), student identifications, and previous meetings with the traditional leaders of the two communities formalized the work in the two communities. The traditional leaders also supported the study in the two communities. In the case of Dakodwom, a chief’s representative accompanied the enumerators and introduced them to the households. In the case of Ayigya-Zongo, the chief communicated and explained to the community the general objective of the study through an announcement in the mosque. With these actions, the traditional chiefs promoted the willingness of community dwellers to participate in the study. Additionally, the introductory letter and student identification supported the interview conducted in the institutions selected.

1.8 Organisation of the Study

The study is organized into five chapters. The first chapter is the introduction of the study. This chapter involves the introduction, problem statement, research question, study objectives, scope of the research, justification of the research, limitations and organisation of the study. This chapter was previously submitted as a synopsis of the study and guides and links the development of the whole research.

The second chapter provides a relevant review of the literature on financing housing in slum communities. Definitions given by other authors are discussed and they assist the construction of an own understanding of the problem faced by these type of communities. In addition, the chapter discusses strategies and policies implemented by city authorities and presents different study cases as examples of successful or unsuccessful policies.

The third chapter discusses the methodology of the research. The methodology provides a detailed explanation about the process and stages implemented during the study. Thus, the chapter details the design of the research, data requirements, data collection methods, sampling techniques and tools chosen for obtaining the information in the communities selected and presentation of the data. In addition, the chapter indicates specific stages for the research process as well as the detailed steps for the administration of questionnaires and interviews conducted during the field work.

The fourth chapter discusses the main results of the study. The chapter provides a context of the towns selected in order to provide an overview of the study area. Furthermore, the relevant characteristics and conditions of the slum communities selected and the efforts implemented by different institutions in slum areas in the Kumasi Metropolis are presented and discussed in this chapter.

The last chapter presents the main findings of the study, their implications and conclusions. In addition, recommendations for improving housing conditions and financing in slum areas are drawn in this chapter. Thus, the chapter synthesises the major findings and recommendations to affect the decision making process and further policies and strategies in the Kumasi Metropolis.

CHAPTER TWO

FINANCING HOUSING IN SLUM COMMUNITIES: DEFINITIONS, STRATEGIES AND POLICIES

2.1 Introduction

This chapter presents a review of relevant literature about informal settlements, such as slums, squatters and shanty towns. The chapter reviews the main characteristics of slum housing and financial options for improving slum housing units. It also includes an overview of governmental interventions and case studies of policies implemented in different countries. In addition to the above, a conceptual framework on financing housing in slums areas is proposed and discussed.

2.2 Definitions of Relevant Terms

Relevant definitions and key concepts are presented in order to bring into focus the understanding of financing housing in slums. Thus, the concepts of slum, squatter and shanty town are explained in this section as basic terms for the study. The review of literature on these settlements generates a basic idea about the living conditions in those areas.

2.2.1 Slums

Slum definition varies according to culture, social dynamics and environment but is usually based on similar characteristics. Baker (2008) defines slums as informal settlements with poor quality housing, limited access to services, and often an insecure tenure of land. Yet there may be substantial differences in size, location, age among others. The location of slums is either in the centre of a city close to employment opportunities, or in the peri-urban area where residents are more isolated. For those slums located in the centre, the infrastructure already established by city authorities may not be sufficient for providing basic services to existing slum dwellers and possible migrants. For those slums located in the peri-urban area, the infrastructure set in could not be well

planned or designed for other uses than residential. Thus, the two situations imply an insufficient or inadequate provision of housing and services.

The formation of slums is usually a result of rapid urban population increase without appropriate planning response. Population expansion is also caused by rural-urban migration, natural increase and forced displacement of population due to armed conflict and violence (UN-Habitat, 2003) without appropriate urban planning. In this regard, individuals who settle in slum communities are either local, international migrants or indigenous people as a result of the urbanisation process. In addition to the lack of space for the new settlements, the mismatch between formal employment generated and high demand causes either high levels of unemployment or a great number of slum dwellers employed in low income activities or informal jobs.

Another definition of slum is provided by MIVAH (2008) which defines slum as settlements with poor condition of houses in terms of poor housing materials as well as the poor provision of infrastructure and services. This definition demonstrates the term slum as a “condition” or state based on the physical characteristics of the settlement.

World Bank (2008) described the term according to the environmental conditions of the settlement. A slum was considered a slum if it is exposed to floods, landslides, diseases, toxic industrial waste and air-pollution. There are other problems associated with slums such as lack of access to roads, footpaths, street illumination, drainage, electricity, garbage collection, and socio-economic assistance. This definition is focused on the hazardous nature of the location of the settlement and the lack of on-site services.

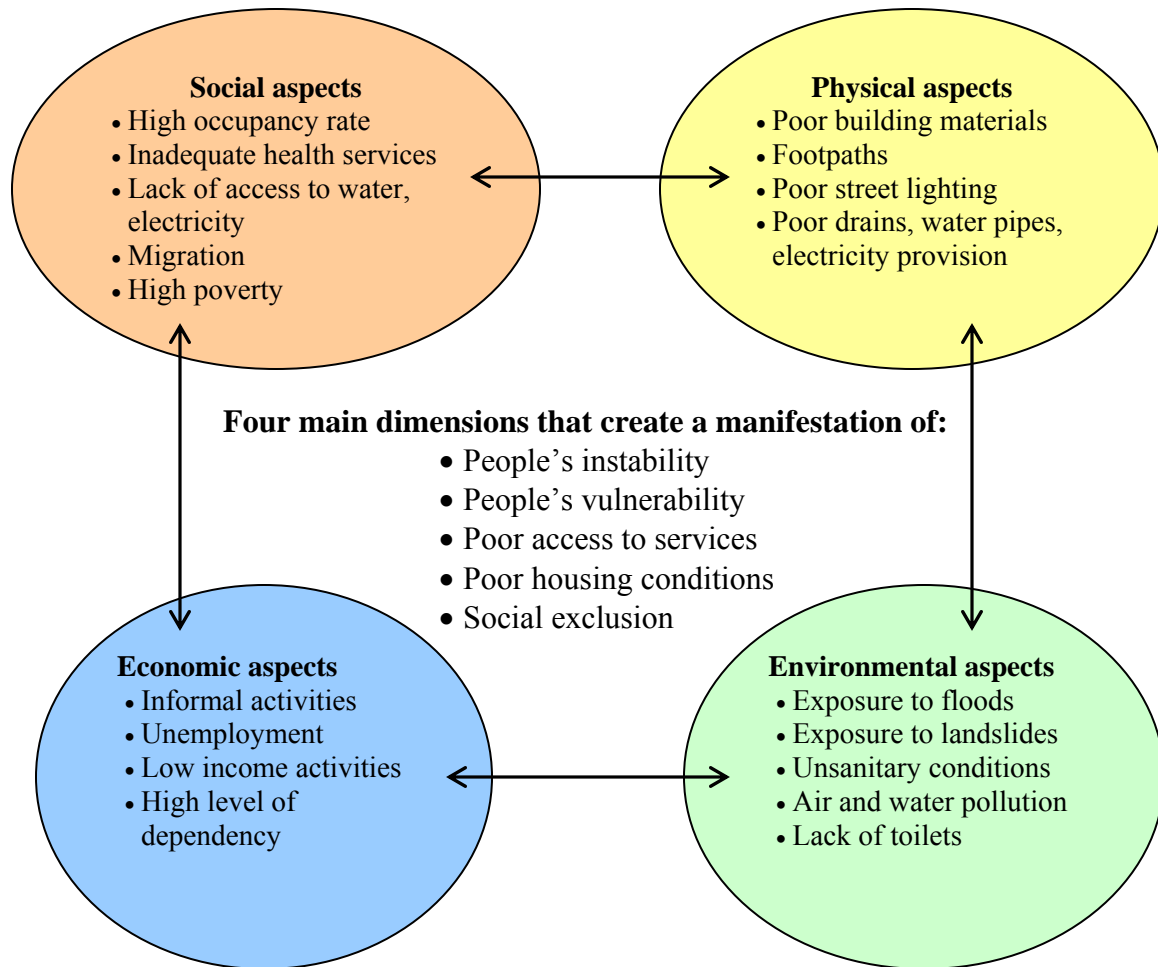
UN-Habitat (2006a) includes another dimension for the conceptualisation of slum communities. Here, slums are seen as a group of individuals living under the same roof in an urban area who have at least one of the following conditions: lack of access to improved water supply; lack of access to improved sanitation; overcrowding (three or more persons per room); houses made of non-durable materials and lack of secured tenure.

The definition above considers the social aspect of slum conditions besides their physical characteristics. Thus, the concept distinguishes other three components like the perception of slum as a group of people and their culture. It also connotes urban poverty characteristics like social deprivation to shelter, access to water, sanitation, health and other services.

Another definition which includes the social aspect is given by MIVAH (2008) in reference to an article by the Attorney General Department of Costa Rica, which defined a slum as an area predominantly residential, with lack of services, buildings or structures that are harmful to safety, health or moral of the community. According to the department these problems are caused by overcrowding, dysfunctional design, lack of illumination and ventilation, insanitary conditions or combinations of these factors.

Thus, based on the above definitions, Figure 2.1 visualises the problem of slums as the integration of four main aspects. First, the physical aspect is related to building materials, amenities or infrastructure while social aspect includes lack of basic services, high poverty levels, migrant phenomenon and high occupancy rate. The economic aspect includes unemployment, low incomes, informality and high dependency rate while the environmental aspect covers inadequate sanitation, pollution and others. These four main dimensions represent the manifestation of poor housing conditions, poor access to services, vulnerability and social exclusion. An interplay between these four factors within the urban environment has been seen as the basis of slum formation.

Figure 2.1. Slum Conceptualization



Source: Author's Construct, January, 2010.

2.2.2 Squatters

Squatters are settlements established by people who have illegally occupied an area of land and built their houses on it, usually through self-help processes (UN-Habitat, 2003). Additionally, the condition of illegality in land tenure is the main factor that differentiates squatters from other types of informal settlements. This is due to the lack of permission from land owners and local authorities.

Lall et. al. (2005) describes squatter as a spontaneous development of informal housing that is either relatively well-constructed or a temporal shelter, which has uncertain tenure status, poor access to basic services such as water and sanitation, low-grade construction and overcrowded living conditions. They further explained that squatter housing could be done in open spaces with proximity to employment centres.

Another definition of squatter settlements proposed by the Official Gazette of Costa Rica (1996) is a group of families that have exerted the possession of land for residential purposes usually in public areas, in good faith, living peacefully and uninterrupted for a period of not less than one year. This definition exposes the lack of property titles of land or housing possessed. At the same time, it indicates that the people demand their rights to live in those open spaces and sometimes for prolonged periods of time.

In general, a settlement is considered squatter if its inhabitants do not have ownership rights over the land for housing purposes without formal titles. It is therefore possible to find houses with adequate physical conditions but built without any permission from land owners or local authorities. Meanwhile, slums may have the legal rights but poor physical conditions.

2.2.3 Shanty Towns

A third terminology used to describe informal settlement is shanty towns. This refers to individuals or families who may occupy lands illegally by themselves and build their houses as best as they can (Grinberg, 2006). Shanty towns face characteristics of marginality and urban poverty such as inadequate basic service provision, lack of secure land tenure and overcrowded spaces.

In the study of Ooi and Phua (2008), the definition of shanty towns refers to the spatiality of these informal settlements. According to them, shanty towns are located either in farm land or peri-urban areas where there is a rural-urban interface. Due to this particular interface, the responsibility of provision of infrastructure and services for shanty towns is not clearly defined between urban and rural authorities.

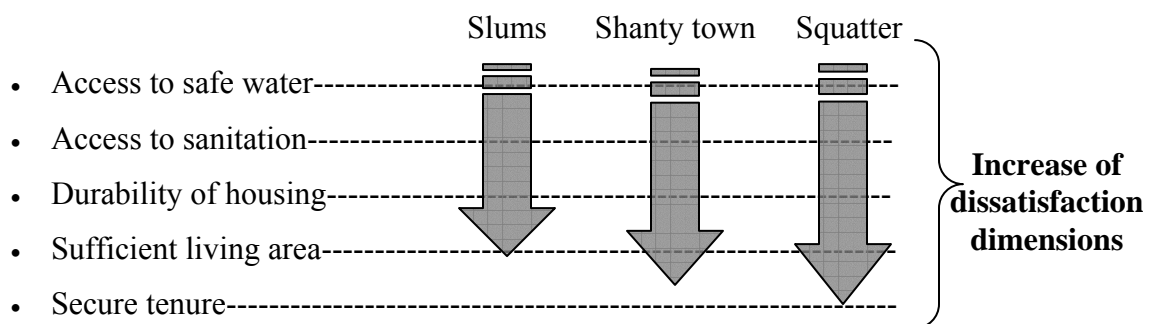
The poverty of shanty town dwellers is therefore manifested by their illegal status in the area, low income groups, poor housing and their difficulties to access proper electricity, water and sanitation services. Shanty areas are an option to individuals who face problems of housing affordability in the city. In addition, shanty towns usually are affected by crime and other security problems due to the marginality in these communities (Adlard, 2005).

Furthermore, shanty town is usually referring to a group of people originally from the same location (indigenous community) living in low class housing with poor service provision. In the urban areas, shanty towns are also located along the roads. A group of shanty towns is considered a slum.

2.2.4 Comparing Slums, Squatters and Shanty Towns

After the review of the terms slum, squatter and shanty towns, it is clear that these types of settlements share common characteristics. All these communities bring a perception of urban poverty based on the dissatisfaction of following five key dimensions indicated in UN-Habitat (2003) and shown in the Figure 2.2.

Figure 2.2. Slums, Shanty Towns and Squatters by Dissatisfaction of their Main Basic Needs



Source: Author's Construction, February, 2010.

In general, slums have lack or inadequate provision of water, sanitation, durable materials for construction and enough space for living. Shanty towns are communities between slums and squatters but when a shanty town faces problems of land tenure it is more

similar to a squatter but when it does not face it, it is more similar to a slum. Squatters have more proportion of people living with the problems of slums and the insecurity of the land tenure. In synthesis, the three types of communities are therefore the physical manifestation of failed urban social and economic policies of governments and they reveal the social characteristics of unsuccessful urban development.

2.3 Housing Characteristics in Slum Areas

Housing is an important asset of human settlements which has economic, social, cultural and personal significance (Caimi, 2009). This means that housing reflects production, employment, investment, environmental impact, poverty eradication, health, religious belief as well as culture. Housing has a component of tangibility, for instance when it is seen as a house or dwelling unit but it is also intangible when it represents a flow of services.

Housing is a right to which people are entitled to. Thus, it is more than a building or the land on which it is situated. Housing includes many dimensions that affect the living conditions of humans. Generally, housing is related to formal settlement in cities, peri-urban areas or rural areas. However, due to the rapid urbanisation process and inadequate planning by governments, there are millions of people living in informal urban settlements around the world (World Bank, 2008).

The existing informal settlements, like slums, present different housing characteristics as compared to formal settlements. Land tenure conditions, environmental aspects, materials for construction, infrastructure, services and facilities usually differ between formal settlements and informal settlements. The following subsections explain the main characteristics of slums.

2.3.1 Land Acquisition

The acquisition of land is an important determinant of living conditions in slum areas. Illegal land tenure is not permanent characteristics of slums but in many cases, slum

dwellers are compelled to occupy insecure lands (World Bank, 2008). By implication, slums may develop on government lands, private lands or land with mixed ownership. The illegal acquisition of lands promotes instability and vulnerability to slum dwellers. In addition, new residents who settle in slums often rent land from owners of multiple properties or landlords. Normally, a high number of slum dwellers live under uncertain conditions of forced evictions or relocation to unsuitable sites (Malcom and Braimah, 2004)

2.3.2 Materials for Housing

Estimates from the UN-Habitat (2006a) show that the world's urban dwellers have challenges to obtain durable materials for housing. When variables such as floor, roof and wall materials are considered, the percentage of population with durable housing is relatively low. For instance, in the case of Bolivia, housing durability among urban dwellers is 27.7 per cent.

The above situation is even worse in the case of slum settlements which are presented with inadequate physical conditions such as old structures, illegal extensions to buildings or poor new constructions. Again, slum dwellers utilise low quality building materials or recycled materials like cardboard, fabric, old tin, tables or infrastructure that are far from the accepted standards for the construction of their shelter.

A study undertaken in Accra, Ghana in 2004 indicated that many houses were located on marginal lands with their structures made of wood or other temporal materials (Malcom and Braimah, 2004). The study indicated that 58 percent of residents in Accra lived in low-lying areas prone to flooding like Korle Lagoon. The 98 percent of houses in this settlement had structures made with wood that presented a high risk for outbreaks of fire.

2.3.3 Housing Facilities

There are three types of physical services for housing. The services can be defined as on-plot, on-site or off-site. The on-plot services include water, electricity and sanitation

facilities for private use. On-site services are those used collectively by the different residents, such as footpaths, street illumination and public facilities like waste collection. Off-site services include facilities that are used collectively by site residents, as well as the whole city. Examples are infrastructural networks services, water pipe lines, access to main roads and public electrification (World Bank, 2008).

Usually, slum dwellers have difficulties to obtain water, electricity and sanitation facilities from formal providers and they have to buy water from vendors and to use alternative connections to electricity (Malcom and Braimah, 2004). As a result of the high density of households and structures present in slums, many families have to share scarce services like communal toilets with high number of residents and to pay higher cost for low quality services. Sometimes they do not have any access to water, electricity or adequate sanitation.

2.3.4 Housing Environment

External and internal hazardous conditions are faced by slum dwellers. Usually, the places where slum settlements are located represent an important factor of vulnerability. The location of slum communities exposes them to natural disasters such as flooding and saddling as well as industrial areas which increases their exposure to environmental risks and pollution (UN-Habitat, 2006a). Moreover, the lack of proper drains, inadequate solid and liquid waste disposal and lack of central refuse collection containers expose slum communities to pollution and health problems.

2.3.5 Access to Roads

Poor road accessibility in these areas is another challenge faced by slum dwellers. The access inside the settlement is usually narrow and impassable due to high density of residents and structures. Normally, footpaths are the way to access the settlements but this presents a higher risk for households in the cases of flooding or fire outbreaks (Malcom and Braimah, 2004)

2.4 Strategies for Financing Housing in Slum Areas

Financing is a relevant aspect to consider in undertaking housing projects in slum areas. It is important to develop housing projects according to the financial capacities of low income households in slum areas. Thus, finance for low income households offers higher affordability to housing needs which by far will reduce housing shortage in slum communities.

Generally, there are a few financing schemes available for housing in slum areas. Most times, micro finance schemes promote small scale businesses than improving housing affordability. However, there are some initiatives which allow slum dwellers to upgrade their communities or to acquire land for housing. The aim of these initiatives is to create affordable and cost-effective housing options in slum communities with the participation of slum dwellers, local governments, line agencies or international programmes. This section presents four housing schemes implemented in slum communities.

2.4.1 Informal Community Savings Schemes – SUSU

This community initiative is developed in low income communities and slums. Usually the participants in this scheme are petty traders and women (Malcom and Braimah, 2004). However, the scheme is for any personal purpose and eventually some individuals use the funds for housing improvements. The traditional savings are managed by members of the community who are in charge of registering people and collecting the individual savings.

The scheme allows community dwellers to save small amounts of money. In addition, the SUSU collectors fix the time, place and day of convenience for savers. Thus, the scheme presents advantages for the participants such as the inclusion of low income groups, saving convenience and avoidance of several journeys to financial institutions to make deposits. However, the disadvantage of the scheme is that, the lack of formality presents some level of insecurity for savers. The risk involved is that, the SUSU collector could

misuse or spend the total amount of savings from participants or contributors. This causes the petty contributors to lose confidence in the scheme.

To reduce the above mentioned problem, there is a scheme that varies slightly from the SUSU scheme. This scheme is called rotational savings and it is similar to the SUSU scheme but differs by the amount of savings deposited and collected (Malcom and Braimah, 2004). The scheme is arranged by cycles and the total amount of savings collected is given to a different member of the group at the end of each cycle. This form of savings has the same advantages of SUSU scheme but reduces the risk of losing all the deposit if one of the savings' collectors misuses the total amount of money collected.

2.4.2 Community Driven Savings Scheme

The Community Driven Savings Scheme is an arrangement between the people living in the slum, facilitated by international organisations (World Bank, 2008). This scheme contributes to affordable and viable slum upgrading programmes. The scheme is usually organised by women who create small savings groups that provide loans for contingencies or crises and also for housing purposes (ACHR, 2007).

Successful experiences in India, the Philippines and South Africa have used this scheme for land purchase, home construction and house improvement. The participation of the slum community in the scheme was very active and members of the savings group covered the cost of physical infrastructure and building materials (World Bank, 2008). In addition, the active participation of slum dwellers promoted good community relationships.

One of the key elements that ensures the affordability of the projects under this scheme is that, projects could be adjusted in terms of engineering, construction and service standards to an acceptable level in housing construction. These adjustments make housing affordable for members of the savings group. For instance, engineering standards usually indicate the type of building materials required, type of roads, type of services per house, minimum spaces, ventilation and illumination required, among others.

Meanwhile, if the project is developed in low income communities, these standards could be adjusted to suit the financial capability of the savings group.

Another advantage of this scheme is that, projects usually select slum dwellers that have a regular saving custom. Thus, the scheme promotes the culture of savings in slum communities. For instance, a study in Chile in 2009 indicated that, some housing programmes created by the government selected the beneficiaries from constant savings groups (UN-Habitat, 2009).

2.4.3 Cooperative Financial Solutions

Financial cooperatives are another type of scheme that could provide affordable housing for low income households in slums. In slums, the scheme was originally created from informal arrangements of individuals living in the area as an alternative to financial options given by banks and other institutions that, could not cater for poor households. Later, these organisations were legalized with a particular regulation for cooperatives. This promoted communal savings, communal participation, partnerships with local authorities and strengthening of social integration and solidarity in communities (UN-Habitat, 2008b).

Sometimes, these cooperatives are promoted by organisations like the United Nations with the aim of addressing unemployment, poor housing and poverty. This scheme also promotes communal health, education and provision of basic services. The characteristics of cooperatives are therefore manifested by their interest to solve problems of low income groups. Thus, the scheme contributes to the development of the human resource in the community. Additionally, the scheme generates employment for slum dwellers in management, designing, constructing and maintenance of houses.

Other benefits of the scheme include the following:

- ✓ Caving mechanisms are established in the informal sector since the conventional financial institutions such as the commercial banks do not offer financial options to households employed in the informal sector.

- ✓ Women's contribution and involvement is encouraged since the cooperative organisations consider and promote the role of women in low income households such as home management and service provision.
- ✓ There is also capacity building for slum dwellers through training programmes in cooperative formation and management.

Cooperative financing is sometimes challenged by inadequate technical skills of local operators, lack of affordable land and insufficient financial resources. In addition, slum dwellers could face obstacles to acquire land through cooperatives. Examples in Kenya indicate that some cooperatives maintain the ownership and titles of the land after the member of the cooperative have already paid the total price of the house. This is a problem for members who have better opportunities and want to sell their units. In those cases, members have to ask first for permissions from the cooperative (UN-Habitat, 2008a).

2.4.4 Financing for Slum Upgrading Programmes

Financing for slum upgrading is a scheme proposed by international organisations like the World Bank and UN-Habitat that addresses the cost allocation, cost recovery and affordability of housing projects in slum communities. The scheme finances the cost of off-site infrastructure such as municipal roads and drainage facilities, on-site infrastructure or services used by the whole community and on-plot development or services that are accessible just for the households in the house. Others include design and supervision costs of civil works, and loans for home materials or small businesses (World Bank, 2008).

In this scheme, local governments cover the infrastructure such as roads, drains, public toilets, local health centres and markets. Other services or infrastructure which connect the slum community to the main services in the cities are facilitated by line agencies while improvements in the house are covered by slum dwellers. Thus, local governments, line agencies and slum dwellers are involved in the project but are faced with the coordination in the improvement of housing conditions in slum communities. In addition,

the scheme requires local intervention and political will of the government as well as regulations for its implementation which could be an obstacle for the scheme.

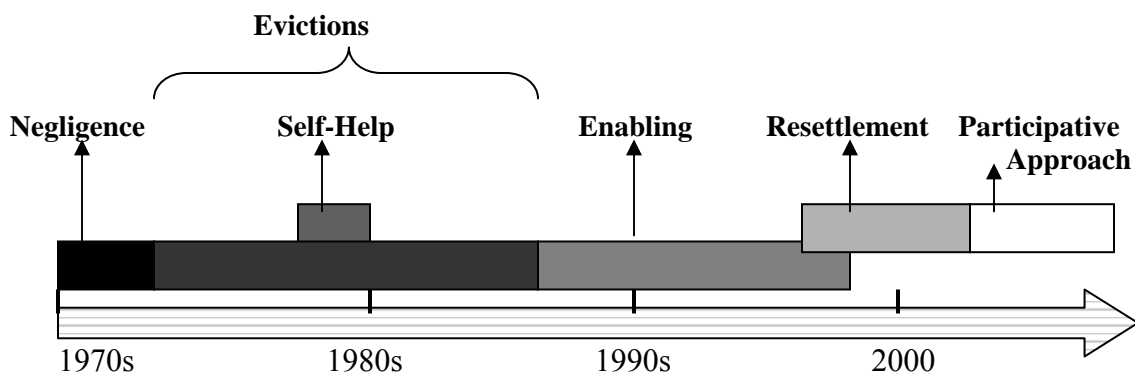
2.5 Governmental Interventions and Policy on Slum Development

Slum formation has been accompanied by governmental interventions or policies during the last forty years in different countries. However, the type of interventions implemented has been changing since 1970. Policies developed for addressing the problem of slums are presented chronologically in this section in order to review the different strategies adopted in different countries.

2.5.1 Policy on Slum Development

UN-Habitat (2003) presents several interventions or policies implemented since 1970. These interventions to address slum development are shown in Figure 2.3 and designated colours have been used to visualise the change in policy over the years.

Figure 2.3. Chronology of Governmental Interventions for Slum Control



Source: Author's Construct Based on UN-Habitat (2003)

The Figure 2.3 shows different types of interventions in different countries since 1970s. At the beginning of 1970s, the problem of slum development was neglected by authorities but during the next decades the interventions and policies tried to correct

problems of previous response. Thus, slum dwellers were gradually included in the planning process until participatory slum upgrading projects in the last years.

2.5.2 Negligence – Early 1970s

During the urbanisation process and the rapid migration (rural-urban) experienced at the beginning of 1970s, the formation of informal settlements started to emerge faster than the planning or urban policy responses in countries. These informal settlements such as slums or squatters were seen as an illegal and temporal problem that could be corrected through the development of the city. There was therefore a total neglect of the problem by authorities and people continued to live in poor conditions.

The existence of slums was either seen in master plans as underdeveloped settlements or not included at all (UN-Habitat, 2003). Nevertheless, some interventions were undertaken during this period such as the construction of social housing for low income households in order to eradicate slum areas. However the management of projects or implementation of programmes was covered by corruption in the assigning of houses to people. This caused an increase in inequality among urban residents and deeper formation of inferior residential locations.

2.5.3 Forced Evictions – 1970s and 1980s

When authorities realised that the problem of slums was not temporal, there were governmental interventions which tried to eliminate the problem drastically. Interventions such as forced evictions, settlements bulldozing and destruction of slum structures were implemented in order to impose urban development, such as health centres, education institutions and sanitary places in slum areas (UN-Habitat, 2003).

The interventions did not take into account the existing situation of households in slum areas and the social networks and organisations created in the slum communities. These policies resulted in movements of slum dwellers from the city centre to the periphery where the land was accessible and cheaper. Hence, instead of a solution, the problem was indirectly relocated to unplanned areas and increased the formation of more slum

settlements in the periphery. Sometimes, slum dwellers settle in hazardous places such as close to rivers, flooding areas, on the border of mountains among others. In these cases, it is preferred to evict slum dwellers than to put at risk their life and the rest of the community.

2.5.4 Self-Help and In-Situ Upgrading - Late 1970s

By the end of 1970s, the slum phenomenon was understood by governmental authorities as structural (UN-Habitat, 2003). This meant that the phenomenon became part of the socio-economic and environmental development of the urban area due to its interactions with the development processes of the cities.

Self-help 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. Slum upgrading programmes in houses were cheaper to implement than other initiatives and at the same time the actions undertaken did not result in the shock experienced by slum dwellers as compared to the policy of forced eviction.

However, experiences revealed that slum upgrading was expensive. It required political will, improved local government, capacity and government and community participation. In many cases, the lack of maintenance of the projects, poor governance, inadequate urban service provision and the failure to recover cost of projects remained as obstacles in the sustenance of upgrading programmes in slum communities. Self-help policy response had also successful experiences. In Manila in the Philippines, 200,000 squatters had significant improvements in environmental conditions, health facilities, open spaces for recreation and enhancement of communal social cohesion in the community UN-Habitat (2003).

2.5.5 Enabling Policies - Middle 1980s to middle 1990s

Enabling policies integrated slum dwellers from the beginning of the decision making process as well as during the project implementation as a way to empower slum communities in the programmes. According to UN-Habitat (2003), enabling interventions also coordinated various stakeholders in the decision-making process. However, this coordination was challenged since it required the local government to support slum communities through local assistance, capacity building and financial advice. An example in Sri Lanka presented a successful experience of enabling policies when the government supported the programme Sri Lanka Million Houses during the 1980s and ensured its role of provider of better conditions to slum communities and low income groups.

2.5.6 Resettlement – Later Middle 1990s

Resettlement policies attempted to allocate slum dwellers in other planned places with the provision of basic services. This approach integrated slum communities and promoted their participation in discussions to determine the conditions, terms and organisation of the resettlement of the slum dwellers.

During the resettlement process, slum communities existing were temporarily allocated to specific places in order to organise and build new settlements. This resettlement was under the agreement of the government and slum dwellers. It also considered the social organisations created, the proximity to sources of job and markets, the availability of basic services and the interactions that had to be maintained among the slum dwellers.

However, in some areas the resettlement policy implied a high cost to slum dwellers. This is because the new settlements were far from their jobs or in sites with limited job opportunities. In other cases, the promise of a new settlement for slum communities did not just materialize (World Bank, 2008).

A successful resettlement was experienced in Brasilia, Brasil during the 1990s. The government resettle 5549 squatter dwellers who lived in open spaces and gardens in the city. The government offered plots in the Samambia suburb to the families and the titles of the land were given to the wives. The families moved but they had to build their houses. The government assisted them to move and provided services in the new settlement. Now the suburb has good local economy, schools, training centre, sport and health facilities and transport networks to the city (UN-Habitat, 2003).

2.5.7 Participatory Slum Improvement – Current Approaches

Participatory slum improvement is seen as the most advanced policy intervention. This policy integrates slum dwellers, local governments and agencies in different social and economic programmes as a whole. Direct beneficiaries contribute to the projects with their labour force, economic resources and capacities.

Self-help programmes, enabling initiatives and resettlement projects are done in a participatory way between slum residents, government and agencies through partnerships. Participatory projects are carried out with improvement of services such as basic health, family planning, education, partnerships for upgrading and affordable interest rates for development.

A successful example in Karachi, Pakistan presented the participation of slum dwellers in the construction of sewers to 72,000 dwellings during 12 years. The residents contributed with their own resources and now the settlement includes health and education facilities among others. Participatory polices are also challenged by the political influence. Sometimes, city local governments are enhanced to participate in the provision of basic services to their residents, including urban poor. However, their funds from national budget are not increased to fulfil this new role.

2.6 Initiatives for Slum Improvement in Different Countries

There exist financing initiatives for housing that are self-generated by the community or local governments. These initiatives strengthen capacity building processes, participation and cooperative work of slum dwellers in projects relevant to the community (United Nations, 2006b). Three examples of local initiatives are presented according to the participation of different actors:

- ✓ The first initiative starts in the core of the community and later on is supported by other actors such as NGOs or local governments. For example, a Philippino Federation with the participation of many groups of people from different cities presented their proposals for land acquisition to the local government. They succeeded with the creation of an urban poor fund for secure land tenure, housing development, provision of basic infrastructure and others. In this case, though the initiative originated in the community, it received the support of the government and NGOs (UN-Habitat, 2006b).
- ✓ The second initiative is characterized by a greater involvement of the governments to integrate formal and informal processes in housing provision. In addition, government policies are focused on urban poverty, housing, infrastructure and services. Successful experiences in India showed governmental projects in collaboration with international organisations for the development of sanitation projects. However, it was unsuccessful in the Philippines due to confrontations between members of slum, NGOs and the local government. As a result, slum communities were either forced, evicted or excluded from the decision making processes for housing improvement.
- ✓ The third initiative is when projects developed have a greater participation of international agencies and donors. One important aspect of this initiative is that, no matter the contribution of the agency, the participation of the community is the key for the success of such projects by the strength of their contributions. Example of such initiatives is the “uTshani” fund created by the National

Federations in South Africa. The fund promoted community-driven development and supported innovative projects for financing housing. An advantage for these federations could be the partnerships with the government or donors. For instance, an African Federation in 1995 created an equity fund for shelter provision and sustainable human settlement development from the contributions of a German agency and the government (UN-Habitat, 2006b pp.42).

2.7 Case Studies of Financing Housing in Slums

There have been different ways in which slum dwellers, governments and international organisations have promoted the improvement of housing and living conditions in slum areas. Some local initiatives strengthened community mobilization and capacity building of some slum dwellers. In addition, governments created partnerships with line agencies and other organisations such as NGOs or donor agencies in slum projects. This section presents two country cases about the implementation of local and financial initiatives for housing improvement in slum communities.

2.7.1 Financing Slum Housing in Quito (Ecuador)

Quito is an important historical city in Latin America and the capital of Ecuador. The enormous migration phenomenon to the peripheral areas of Quito during the 1970s resulted in the generation of several “*barrios*” (neighbourhoods). These were seen by the authorities as slum settlements due to their formation process and illegal or semi illegal status (UN-Habitat, 2003). Although, an important proportion of these slum dwellers own their land and houses, local authorities defined these “*barrios periféricos*” (outskirts neighbourhoods) as illegal settlements since they did not have the official permission for construction.

The slum communities in Quito were characterized by low income households, low levels of education and high unemployment rates. Thus, slum dwellers faced difficulties to obtain income to afford basic services such as water and sanitation. Their poverty level was also manifested by their housing and living conditions. These households lived in

deteriorated houses constructed with poor and non-durable materials located in the historical centre or nearby towns.

The access to services was also poor in the “*barrios*” (neighbourhoods). Slum dwellers had no access to potable water and were prone to outbreak of diseases. Additionally, these settlements had limited or no access to sewage, garbage collection and toilet facilities.

Quito is an antique city with its development based on the preservation of its historical areas. The city attracts income through the promotion of tourism but is faced with problems since these “*barrios*” were located in or close to its historical areas. Thus, authorities implemented local initiatives such as land regularization processes which focused on gaining access to secure land for 13,000 families and creating a public-private partnership to regulate the prices of land (UN-Habitat, 2003).

An attempt was made by government authorities in collaboration with local NGOs to tackle the problem of slum communities located in the historical area (UN-Habitat, 2003). The project resettled families living close to the old city to other lands out of the historical area. The financing of the project was a combination of a loan from the Chamber of Commerce’s Cooperative, technical expertise and financial support from the NGOs. Numerous apartments for households were therefore constructed in another location. Considering the particularities of Quito, the resettlement project was a better option since it maintained the historical city and improved the conditions of the slum communities.

Some lessons have been learned from the local initiatives and financial projects in Quito. These lessons indicate that the effective participation of slum dwellers in the decision making process is a relevant aspect for the development of slum areas. Additionally, the participation among NGOs, CBOs, private sector and the government authorities brings better results for improving slum conditions than the implementation of government projects without the participation of major stakeholders.

2.7.2 Financing Slum Housing in Nairobi (Kenya)

Nairobi is the capital of Kenya with three million inhabitants. Nairobi faces the problem of implementing effective policies for urban development. The rapid urbanisation process coupled with rural-urban migration resulted in the formation of many slum settlements (UN-Habitat, 2003). In addition to this, is the segregation of people from Africa, Asia and Europe into different residential areas with insufficient housing provision.

Although there are many slum communities in Nairobi, the Kenyan authorities do not have clear and formal definitions of slum settlement. The government refers to these settlements in terms of the deteriorated infrastructure or the insufficient provision of basic services. This unclear definition of slums creates an obstacle for effective policy formulation and implementation.

Slum communities in Nairobi are characterized by low income households, unskilled workers employed in low income activities such as construction, petty trade, domestic help and others. The slum areas are dominated by cultural stratification and ethnic discrimination. Additionally, social problems such as crime and violence are common in these settlements. Regarding housing conditions, some slum dwellers constructed their houses in hazardous and unauthorized areas. Many of these slums are located in non planned zones or areas with environmental problems such as pollution.

Local initiatives in Nairobi had the purpose of slum upgrading and improvement of the participation of the slum dwellers in decision making processes. Some initiatives such as project Gykomba housing cooperative project was successful. In this project, slum dwellers from the Gykomba developed a cooperative society for housing improvement (UN-Habitat, 2008a). The success of the project was backed the support of national and local government.

The project built several six-room housing units for the 45 members of the cooperative. Some members moved to the new settlement while others rented theirs to other individuals. The cost of the project was covered by cash and by kind. Slum dwellers provided monetary contributions as well as labour force in the construction of the new

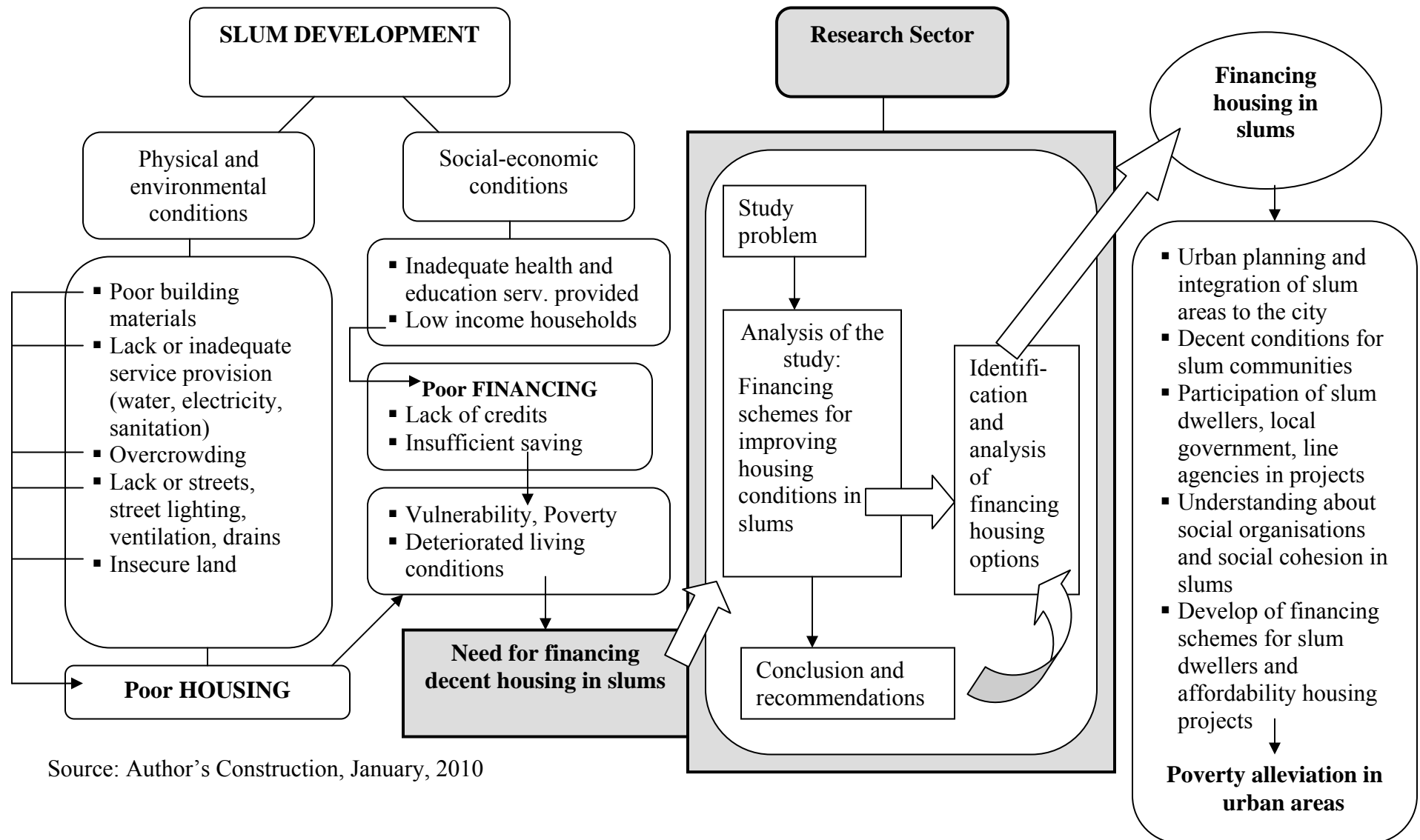
settlements. In addition, the government secured loans from the National Housing Corporation for the financing of the project. One lesson learned from the project was that slum dwellers considered the project as their own initiative since their participation was strong. However, the unclear definition and understanding of slums by the authorities in Nairobi resulted in ineffective partnerships for housing projects and inaccurate policies for urban development in this city.

2.8. Conceptual Framework for the Study

Figure 2.4 presents the conceptual framework adopted in the study. In the Figure, the study covers the physical and environmental aspects and socio-economic aspects as the main dimensions of slum development. Poor housing materials, inadequate service provision, lack of spaces among others manifest poor housing of slum dwellers. In addition, slum communities face inadequate basic health and education facilities. Slum communities which are characterized by low income groups are challenged by the poor financing offered to improve their conditions. All these conditions express the vulnerability and urban poverty manifested in slum communities and demand a need for financing decent housing for low income groups.

The study investigates this urban problem and the analysis is focused on the financing schemes for improving housing conditions in slums. The study identifies and analyses financing housing options. The study intends to make conclusions and recommendations to improve financing housing in slums through urban planning, integration of slum areas to the city, decent conditions for slum communities, participation of major stakeholders, understanding of social organisations and social cohesion in slums and development of financing schemes for slum dwellers and affordability housing projects. These improvements may lead to the poverty reduction in urban areas (See Figure 2.4).

Figure 2.4 Conceptual Framework for the Study



Source: Author's Construction, January, 2010

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology adopted for the study. A detailed procedure for the design of the research, collection of primary and secondary data required for the study as well as their analysis is explained in the chapter. This procedure is organised and presented as a sequence of steps and techniques to achieve the objectives proposed in the study.

3.2 Research Design

The research design explains the organization and planning of the study. The study follows the scientific process which includes the identification of the problem to be investigated, definition of research questions and objectives, the review of relevant literature for the contextualization and understanding of the topic, collection and analysis of the data and main findings and conclusions.

The research is thus a case study of slum dwellers in Dakodwom and Ayigya-Zongo communities. The case study research approach is a systematic way of in-depth collection of information for investigating the circumstances of a slum community (Kumekpor, 2002). With this approach, it is possible to have a better understanding of the slum communities in Kumasi with the particular case of Dakodwom and Ayigya-Zongo.

One advantage of the case study approach is the possibility to modify or adopt different techniques or a combination of them. Furthermore, several case studies of the same research problem generate accumulated results and vast knowledge about the problem from different angles. It also presents advantages for decision making and prediction in the study area. However, the case study also has problems. This approach requires adequate training and experience from the researcher. It is a slow and time consuming

technique. Moreover, case studies could be hindered by linguistic and communication problems and insufficient cooperation from the community or any other unit of analysis.

In the particular case of this study about housing finance schemes in slum communities, the case study approach could help the critical analysis and understanding about the characteristics of the communities under the study.

Techniques in the study included the administration of questionnaires to slum households and interviews of community leaders, such as chiefs. In additions, interviews in relevant institutions were applied. Thus, the main stakeholders explained the problem of financing housing in slum areas from their perspectives or competences.

The study followed five research stages to organise and simplify the research process. These stages are explained as below and presented in Figure 3.1.

☒ **Synopsis Preparation:** Firstly, the synopsis of the study was prepared and presented. The synopsis included introduction to the study about financing housing faced in slum communities, research questions, objectives, problem statement, justification of the study, scope of the research and expected limitations.

☒ **Literature Review:** Secondly, secondary data sources such as relevant books, working papers, published and unpublished documents and reports from international organisations as well institutional documents or figures in Ghana were reviewed. This review allowed the researcher to know the state of the problem, the approaches followed by other authors as well as information generated from different sources.

☒ **Tools Design and Data Collection:** Thirdly, tools for collecting data were designed. These tools included questionnaires to the slum dwellers, interview guides to traditional leaders and officials from major institutions related to

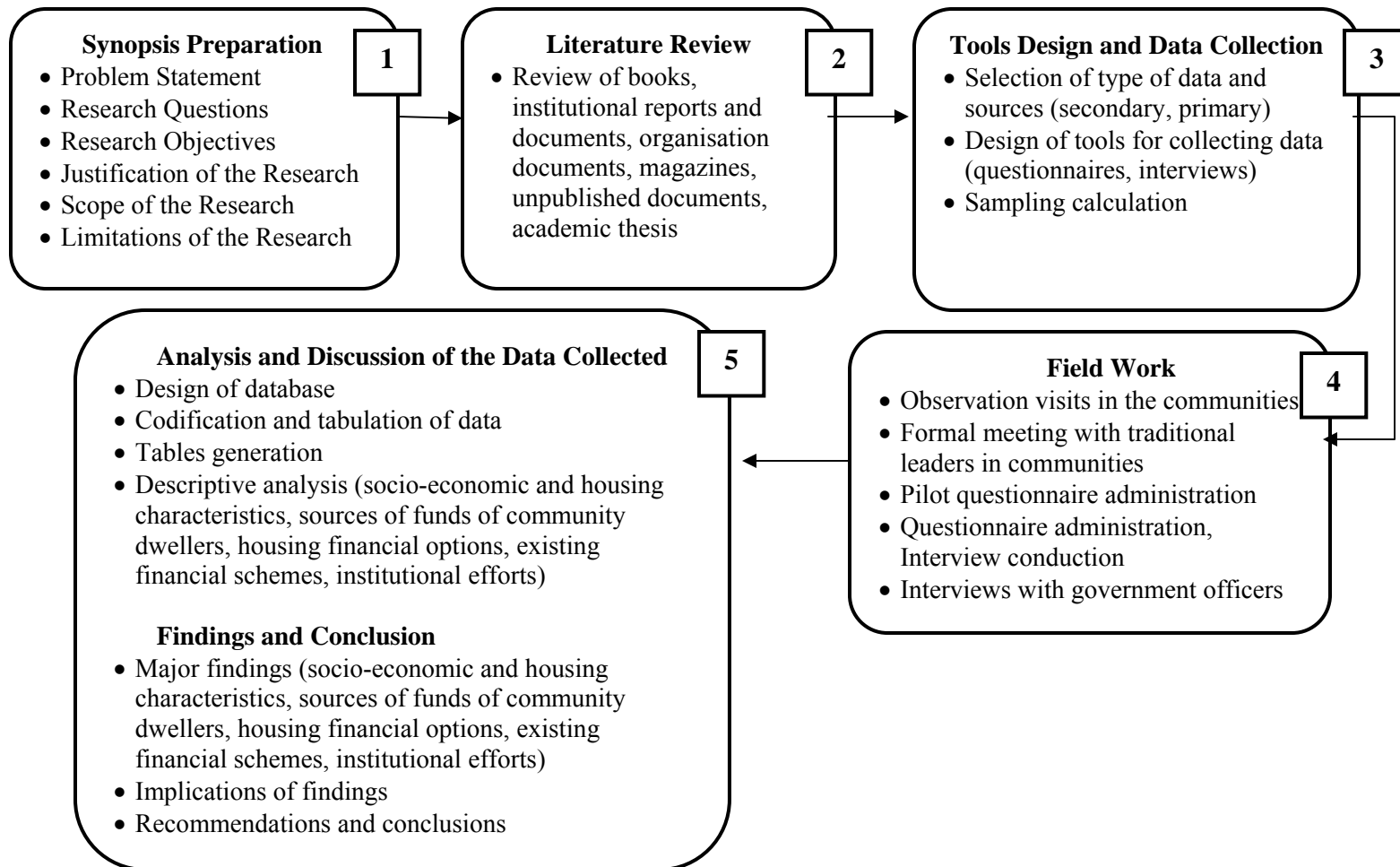
housing in slum communities such as Kumasi Metropolis Assembly (KMA), Electricity Company of Ghana (ECG), Town and Country Planning Department (TCPD), Ghana Water Company (GWC), Waste Management Department of KMA.

☒ **Field Survey:** Visits to the communities were organised in order to have a first hand understanding of their situations. Then, meetings with the traditional leaders of the two communities were arranged to explain the objectives of the study and to request for their permission to work in the area. The assistance of enumerators for the questionnaire administration was required due to the limited time and language difficulties of the researcher. The enumerators were trained about the information required and objectives of the research and they participated later in a pilot of the questionnaire in the communities. After this, questionnaires were administered to slum dwellers in Dakodwom and Ayigya-Zongo.

In addition, interviews with the Chief of Elders in Dakodwom, Traditional Chief of Ayigya-Zongo, Kumasi Metropolitan Assembly (KMA), Town and Country Planning Department (TCPD), Electricity Company of Ghana (ECG), Ghana Water Company and Waste Management Department of KMA were carried out.

☒ **Analysis and Reporting:** This stage involved the design of databases in Microsoft Excel, coding of questionnaire and representation of data in tables and graphs. For the data analysis, Pivot Tables of Excel were used. Then, the analysis of the major results from the field work was prepared. Later, the main findings and conclusions were included in the study and the complete report of the study was organised and presented in the format required to meet the appropriate standards.

Figure 3.1. Research Framework



Source: Author's Construct, 2010.

3.3 Data Requirements and Sources

Data about financing housing in slum communities from selected landlords of houses in the two communities, traditional leaders and key institutions were required. This information included socio-economic characteristics of slum dwellers, housing conditions and financial options for housing improvement. In addition, data about institutional slum upgrading efforts was required. The detailed data collected is presented in Table 3.1.

Table 3.1. Major Types and Sources of Information Collected for the Study

Type of Information	Sources
Review of major literature about slum communities and policy response.	Planning Department Library, Architecture and Land Economy Faculty Library and Main Library of KNUST. Internet resources from UN, World Bank among others.
Maps of Kumasi and Layouts of the two communities.	Town and Country Planning Department (TCPD) and government documents.
Information about socio-economic characteristics, housing characteristics and financial options for improving or purchasing housing in slum communities.	Landlords, landladies or caretakers of houses in Dakodwom and Ayigya-Zongo.
Land tenure system in the two communities, major housing problems faced by slum communities, communal recommendations to improve financing housing in slum communities.	Chief of Council of Elders in Dakodwom and Traditional Leader in Ayigya-Zongo.
Geographical information, profile of the areas, household, houses and population estimates and slum upgrading projects and challenges in Kumasi.	Kumasi Metropolitan Assembly (KMA)
Major projects for slum upgrading in Kumasi and challenges for planning and urban development in the city.	Town and Country Planning Department (TCPD)
Major projects for slum upgrading in Kumasi and challenges for water provision in slum communities in the city	Ghana Water Company (GWC)
Major projects for slum upgrading in Kumasi and challenges for electricity provision in slum communities in the city.	Electricity Company of Ghana (ECG)
Major projects for slum upgrading in Kumasi and challenges for waste disposal management in slum communities in the city.	Waste Management Department of KMA.

Source: Author's Construct, 2010.

3.4 Sampling Techniques

The study applied the random sampling method. The study collected information from the communities of Dakodwom and Ayigya-Zongo as well as from selected institutions. With this method, each landlord, landlady or caretaker of houses had an equal probability of being selected. Thus, the final sample was representative for the two communities. Institutions were also selected according to their relevance to the study. Thus purposive sampling method was adopted for the selection of those relevant institutions.

The sample size in each community was calculated from the total number of houses. This is because the study is focused on the financing housing characteristics of slums which are similar to all the households living in each house selected. In Dakodwom there are 127 houses while in Ayigya-Zongo there are 480 houses. The sample details are explained as follow.

⊠ Estimation of Sample Size for the Study:

The estimation of the total sample size in the slum communities studied was derived from the formula below:

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

where; n is the sample size

N is the total population

α is the margin of error defined at 92 percent confidence level ($\alpha = 0.08$).

The sample size was defined from the total number of houses in the communities selected. There are 607 houses in the two slum communities, with 480 in Ayigya-Zongo and 127 in Dakodwom. The total sample was 124 houses, with 98 houses selected in Ayigya-Zongo and 26 houses selected in Dakodwom. The selection of each house was based on the lottery random method. First, houses were numerated and after that, pieces

of paper in a container with the number of each house were randomly picked. Table 3.2 presents the detailed sample size for the field work of the study.

**Table 3.2 Estimation of Sample Size per Community in
Dakodwom and Ayigya-Zongo
2010**

Community	Population	Households	Houses	Houses in slums¹	Sample
Ayigya	48,419	5,966	1,181	480	98
Dakodwom	2,223	320	127	127	26
Total	50,642	6,286	1,308	607	124

1/ The number of houses refers to Ayigya-Zongo in Ayigya. The whole community in Dakodwom is considered as slum.

Source: Author's Construct based on data from KMA and own estimations, 2010.

The information from the communities is complemented and cross-checked with interviews conducted with key informants such as traditional leaders from the communities and governmental authorities. Two interviews are conducted with the traditional leaders and five interviews are conducted with government officials. The relevant government authorities for the study were the Kumasi Metropolitan Assembly, Town and Country Planning Department, Ghana Water Company, Electrical Company of Ghana and Waste Management Department of KMA.

3.5 Field Work

The field work process adopted in the study is organized as follows:

- ☒ Visits to the communities to observe the social, physical and housing conditions in the two communities.
- ☒ Preparation of questionnaires to slum dwellers and interview guides to the traditional leaders and officials of relevant institutions.
- ☒ An introduction letter of the study was requested from the Department of Planning, KNUST. This letter coupled with the student identification provided formality for the data collection.

- ⊗ The Leader of the Council of Elders of Dakodwom was contacted in order to explain to him the objectives of the survey and to schedule the date and time for the field study.
- ⊗ The Chief of Ayigya-Zongo was also contacted in order to explain to him the objectives of the survey and to schedule the date and time for the field study.
- ⊗ Selection and training of field enumerators. This was to equip them with an understanding of requirements of the study.
- ⊗ Another visit to the communities was organised to conduct a pilot of the questionnaire administration. The enumerators accompanied the researcher to the field to introduce the team to the traditional leaders and to test the adequacy of the questionnaires. In these visits the interviews with the chiefs were conducted.
- ⊗ The weaknesses found in the administration of the pilot questionnaire were corrected to improve the survey instrument in order to achieve its set objectives.
- ⊗ Preparation of materials for the questionnaire administration. The materials included 124 questionnaire forms, six interview guides, pens, student identifications and copies of introductory letter. Then, the questionnaires were administrated in the two communities and interviews with key informants of the government were defined, scheduled and conducted.

Some limitations were faced by the researcher in the field work. Local language of slum dwellers such as “Twi” required language interpretation assistance for the researcher. To overcome this limitation, the enumerators selected were from communities close to the study area and native speakers of local languages. In addition, slum dwellers could be unwilling to participate in the survey. To reduce this limitation, support from the traditional leaders was requested. In Dakodwom, a chief’s representative accompanied the enumerators and introduced them to the households. In Ayigya-Zongo, the chief communicated and explained to the community the general objective of the study during the announcements in the Mosque. Another major constraint was the limited time for the field work.

3.6 Data Collection Methods

Secondary and primary data were required for the study. Secondary data were collected through a review of relevant documents, articles and academic reports. Others included governmental reports, international reports, books, working papers, magazines and internet resources. The primary data required the design and administration of questionnaires in the communities. In addition, structured interviews to key informants in the communities and the government sector were conducted. The results of the interviews were analysed and interpreted with statistical methods in order to generalize conclusions. Pivot tables of Excel were used to generate tables of results.

3.7 Presentation and Reporting

The analysis of the major results from the field work was explained with the use of descriptive statistic tools such as percentages, averages and statistic functions. The descriptive analysis of the study was prepared and sometimes summarized in tables or boxes and illustrated through charts and maps. These resources contributed to better understanding of the topic in the study.

CHAPTER FOUR

SLUM CONDITIONS AND HOUSING FINANCING IN THE KUMASI METROPOLIS

4.1 Introduction

This chapter covers the presentation and analysis of empirical data collected from the communities selected for the study as well as from the key institutions identified. Firstly, the main characteristics of the communities, such as their locations, socio-economic and environmental characteristics are provided to contextualize the study. Secondly, the characteristics of the slum dwellers such as their status, their housing conditions, and the way in which they finance their housing are presented and discussed. In addition, institutional efforts to provide better living conditions in the communities are examined to better understand the interventions available for solving the problems faced by slum dwellers.

4.2 Profile of the Study Communities

The study concentrates on some selected slum communities in the Kumasi Metropolis. Kumasi is located in the Ashanti Region and it is the second largest city in Ghana (See Figure 4.1). Kumasi is a city which is highly significant to the development of Ghana due to its role in the service and industrial sector, such as production of timber, gold, hardwood and cocoa. Also, services such as education and transport which cannot be overemphasized. Due to its role in development, urbanization and economic activities have resulted in rapid population increase and migration which has led to the generation of slum settlements.

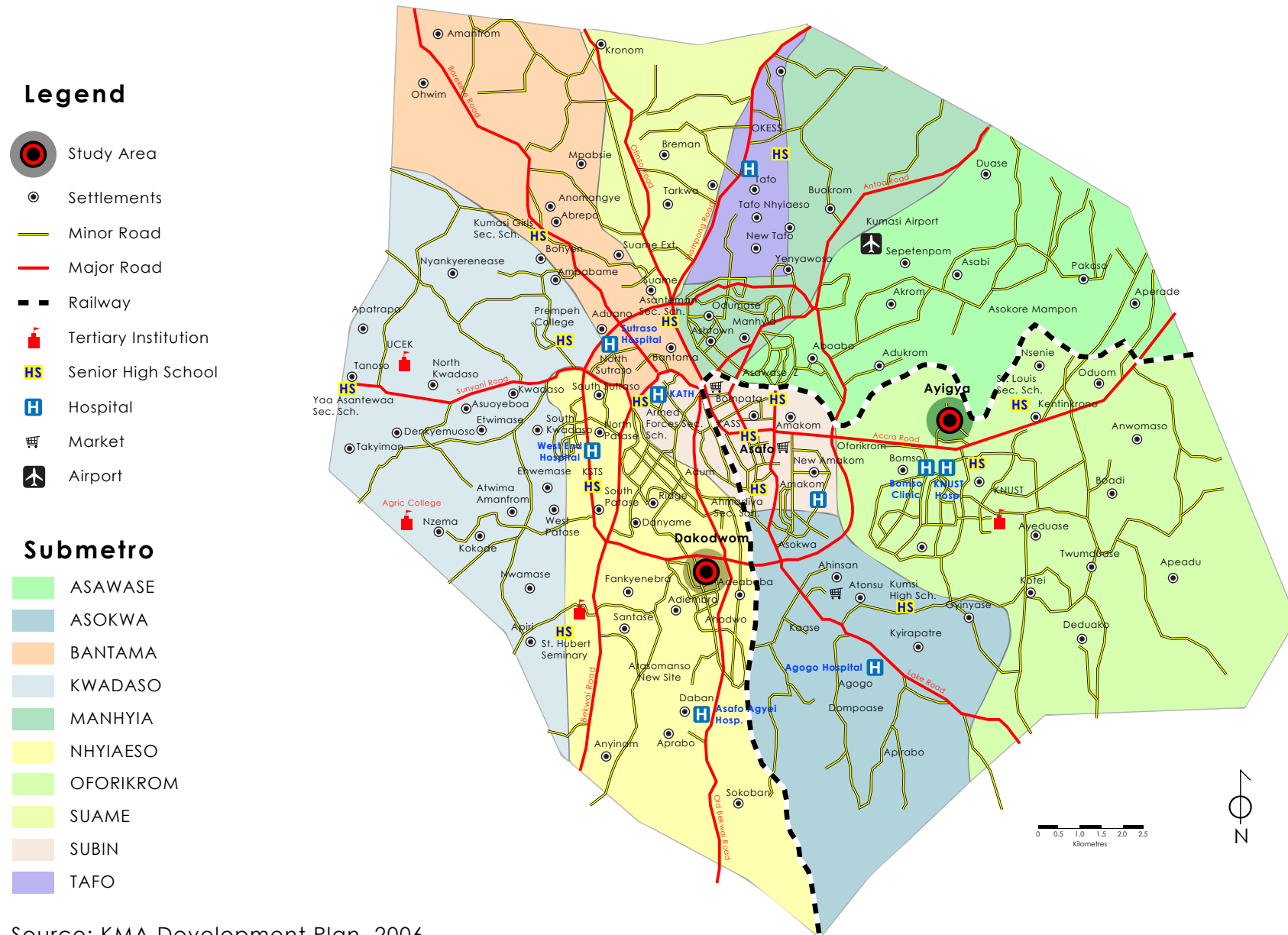
The study covers the Ayigya-Zongo and Dakodwom communities. These communities are in the east and southern part of the Kumasi Metropolis respectively (See Figure 4.2). Ayigya-Zongo and Dakodwom are considered as slums since they are characterised by low income activities, poor housing infrastructure, poor access to services, inadequate or lack of sanitation facilities, settlements expose to floods and pollution.

Figure 4.1. Regional Map of Ghana



Source: Map taken from www.googlemaps.com, April, 2010

Figure 4.2 Map of Kumasi Metropolitan Area



Source: KMA Development Plan, 2006

4.2.1 Profile of Ayigya Community

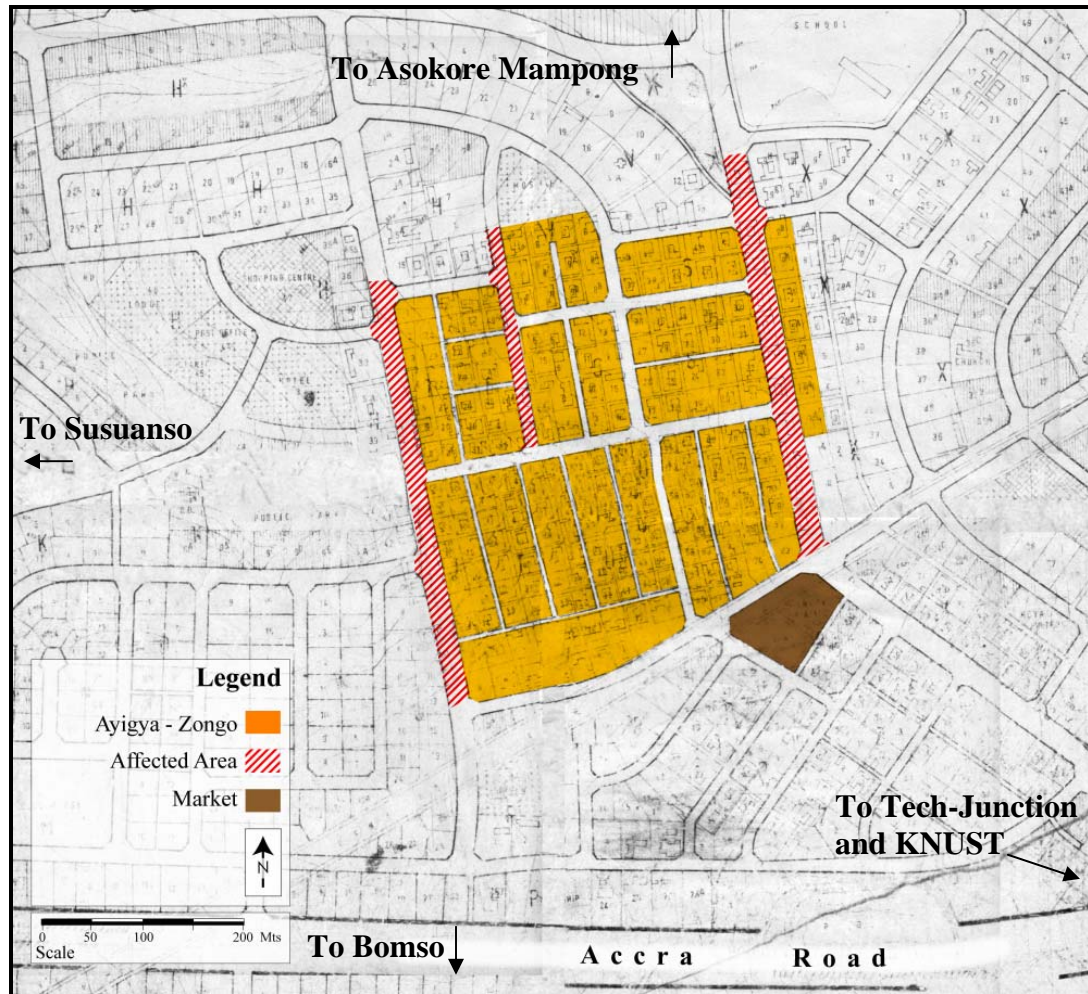
Ayigya is a suburb located in the eastern part of the Kumasi Metropolis within the Oforikrom Sub-Metro. It is bounded to the north by Asokore Mampong, to the west by Susuanso, to the east by Ayigya cemetery, to the south-east by Kwame Nkrumah University of Science and Technology (KNUST) and to the south by Bomso. According to the Kumasi Metropolitan Assembly (KMA), the population of Ayigya community was 48,419 in 2009 with an annual growth rate of 5.4 percent. The population increased by 60 percent from 2000 to 2009 as a result of migration, natural population growth, commerce and service activities in the area (Kumasi Metropolitan Assembly, 2010).

Ayigya-Zongo is a community within the Ayigya suburb which is characterised by poor housing and insufficient access to basic services such as water and sanitation. Figure 4.3. illustrates Ayigya-Zongo within the Ayigya community. In the figure, it is possible to appreciate Ayigya-Zongo as part of a planned community with roads and spaces between blocks of houses. There is a market close to the community and with its nearness to “Tech-Junction” and KNUST, there are a lot of commerce and services activities. The increase of inhabitants in the community and overcrowded housing units resulted in the creation of unauthorized house extensions in and around the community. These extensions are highlighted with red colour on the layout and are illustrated as “affected areas”.

a) Social Characteristics

According to the 2000 Ghana Population and Housing Census, Ayigya community has a population of 48,149. The community has different land uses such as residential, commerce and service. During the last decade, the importance of commerce and service activities, such as trading and civil work in the KNUST has increased and has attracted a lot of people. This has resulted in an increased demand for land for residential purposes. There is therefore high demand for affordable housing since proximity to KNUST has increased the value of housing. This has motivated many people to live in the Zongo area of the community where there is low cost of housing.

Figure 4.3. Layout of Ayigya Community



Source: Town and Country Planning Department, Kumasi, 2010.

Ayigya community has very heterogeneous ethnicity. Akans, who are predominant in the community constitute 63.2 percent, Mole Dagbani tribes from the northern part of Ghana represent 27.0 percent, Ewes constitute 4.7 percent, the 2.3 percent of the population are Ga-Dangme and 2.8 percent represent other ethnic groups (KMA, 2010). Although there are many different ethnic groups living in the Ayigya community, their social relationships are peaceful and without ethnic conflicts.

About the religious affiliation, people in Ayigya are mainly Christians representing 83.1 percent of the total population of the community. There are other religious groups such as Muslims with 6.7 percent, 1.3 percent belonging to traditional religion and others with

8.9 percent (KMA, 2010). Specifically, the Ayigya-Zongo community is characterised by Muslim households.

b) Economic Characteristics

According to the 2000 Census Report, the economically active labour force in Ayigya community represents the 58 percent of the total population. From this labour force, 62.5 percent are employed while the rest are unemployed. In addition, there is a high economic dependency in the community which has led to difficulty in saving and investing in the local economy. The common economic activities of the community are mainly commerce and service provision with 82.8 percent of the total occupation. The commerce is the dominant occupation in this community. This is evident by its location along the Accra Road and the nearness to KNUST.

The community has a market that presents a source of employment and commerce to Ayigya and other communities close to the area. The main commerce activity is petty trading. Again, the location of Ayigya, close to the KNUST and the central business centre makes the area a dormitory town. Many of their residents are low income workers of KNUST.

c) Environmental and Sanitation Characteristics

There are numerous environmental problems in the Ayigya community. Problems such as erosion, insufficient access to potable water and pollution are prominent due to rapid urbanisation and inadequate planning and governmental interventions. There are places in Ayigya like the Zongo community where there is high density of people per house without sufficient basic service provision such as water and sanitation.

Access to water is a main issue in Ayigya community. In some areas, there is lack of potable water for daily human activities. There are few standpipes in the community and access to water is therefore constrained by proximity and quality of water facilities. Out of the total, 29 percent of the houses in the Zongo community have direct access to

provision of water. The rest of houses have to buy water from vendors or to connect to few existing pipes. About sanitation, all households have access to six public toilets that are insufficient for the whole community due to the high population. For instance, in the Zongo area, the problem has resulted in indiscriminate dumping of human faeces and waste on dumpsites and open spaces.

Additionally, the management of solid and liquid waste in Ayigya community is very poor. Communal system and door to door collection are the two main systems to collect waste. However, since communal sites are insufficient or far from the community and the door to door system is expensive to low income households, a lot of waste is indiscriminately disposed of.

4.2.2 Profile of Dakodwom Community

Dakodwom community is located in the south-western part of the Kumasi Metropolis. The community is in the Nhyiaeso Sub-Metro and shares boundaries with Danyame community at the north, Danyame River to the east and Ridge residential community to the west. The area is mainly for residential uses but there are also commercial activities present. Figure 4.4 is the layout of Dakodwom and shows the community, the Forest Reserve of Kumasi and the southern by-pass at the south of the community.

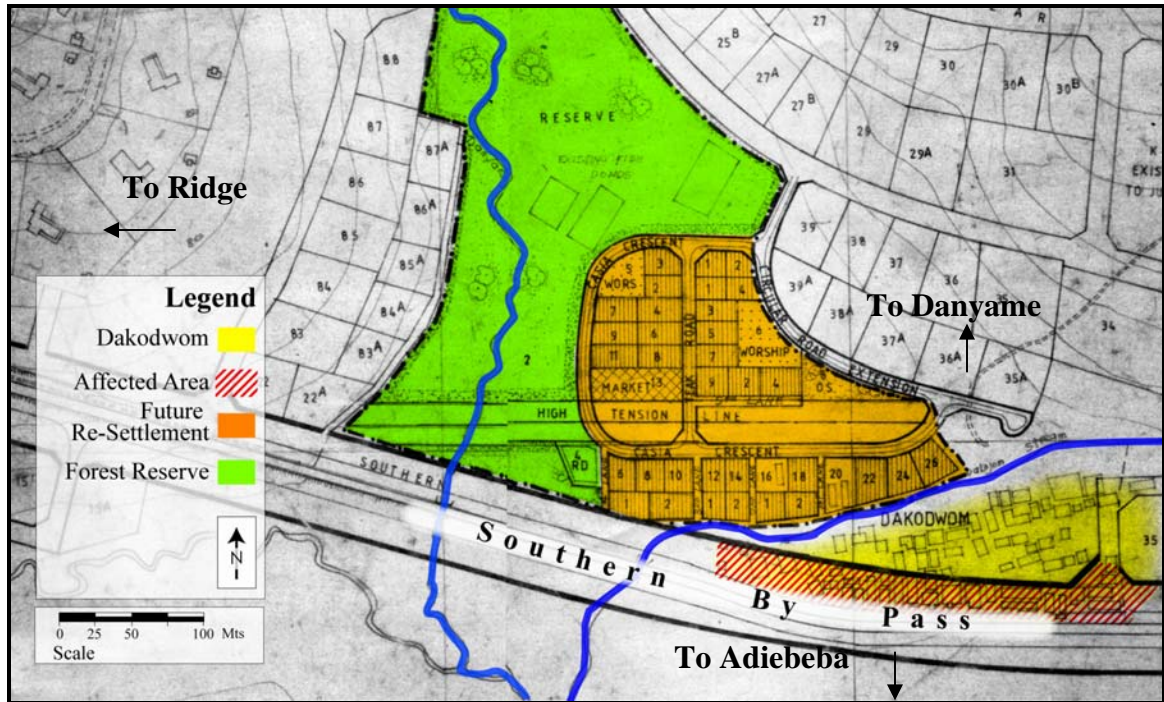
a) Social Characteristics

According to the KMA, Dakodwom had a population of 2,223 in 2009 with a 27 percent increase from 2000 to 2009. In terms of the ethnicity, the community is predominantly Fante with communities from the Central Region of Ghana. Dakodwom is mainly settled by low class groups of people normally from the same locality. Regarding religious affiliation, the major portion of the population (96.9 percent) are Christians from different denominations.

The area is characterized by low level of education. There is a pre-school and three basic schools near to the community but there is low attendance of the community residents

due to inadequate facilities in those schools and the low engagement of the households from Dakodwom with the educational system.

Figure 4.4. Layout of Dakodwom Community



Source: Town and Country Planning Department, Kumasi, 2010.

b) Economic Characteristics

The economic activities of Dakodwom are classified in the service and commerce sectors. Regarding this economic occupation, 59 percent of the population are occupied in commercial activities that represent the major source of remuneration for low income households. The main commercial activities include kenkey production, rice selling, tailoring, petty trading, plastering, carpentry, dressmaking, civil servant, sugarcane farming, among others. Meanwhile these activities are usually on small scale basis and there are also linkages with other communities through trading.

The significance of the kenkey production into the local economy promoted the migration of many women from the Central Region to the community. The production of kenkey

and petty trading are linked to the nearness of market such as Asafo market and the Kumasi Central Market.

c) Environmental and Sanitation Characteristics

Dakodwom is mainly occupied by low income residents with low access to services and exposure to water pollution. The provision of water is through few pipe lines and in general, the access to the service is low. Only 55.6 percent of the water facilities are in good shape and there is likelihood for the outbreak of diseases such as cholera in the area. The river which crosses over the settlement is polluted with wastewater and solid waste which exposes people to bad smell and diseases.

Sanitation in the community is also important to be discussed. The disposal methods in the area are poor and the practices include “free range” that means disposing human organic waste in open spaces. The liquid waste is disposed in open spaces or soak-aways and the solid waste is disposed indiscriminately on and around the existing dumpsite. The open space disposal method and the polluted river present a high risk for the breeding of mosquitoes which causes malaria.

4.3 Characteristics of the Slum Dwellers in Dakodwom and Ayigya-Zongo

The main characteristics and living conditions of slum dwellers in Dakodwom and Ayigya-Zongo are discussed in this subsection. It includes a description of the status of households living in these communities, their basic socio-economic characteristics, their housing conditions, their challenges as well as their access to finance for housing improvements.

4.3.1 Basic Household Characteristics of Respondents

The study used a total of 124 respondents who provided relevant information about the living conditions in the slum communities of Dakodwom and Ayigya-Zongo. The total number of respondents was selected from these two communities in order to obtain information about housing in slum communities and the finance options available. The

respondents were landlords and caretakers of the houses selected. Out of the total, 79.1 percent of respondents were from Ayigya-Zongo and 20.9 percent of respondents from Dakodwom.

☒ Age, Sex Structure and Ownership Type of Respondents

Respondents were averagely older people. The 0-14 cohort had 0 percent, but 79.5 percent and 20.5 percent for 15-64 and 65+ respectively. This is because the respondents were landlords, landladies and caretakers. Regarding the sex of the respondents, 61.5 percent were males at Dakodwom with the remaining 38.5 percent being females while in Ayigya-Zongo the 41.8 percent and 58.2 percent represents males and females respectively. The respondents were also classified as landlords, landladies and care takers of the houses. The majority of house owners (84.6 percent in Dakodwom and 59.2 in Ayigya-Zongo) were landlords or landladies and the 15.4 percent and 40.8 percent were care takers of the houses in Dakodwom and Ayigya-Zongo respectively. The respondents were owners of the houses and the land. Thus, they were considered as the most appropriate for the collection of the data since they are responsible for the houses, land and for collecting rent from households.

☒ Length of Stay of Respondents

The data collected in the selected communities indicates that the slum dwellers in Dakodwom and Ayigya-Zongo have lived in these areas for long periods of time. All the respondents in Dakodwom have lived in this community for 21 to 66 years while majority of respondents in Ayigya-Zongo (60.3 percent) have lived there for 21 to 66 years with the remaining 39.7 percent of people being residents for 20 or less years (See Table 4.1).

**Table 4.1. Length of Stay of Respondents in
Dakodwom and Ayigya-Zongo**

2010

Ranges of years	Dakodwom		Ayigya-Zongo	
	Frequency	Percentage	Frequency	Percentage
0-5 years	0	0.0	4	4.1
6-10 years	0	0.0	10	10.2
11-20 years	0	0.0	25	25.4
21-30 years	13	50.0	13	13.3
31-40 years	3	11.5	15	15.3
41-50 years	8	30.8	18	18.4
51-66 years	2	7.7	13	13.3
Total	26	100.0	98	100.0

Source: Field Work, March, 2010.

☒ Marital Status, Household Size and Number of Children

The dominant system of family in the communities is the traditional nuclear family. This is evident in Dakodwom by 69.2 percent of respondents being married, 19.3 percent of landlords being single and 11.5 percent of respondents being widows. In Ayigya-Zongo it was realized that 94.5 percent are married and 5.1 percent widows. Furthermore, the average household size of the respondents is six persons in Dakodwom and seven members in Ayigya-Zongo but in general, families have between 6 to 10 members. There were even families with 20 children and landlords with no children as well.

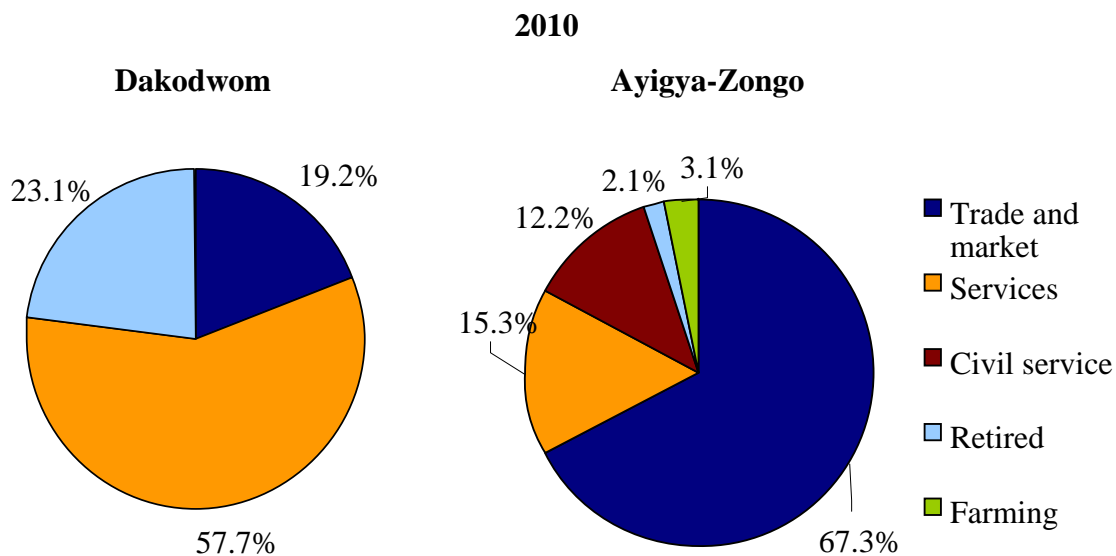
☒ Educational Level of Respondents

The education level of the respondents is mainly primary and secondary. Of those interviewed in Dakodwom, 42.3 percent indicated that they attended primary school but 54.5 percent of them completed the basic education. In Ayigya-Zongo, 56.1 percent attended primary education but only 20.0 percent of them finished the school. With secondary education, 50 percent of respondents in Dakodwom attended high school and 76.9 percent of them completed while in Ayigya-Zongo, 31.6 percent attended high school and 58.1 percent of them finished. In addition, there are 7.7 percent and 10.2 percent of respondents in Dakodwom and Ayigya-Zongo respectively that had attained vocational, technical or tertiary education.

☒ Occupation of Respondents

Concerning the occupation of the respondents, 19.2 percent in Dakodwom and 67.3 percent in Ayigya-Zongo are engaged in activities which involve buying and selling. Major commercial activities include the retail of vegetables, provisions and food. However, respondents also trade in products such as water, bread, groundnut, herbal medicine, maize, palm oil and clothing. Service provision constitutes 57.7 percent in Dakodwom and 15.3 percent in Ayigya-Zongo. Examples are carpentry, plumbing, electrical works, tailoring and painting as well as transport, teaching, shop management and hairdressing. Other group in Ayigya-Zongo works in the Civil Service constituting 12.2 percent and 3.1 percent were engaged in farming. The remaining 2.1 percent in Ayigya-Zongo and 23.1 percent in Dakodwom are retired slum dwellers. Figure 4.5 illustrates the information above.

Figure 4.5 Percentages of Landlords and Caretakers per Different Occupation



Source: Field Survey, March, 2010.

In the last figure, the main activities in Dakodwom are Services while in Ayigya-Zongo are related to Trade and market. In addition, the portion of retired people in Dakodwom is higher than in the Zongo.

☒ Income and Expenditure of Respondents

The income level of respondents is worth discussing as well their main expenditures on food, education, health, electricity and water services. In Ayigya-Zongo, the 38.8 percent of slum dwellers had incomes of more than 250 Ghana Cedis per month. The income of 15.3 percent of slum dwellers was between 201 and 250 Ghana Cedis per month. Of those interviewed, 20.4 percent indicated that their monthly income were between 151 and 200 Ghana Cedis in Ayigya-Zongo while in Dakodwom 30.7 percent of slum dwellers had this monthly income. Also, 5.1 percent and 3.8 percent of respondents in Ayigya-Zongo and Dakodwom respectively earned incomes between 101 to 150 Ghana Cedis per month. In addition, 12.2 percent in Ayigya-Zongo and 7.7 percent in Dakodwom indicated that their monthly income was between 51 and 100 Ghana Cedis. In Ayigya-Zongo, 3.1 percent respondents had income of not more than 50 Ghana Cedis while in Dakodwom 15.4 percent of respondents had this monthly income. Table 4.2 presents the income level of respondents by their education level.

**Table 4.2. Income of Landlords and Caretakers by Education Level
in Dakodwom and Ayigya-Zongo
2010**

Education/Income		0-50	51-100	101-150	151-200	201-250	>250	Ukn/Nr ¹	Total
Dakodwom	Primary	4	-	-	4	-	-	3	11
	Secondary	-	-	1	4	-	-	8	13
	Vocational	-	2	-	-	-	-	-	2
	Tertiary	-	-	-	-	-	-	-	0
	Total	4	2	1	8	0	0	11	26
Ayigya-Zongo	Primary	2	10	4	10	5	21	4	56
	Secondary	1	1	1	7	7	14	1	32
	Vocational	-	-	-	-	1	-	-	1
	Tertiary	-	1	-	3	2	3	-	9
	Total	3	12	5	20	15	38	5	98

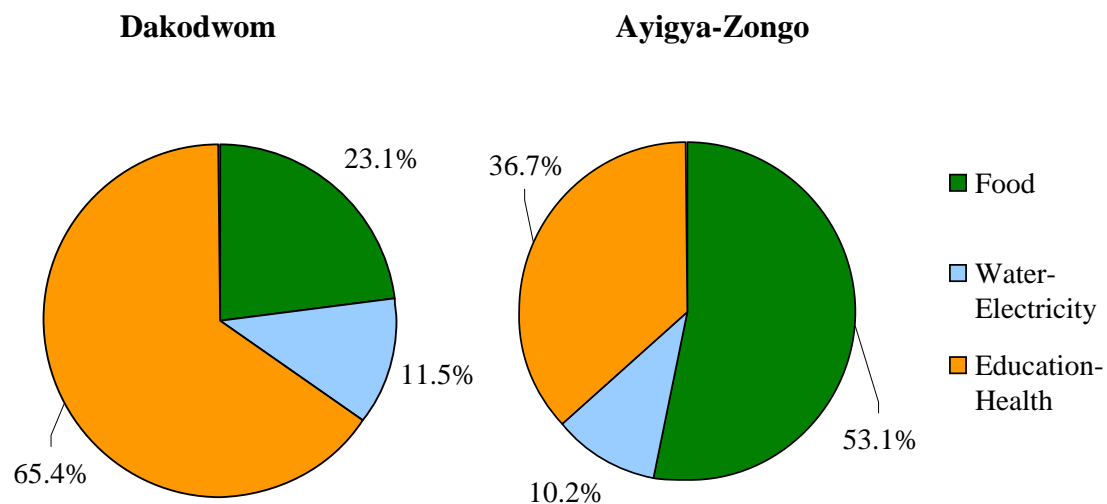
1.Ukn/Nr classifies the number of respondents that did not know this information or no response.
Source: Field Survey, March, 2010

From the table, majority of respondents in both communities have low level of education. However, irrespective of the low educational levels, a greater number of them in Ayigya-Zongo earn more than 200 Ghana Cedis per month. Meanwhile, for Dakodwom, the

highest educational level is primary and their income is less than 200 Ghana Cedis but in Ayigya-Zongo, there is more variation of income per education level.

Regarding the main expenditure in each house, food is the main expenditure for 53.1 percent of slum dwellers in Ayigya-Zongo and 23.1 percent in Dakodwom. In addition, 65.4 percent of slum dwellers in Dakodwom spend their money in education and health. This could respond to the significant proportion of people retired in the community who may need more health services. In Ayigya-Zongo, this category includes 36.7 percent of respondents. The remaining 11.5 percent and 10.2 percent of respondents in Dakodwom and Ayigya-Zongo respectively have main their expenditures in water and electricity (See Figure 4.6).

Figure 4.6 Percentages of Landlords and Caretakers per Main Type of Expenditure 2010



Source: Field Survey, March, 2010.

House improvements are not necessarily part of the monthly expenditure of every slum dweller. This type of expenditure responds to eventual critical problems in the house or future needs for improving roofing, walling and other repairs in the house rather than other monthly expenditure such as food or water. Thus, there was a limitation to capture

information about the amount of money invested, part of salaries and the proportion of savings for housing improvements of each slum dweller.

Characteristics of the respondents described in the sections above, provide basis of stability in the way of life and economic activities of these two slum communities. For instance, the relatively long length of stay of the slum dwellers and the size of the families indicate that they are more permanent in the area. In response to the low educational level of respondents, their main occupations are in the informal sector. In addition, the respondents are involved in these types of activities for long periods and this shows some stability in their lives. Also, 38.8 respondents in Ayigya-Zongo generate income of more than 250 Ghana Cedis and this aspect is usually underestimated.

4.4 Housing Conditions of Slum Dwellers in Dakodwom and Ayigya-Zongo

Housing conditions in slum communities such as tenure of the land, building materials of houses, roads, access to services like water, electricity and sanitation are analysed under this subsection. The analysis presents the peculiar situations of Dakodwom and Ayigya-Zongo as well as the general conditions of these communities.

☒ Land Tenure

Regarding the land tenure in Dakodwom, all the respondents (26 persons) own their land either through inheritance or personal efforts. The chief of the community explained that, the residents were permitted by government to settle in the area. From the survey, 20 respondents acquired their lands through family inheritance and six obtained their land directly through the chief. In Ayigya-Zongo, 69.4 percent of respondents owned their land through personal savings, inheritance and the community. The remaining 30.6 percent of respondent did not acquire the land.

⊗ Building Materials of Slum Houses

According to the survey, houses were constructed mainly with concrete blocks, sand or land blocks, zinc, wood, bamboo and mud (See Plate 4.1). Meanwhile, there are differences in building materials for the two communities. For instance, the walling of houses in Dakodwom (73.1 percent of houses) were mainly landcrete, red sandblocks and bamboo. Ayigya-Zongo on the other hand, has mainly concrete blocks for walling (68.4 percent of houses). The roofing in the two communities is made of aluminium or zinc. Due to the building materials of the structures in Dakodwom, houses are more exposed to bad weather than in Ayigya-Zongo but the general maintenance of houses in Dakodwom is better than in Ayigya-Zongo because 54 percent of houses in Dakodwom had been improved while only 5 percent improved their houses in Ayigya-Zongo. Table 4.3 presents the number of houses by different type of building materials in the two slum settlements.

Table 4.3. Number of Houses by Different Types of Building Materials in Dakodwom and Ayigya-Zongo

Materials/Community	Dakodwom		Ayigya-Zongo		Total	
	Freq.	Percentage	Freq.	Percentage	Freq.	Percentage
Walling						
Concrete block	7	26.92	67	68.37	74	59.68
Landcrete with bamboo	9	34.62	16	16.33	25	20.16
Sandcrete/redblocks	10	38.46	8	8.16	18	14.52
Wood	0	0.00	7	7.14	7	5.65
Total	26	100.00	98	100.00	124	100.00
Roofing						
Aluminium/Zinc	26	100.00	98	100.00	124	100.00
Total	26	100.00	98	100.00	124	100.00

Source: Field Survey, March, 2010.

Plate 4.1. An Example of a House in Ayigya-Zongo and Dakodwom Showing Building Materials Used and Housing Conditions

Ayigya-Zongo



Dakodwom



Source: Field Survey, March, 2010.

☒ Housing Conditions in Dakodwom and Ayigya-Zongo

Housing maintenance in the settlements is poor and the building materials are not very durable. There are therefore many problems with the structures of houses in both communities. On one side, 50 percent of the respondents in Dakodwom indicated that the main problem in their houses were the roofing. They also faced problems with the foundation of houses and wish to extend the houses, improve the plastering and to paint the houses.

On the other side, 25.5 percent of respondents in Ayigya-Zongo pointed out that they wanted to improve the roofing of their houses and 14.3 percent of slum dwellers preferred to improve the walls of their houses. In addition, 18.4 percent of respondents in Ayigya-Zongo indicated that they wanted to improve the whole structure. The rest of the respondents had other interests of improving floors, bathrooms, toilets, frame and doors, wiring system, and entrance to the houses. This interest of slum dwellers reveals their expectations for better sanitation and a better social status through a better appearance of their houses.

Table 4.4 presents the assessment of respondents to the conditions of roofing, floors, exterior walls and foundation of houses per each community. The conditions of houses are classified as good, fair or bad. Good conditions refer to painted walls with no cracks, no leakages in roofing, no cracks or holes in the floor and solid foundation. Fair conditions mean painted walls with small cracks and no or with less leakage in roofing, floor with small holes and solid foundation. Bad conditions refer to unpainted walls with deep cracks, leakages in roofing, floor with holes and cracks and sinking foundation.

**Table 4.4. Condition of Main Structures of Houses in Dakodwom and Ayigya-Zongo
2010**

Conditions/ Communities		Good Condition		Fair Condition		Bad Condition		Total
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	
Dakodwom	Roof	4	15.3	7	26.9	15	57.8	26
	Floor	11	42.3	13	50.0	2	7.7	26
	Exterior walls	7	26.9	12	46.2	7	26.9	26
	Foundation	16	61.6	4	15.2	6	23.2	26
Ayigya-Zongo	Roof	23	23.5	51	52.0	24	24.5	98
	Floor	28	28.5	53	54.1	17	17.4	98
	Exterior walls	26	26.5	53	54.1	19	19.4	98
	Foundation	41	41.8	44	44.9	13	13.3	98

Source: Field Survey, March, 2010.

A substantial proportion of respondents in Dakodwom (84.7 percent) had bad or fair condition of roofing. With floor conditions, 50.0 percent of respondents indicated that it was fair, while 42.3 percent of respondents saw it as good. Walling was mostly considered to be in fair condition and the foundation of houses was seen as good according the 61.6 percent of respondents.

The housing conditions in Ayigya-Zongo are seen as fair by their respondents. For instance, 52.0 percent of respondents indicated fair roofing, 54.1 percent of respondents indicated fair floors and exterior walls and 44.9 percent of respondents indicated fair foundation of their houses.

☒ Access to Basic Services in Dakodwom and Ayigya-Zongo

Housing also represents a flow of services for households. For an adequate house structure to fulfil the standards of construction, there has to be access to the basic services such as water and sanitation. From the study communities, access to water, electricity and waste disposal are key problems for households. Table 4.5 shows the percentage of respondents who have access to water, electricity and waste collection.

Table 4.5. Access to Basic Services in Slum Communities in Dakodwom and Ayigya-Zongo 2010

Services/communities		Dakodwom		Ayigya-Zongo	
		Freq.	Perc.	Freq.	Perc.
Water	Access	14	54.0	48	49.0
	No access	12	46.0	50	51.0
	Total	26	100.0	98	100.0
Electricity	Access	23	88.5	94	95.9
	No access	3	11.5	4	4.1
	Total	26	100.0	98	100.0
Waste collection	Access	26	100.0	1	1.0
	No access	-	-	97	99.0
	Total	26	100.0	98	100.0

Source: Field Survey, March, 2010

From the table, 54.0 percent of respondents in Dakodwom and 49.0 percent in Ayigya-Zongo have access to water. In Ayigya-Zongo, the access to water is facilitated by pipelines and borehole systems. When there is shortage, few individuals sell water to other inhabitants in the community in the Zongo. In Dakodwom, there are 14 individuals with pipes and have constant flow of water. Since it is very expensive to connect all the households to pipelines, families in the community have resorted to the purchase of water from the few individuals who have connection to the pipelines.

Regarding sanitation in Dakodwom, there are two types of public toilet facilities in the community. One facility is Kumasi Ventilated Improved Pit Latrine (KVIP) and the other is water closet which is currently under renovation. In general, the toilet facilities are clean but not sufficient to all the slum dwellers (See Plate 4.2).

In Ayigya-Zongo, there are five public toilets but are not in hygienic conditions due to lack of ventilation and irregular cleaning. In the case of Ayigya-Zongo, people have to pay 10 pesewas per each visit.

Plate 4.2. Public Toilet in the Slum Community of Dakodwom



Source: Field Survey, March, 2010

Regarding waste collection, 100 percent of respondents in Dakodwom and Ayigya-Zongo indicated no access to house to house waste collection system. However, the two settlements have communal disposal site. In Dakodwom, the 100.0 percent indicated the use of their disposal site while in Ayigya-Zongo, the 99.0 percent indicated no access to waste collection. The payment for disposing waste was between 5 to 20 pesewas per a fixed amount of garbage. In Ayigya-Zongo, the long distance of the dumpsite from the community has resulted in indiscriminate waste disposal.

With electricity, almost all the respondents from the slum communities have access to this service. In Dakodwom, 88.5 percent of people have electricity in their houses but have insufficient metres. There is also poor path illumination for the whole settlement. In Ayigya-Zongo the 95.9 percent of respondents living in the community have access to electricity.

The conditions of roads, paths and streets are inadequate in the two communities. All the respondents endorsed the need to improve the conditions of the paths and streets in the

community. The two settlements have erosion problems due to poor drainage system (See Plate 4.3). Due to the unavailability of concrete drains, the erosion has seriously affected the foundation of buildings, especially, in Ayigya-Zongo. The accessibility between houses is also affected by the illegal extension of houses.

Plate 4.3. Example of Drainage in Ayigya-Zongo and Dakodwom Which Creates Soil Erosion

Ayigya-Zongo



Dakodwom



Source: Field Survey, March, 2010.

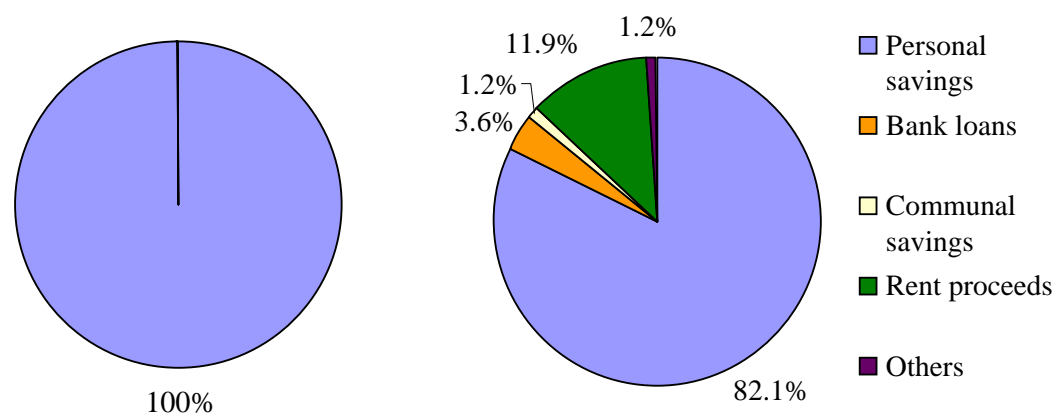
4.5 Financing of Housing Improvements in Dakodwom and Ayigya-Zongo

Financing housing improvements is a challenge for households living in slum communities. Their illegality or low income levels affect their access to credits in formal institutions such as commercial banks. Thus, the analysis of the type of financing, level of improvement and local initiatives in the slum community of Dakodwom and Ayigya-Zongo are presented under this subsection.

Existing Types of Financing for Housing Improvement

From the survey, different options of housing financing were identified. The options vary from personal savings, rent proceeds, communal savings, loans from commercial banks and others. The main purposes of financing were for building houses and accessing basic services. In Dakodwom, 100.0 percent of slum dwellers finance the improvements with their personal savings. In Ayigya-Zongo, 82.1 percent invested their personal savings for construction or purchase of their houses. Also, 11.9 percent of the respondents used rent proceeds. Few slum dwellers (3.6 percent) obtained bank loans to finance the construction or purchase of their houses. Then, 1.2 percent used communal savings or donations from friends (See Figure 4.7.).

**Figure 4.7. Financing Housing in Slum Communities in
Dakodwom and Ayigya-Zongo
2010**



Source: Field Survey, March, 2010.

Some respondents also indicated that, investments have been made into the expansion and improvements of their houses. From those interviewed in Dakodwom, 53.8 percent improved or expanded the interior areas such as floor of the bedrooms and exterior areas like roofing and painting of walls. In Ayigya-Zongo, 5.1 percent of slum dwellers improve or expand areas such as floor, drains, verandas and painting of walls. They financed these improvements with personal savings, communal savings or loans.

One interesting aspect is that, slum dwellers do not improve the sanitation and structural conditions but invest in painting, floors, veranda beautification and others. These improvements usually present a better social status of the people living in that particular house.

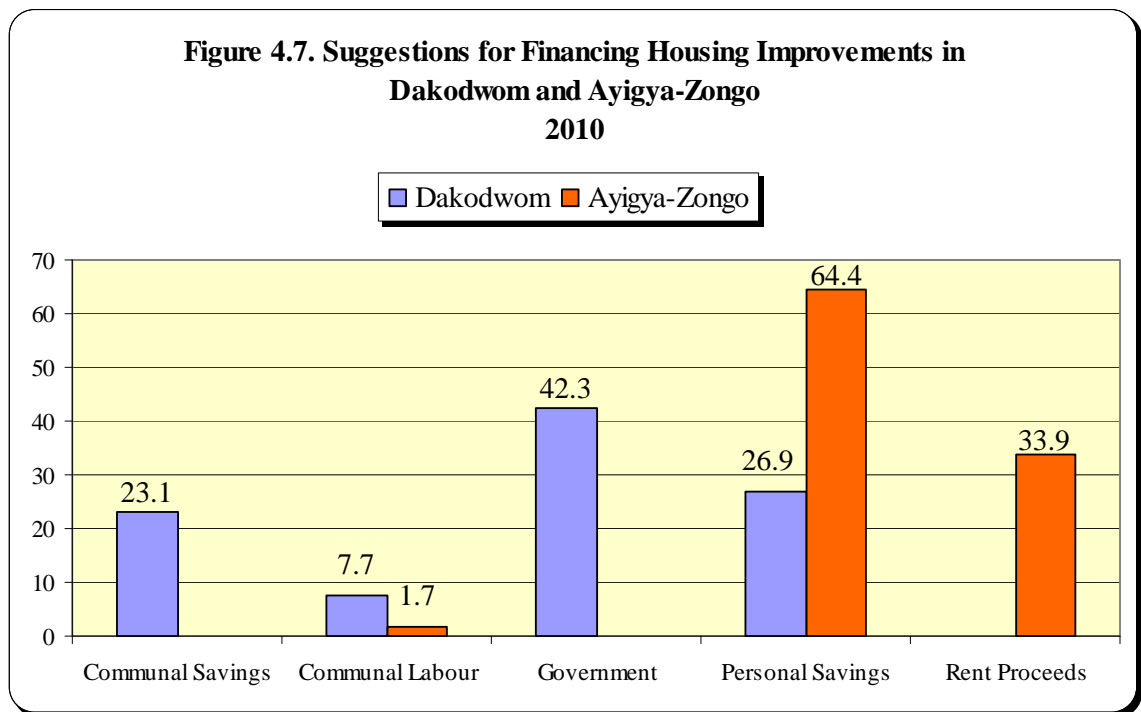
☒ Suggestions of Financing Options by Respondents

As mentioned, the majority of respondents used their own saving to construct, improve or expand their houses. However, there exist collective practices and communal financing options such as communal cooperatives, susu collection, communal saving associations that aided them to improve their housing conditions. In Dakodwom, 26.9 percent of respondents indicated that they saved part of their income to participate in this type of financing mechanisms. These, respondents usually saved in communal groups or cooperatives. There were no members of communal saving groups or cooperatives in Ayigya-Zongo. Although there is a substantial proportion of respondents who do not participate in these type of financing mechanisms, 84.6 percent and 99 percent of respondents in Dakodwom and Ayigya-Zongo, respectively, expressed interest in becoming members of a saving group, association, cooperative or other communal systems.

Furthermore, respondents have some clear ideas about how to improve the financing of their housing. In Dakodwom, 23.1 percent of respondents mentioned that, it is important to create communal saving groups to help each other. Some also expressed the cooperation to support communal labour work (7.7 percent in Dakodwom and 1.7 percent

in Ayigya-Zongo). Also, 42.3 percent of respondents in Dakodwom requested for government support to improve the conditions of the communities.

In Ayigya-Zongo and Dakodwom, 64.4 and 26.9 percent of respondents, respectively, insisted on the use of personal savings to finance their housing improvements. The use of rent proceeds was another suggestion from the respondents in Ayigya-Zongo which represented 33.9 percent of respondents in the community (See Figure 4.8).



Source: Field Survey, March, 2010.

Another suggestion from respondents in Dakodwom was to organise neighbours per block of houses to save money collectively for renovation of their houses a one-at-a-time sequence. In general, respondents in Dakodwom proposed communal financial options while Ayigya-Zongo residents, suggested more individual financial options.

⊗ Local Initiatives in the Two Communities

Local initiatives in slum communities like Susu collection exist in Dakodwom and Ayigya-Zongo. In Ayigya-Zongo, there are two types of Susu Collection. One is the Susu Collection Centres that help people to ensure access to basic needs and eventually for improvements of their houses. The other type of Susu Collection is the house to house type of saving whereby families register and contribute with records in small booklets which are usually kept by them. In the case of the Susu Collection Centre, community members have to buy an initial Susu Collection Card in order to start saving. Customers save for a month and have to decide whether to collect it at the end of the month or to continue saving to gain an appreciable amount of money before collection.

Thus, the money is deposited in formal banks chosen by the Centre itself. The Centre charges a fee when money is collected at the end of a period. These collection centres are an option for people who want to save in formal banks but cannot due to their small savings. Additionally, people have the advantage of saving money that could otherwise be spent. The money saved in the Susu Centre is usually used by contributors for financing basic needs such as food, water, electricity, contingency and others. However, there are many petty traders who use their savings for investments into their commercial activities.

Sometimes, people who save in the Susu Centres in the communities face problems. The lack of formality and security in the mechanism presents a risk of losing people's savings. For instance, it is possible for any individual to take the Susu card of another person to collect the money without the permission of the real saver. At present, there is no institutionalised system to check whether the person is the real owner of the card or not. Additionally, the mechanism for asking for the savings is also very informal and there is no database to support members who may eventually lose their cards. For more explanations of the operation of the collection centres, refer to Figure 4.9.

Figure 4.9. Susu Collection in the Ayigya – Zongo Community, Kumasi

Mr. David Awuni is a young teacher who works for a private school in Kumasi and saves part of his salary every day. His salary in the school is 4 Ghana Cedis (GH ¢) daily and he gives GH ¢ 1 to the JY Communication and Susu Collection Centre in Ayigya-Zongo every day. As he explained, at the beginning he bought the Susu Collection card for 20 pesewas and started his savings with 1 GH. The savings are registered in the Susu card that shows the daily savings per 31 days. At the end of the 31 days he can continue saving or ask for his savings minus GH ¢ 1 for the Susu fee. David saves part of his salary for his future education but since he lives alone with his brother, he also uses the money for expenditure at home like food, electricity, clothes or repairs in the house. He expresses satisfaction with the Susu system because in his words “we use the Susu savings for helping ourselves”. David can suggest just one improvement when it is the moment of asking for the savings.

Source:Field Survey, March, 2010.



He indicated that when someone asks for his money, he will be given a small card that the person has to present after two days before receiving his money. However, the person could lose the chance for collecting his own money if he or she misplaces the small card. It implies a risk for the savers, especially in Ayigya.-Zongo where the illiteracy rate is high and people could not understand very well the rules of the system. Thus the lack of formality of the system also generates some insecurity for Susu patrons like David.

4.6 Institutional Efforts towards Housing Improvements in Slum Areas in Kumasi

This section examines the response of the government to improve conditions in slum communities located in the Kumasi Metropolis. Representatives of institutions like Kumasi Metropolitan Assembly (KMA), Town and Country Planning Department (TCPD), Electricity Company of Ghana (ECG), Ghana Water Company and the Waste Management Department were interviewed to ascertain the activities undertaken in slum communities as well as their successes, failures and the reasons for them.

According to TCPD, slum communities emerged in Kumasi as a result of the rapid urbanisation process and migration from rural areas. People first settled in kiosks or containers in precarious conditions in communities such as Moshie-Zongo, Ayigya-Zongo, Asawase-Zongo, among others. This led to the formation of poor areas close to the Central Market occupied by low income families who could not afford decent affordable shelter in the city.

In addition, housing projects for workers, like Asawase Housing State were later occupied by migrants. These migrants changed the original structures in order to provide more space for more households. Residential areas such as Ayigya-Zongo or Aboabo were planned with basic facilities, schools, sanitary facilities and open spaces but degenerated in slum settlements.

According to the TCPD, the main challenge for planning, development control and zoning in the city is the lack of base maps. Existing maps are already old and updating them requires a lot of resources. Sometimes, TCPD has to depend on landowners for updates. This challenge compels TCPD to develop the city without adequate maps or spatial information. Another problem faced by the authorities, is the lack of enforcement of the building regulations. For instance, in many cases chiefs of communities take land for other uses than intended by city authorities.

⊗ Service Provision in the Two Communities

According to ECG, although there is access to electricity by majority of households, the power provided is not sufficient. They expressed that electricity could not be provided to the whole communities since they could not afford. In addition, the ECG considered slums as temporal settlements. The company could provide power on the main roads but not to the entire slum areas without government permission. Also, ECG requires detailed layouts of the slum communities to plan the provision of electricity. Unfortunately, these detailed layouts do not exist in the slums.

With regards to access to water in slum communities, this is considered the major problem that families face. There is either lack of the service or higher cost of accessing the service. From the regional office of the Ghana Water Company in Kumasi, the problem is also the affordability of the service. Informal settlements constructed in unplanned areas are therefore usually out of the pipeline distribution networks in the city.

In terms of sanitation, there are also problems with proper provision of services. According to the Waste Management Department in Kumasi, the lack of land in the communities to allocate dump sites and the attitude and behaviour of the people against good environmental practices are the main challenges for the adequate sanitation in slum areas.

⊗ Upgrading Programs in the Two Communities or in Kumasi

These outstanding problems in the slum communities have received some policy responses over the years. Meanwhile, development policies for upgrading existing slum and the prevention of new ones have yielded fewer results. For instance, according to the officers in ECG and Water Company, there has not been an implementation of any slum upgrading programmes of which they are aware of. However, they added that, there have been some actions to improve conditions in such areas. An officer from the TCPD explained that, they have implemented some strategies in collaboration with the Urban

Road Office and the Water Company for improving drainage systems, provision of roads and public toilets and boreholes in communities like Ayigya-Zongo.

Information from the Kumasi Metropolitan Assembly (KMA) indicates that, there has been an implementation of four donor projects or programs for improving conditions in the Kumasi Metropolis with some actions in slum communities and some programmes for slum development control from 1996 to 2009. These programmes include EU-Micro Project, Urban Environmental and Sanitation Projects (UESP) I and II, Community Infrastructure Up-Grading and UN – Habitat Slum Upgrading Facility (SUF). The focuses of the programmes were construction of public toilets, roads and drains rehabilitation, waste management, provision of water and electricity, eradication of slums and prevention of new ones.

Meanwhile, KMA did not have specific programmes implemented in the slum communities to improve housing but programmes for the Metropolis were sometimes extended to these areas.

☒ Future Plans for Slum Improvements in Kumasi

Institutions such as the Ghana Water Company have plans for these slum communities. The plans of the Company include extension of pipelines to those areas in their medium term development. These projects are supposed to be implemented in target communities within the central part of the city such as Asebi, Asokore, Atibeti in Mampong and communities close to Ayigya. Other institutions like the ECG do not have any existing plan for those areas.

Due to the future expansion of the Southern by pass, TCPD indicated that there are plans to resettle part of the slum community in Dakodwom. This area would be affected by the expansion of the road. In Figure 4.4, it is shaded by the red colour. In this kind of development, the government would have to consider many aspects before resettlement in order not to affect the existing social cohesion in the community. In Dakodwom for instance, majority of the slum dwellers are from the same ethnic group and already have

social organisations. In addition, the new settlement could also affect the environmental conditions of the Forest Reserve.

The KMA indicated that they have future physical infrastructural projects for upgrading communities such as Sawaba, Adukrom, Asawasi, Asokore-Mampong and Moshie-Zongo. These projects are part of the list for specific priority investment projects in the Metropolis. In addition, the KMA have ranked all slum communities according to their deterioration and deprivation conditions. This ranking is to assist them in the organisation of specific priorities for the slum communities.

Slum upgrading projects in Kumasi require the participation of many institutions. It is important to coordinate and plan projects with the collaboration of the KMA, ECG, Water Company, Urban Roads, Feeder Roads, Highways, Town and Country Planning Department, Sub-Metro officials, traditional leaders and other stakeholders. However, the majority of institutions interviewed did not indicate major collaboration between them. Furthermore, most of these institutions usually pass their responsibility for slum upgrading to other institutions. Due to different institutional priorities, most of these slum projects are disregarded.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

5.1. Introduction

This chapter presents the major findings of the study, that is concerning the different options to finance housing improvements in slum communities in the Kumasi Metropolis. The chapter summarises the main results from the analysis of data collected in Dakodwom and Ayigya-Zongo. Firstly, the main findings of the study are presented in line with the objectives of the study. Secondly, recommendations to improve the housing financing in slum communities are proposed. Finally, the general conclusion forms the last aspect of this chapter.

5.2. Summary of Findings

Key findings from the study about financing housing in selected slum communities in the Kumasi Metropolis are discussed in this section. These include socio-economic and housing characteristics of communities, sources of funding available in the communities, financing schemes in the Metropolis for slum communities as well as other important findings.

5.2.1. Socio-Economic and Housing Characteristics of Selected Communities

- Dakodwom and Ayigya Zongo have 69 percent of respondents who had lived in these communities approximately 20 to 66 years. The study revealed that, slum dwellers have permanency in the two communities and thus, future projects on physical and social investment in the area would remain within the communities.
- Residents from the two communities are engaged mainly in activities related to the commerce and service sector. From those interviewed, 84 percent are involved in buying and selling activities such as petty trading or service provision like construction works. This calls for proper interventions of local

authorities, NGO's and small scale enterprises to promote entrepreneurial skill of landlords and caretakers as a way to take advantage of their experience in commerce and service activities to start their small scale businesses and increase their income generation.

- Ayigya-Zongo has 39 percent of respondents having a monthly income of over GH¢ 250. This implies that, a sizeable proportion of landlords and caretakers have the financial capacity to provide basic housing facilities such as electricity and water. This however needs a regulated saving pattern.
- The study also revealed a social cohesion within the two communities. This is because the two communities respectively have migrated from the same regions of Ghana. While Dakodwom is inhabited mainly by people from the Central Region, Ayigya-Zongo has people from the northern part of Ghana. However, Dakodwom is more socially organised and united than Ayigya-Zongo. Again, recommendations made by respondents of Dakodwom were more collective in focus than Ayigya-Zongo. Nevertheless, this implies that, the study communities have the potentials to create communal housing projects and to participate in slum upgrading interventions with the local authority.
- Housing conditions are similar in the two communities. Materials for construction of 40 percent of the houses were of poor quality and durability. It was also revealed that the major housing problems in the two communities were lacking roofs, cracked and unplastered walls and exposed foundations. These posed risks to the inhabitants of such housing units.
- It was revealed that in Dakodwom, 54 percent of houses received some form of maintenance while in Ayigya-Zongo only 5 percent saw improvements over the study period. This has the implication for landownership and security of tenure in the two communities. This is supported by the respondents in Dakodwom who are actual owners of the land and houses.

5.2.2. Sources of Funds for Housing Improvements

- Funding for housing improvements or construction was mainly through personal savings. This was attributed to difficulties respondents faced in accessing credit and loans from conventional financial institutions. In order to buttress the above funding, 86 percent of respondents used their own resources in the construction, purchase or improvement of their houses as well as access to basic services.
- Access to loans from commercial banks was not available for low income groups. This was evident by only 2.78 percent having had access to loans for construction or purchase of their houses. This implies that, landlords or caretakers do not have any alternative source to finance their housing besides their personal resources. This put pressure on their meagre income and thus landlords are unable to regularly invest in their houses.

5.2.3. Housing Financing Schemes Available in Study Communities in Kumasi

- There was no available any financing scheme for housing improvements in the two communities. However, some landlords and caretakers (5.6 percent) had small savings with relatives, while other saved their money in Susu Collection Schemes. These savings were eventually for house repairs. In addition, over 99 percent expressed interest in the participation of schemes for providing financing for their housing improvements. The study revealed that, the interest of slum dwellers for housing financing in the community coupled with their saving habits are a high potential for the creation of communal financing schemes in the study communities. In addition, communities are willing to participate in housing projects with the government and line agencies.

5.2.4. Other Findings

Some incidental findings were obtained during the study in Dakodwom and Ayigya-Zongo as well as through the institutional interviews. These findings are explained in the subsequent paragraphs.

- There are two tenure systems overlapping in the two communities; these are the traditional authority and the government authority. The study revealed a disregard of city plans by the traditional authorities who are custodians of land. For instance, the traditional authorities in Ayigya allocated or sold land to residents in unplanned areas. This presents a major challenge to city authorities as all lands are sold to private individuals. For example, at Ayigya-Zongo, there is no land available to allocate a new refuse dump site for the community.
- Sanitation is not considered a major priority by slum dwellers. Only 5 percent of respondents indicated their need for the improvement of toilet facilities and drain systems. However, by observation, the environmental conditions in the communities are poor. In addition, Waste Management Department and other line agencies recognise sanitation as important to the solution of environmental problems in those communities. However they did not have any specific sanitation programme for slum communities.
- The study revealed that, the KMA does not have any housing improvement projects to upgrade slum communities in Kumasi. However, there has been some participation between traditional leaders, local government and international organisations in the implementation of specific activities under Metropolitan programmes for sanitation, roads and electricity of which the slum communities benefited. Thus, the actions of KMA are more aligned with the negligence policies adopted 40 years ago by some developing countries. The inexistence of slum upgrading projects presents an obstacle to line agencies (GWC and ECG) to have effective coordination with the KMA for collaborative actions to provide or improve services in these communities.

5.3. Recommendations

From the analysis of results and findings, some recommendations have been made to improve housing financing in slum communities. These are as follows;

- Coordination of metropolitan planning and development institutions in slum areas: The coordination of functions, responsibilities and tasks related to the improvement of conditions in slum areas could improve effective urban development in the Metropolis. This requires the strengthening of local government offices and clarification of functions. The Sub Metro offices should be strengthened by KMA to organise and coordinate the actions with service providers in slum upgrading projects according to the Medium-Term Development Plan of the Metropolitan Assembly.
- Clarification of the tenure systems existent in the slum communities: There was an overlap in the registral tenure system and the traditional tenure system in slum areas. It is therefore recommended that the coordination between the local planning authorities and the traditional chiefs should be improved to enforce the distribution of land according to the regulations established by government authorities in the area. With this recommendation, problems faced by KMA in allocation of basic services to those communities would be reduced.
- Allocation of funds for updating or creating geographical information: All the institutions expressed their challenges with the lack of maps and geographic information. Some institutions had to develop projects without these relevant instruments. Thus, the annual budget of the local and national government should include resources for Geographic and Spatial Information. This recommendation includes the training of officers in the use of GIS and other technological tools as well as the purchase of those instruments for use in efficient allocation of resources in the District.

- Implementation of information campaigns about the benefits of saving in communal and conventional financing schemes: The above could motivate slum dwellers to participate in the creation of financing schemes for housing. There should be collaboration between local financial institutions, traditional leaders and communal groups. These activities would increase the communal understanding about benefits of financing schemes and improve the willingness of landlords and caretakers to participate. In addition, the creation of communal savings groups could attract the attention of NGO's in Kumasi Metropolis to support these communities in accessing credit facilities to better living conditions.
- Creation of a partnership between community groups, financial institutions and service providers: Communities should organise themselves in the form of a communal saving group, association or cooperative for housing improvements. Then, the communal group could ask for collaboration from local financial institutions and service providers such as GWC and ECG. The KMA have to create the proper environment for the partnership between the stakeholders. This partnership would promote good collaboration between the community, private sector and line agencies as well as the accessibility of resources from financial and development institutions or agencies to improve the conditions in slum areas.

5.4. Conclusion

Significant issues from the analysis of data and the subsequent findings revealed the importance of slum community upgrading through better affordability of housing and service provision. These upgrading interventions could reduce poverty and provide better housing conditions to low income groups. City authorities have implemented some actions to improve quality of life in slum communities. However, their lack of programmes and financial schemes specifically for slum upgrading challenges slum development in terms of basic service provision in the Metropolis.

These interventions require the strengthening of local government and effective collaboration between all the stakeholders involved to formulate special plans for slum upgrading in Kumasi. A good potential from the study is the personal saving habits of the slum dwellers as well as the social cohesion existing among them. There is also a call on government to respond with appropriate policies for slum upgrading and adequate urban development.

Slums as identified in the study are not temporal as seen by government agencies and therefore should be inculcated into the development plans of every urban area. It is therefore important for government to implement more participatory programmes for slum upgrading in order to have the full support of slum dwellers. Finally, access to basic services like health, water, sanitation and shelter are considered basic rights for every individual and slum dwellers are no exception.

REFERENCES

- Adlard, R. (2005) .Informal Settlement –Origin , Features and Impact in Developing Countries. <http://www.prb.orginformalsettlemt>. May, 2009.
- Asian Coalition for Housing Rights - ACHR (2007). Successful Mumbai experience ignited global community savings programs. In: GH Bank Housing Journal, n° 17. Housing People in Asia.
- Asian Development Bank (ADB) (2000). Finance for the Poor: Microfinance Development Strategy. Manila, Philippines.
- Baker, J.L. (2008). Urban Poverty: A Global View. Urban papers No 5. The World Bank. Washington, D.C.
- Caimi, S. (2009). Cities of the Developing Countries. Informal city-Illegal city. Technical Univerty of Dortmund, Germany.
- Government of Ghana (2008). Ghana in Figures. Ghana Statistical Service (GSS). Accra, Ghana.
- Grinberg, S. (2006). Pedagogical risk and governmentality: Shantytowns in Argentina in the 21st century. Universidad Nacional de San Martín. Universidad Nacional de la Patagonia Austral. Argentina.
- 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.
- International Monetary Fund (IMF) (2006). Ghana: Poverty Reduction Strategy Paper. IMF Country Report No. 06/225. Washington D.C.
- 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.
- Kumekpor, T. (2002). Research Methods and Techniques for Social Research. Sonlife Printing and Press Services, Ghana.
- Lall. S. et al. (2005). Household savings and residential mobility in informal settlements. Policy Research. Working Paper 3596. World Bank. Washington D.C.
- Government of Costa Rica, the Gazette-Official Newspaper of Costa Rica (1996). Reglamento de Operaciones del Sistema Financiero Nacional para la Vivienda

[Regulation about Nacional Financing Housing System]. La Gaceta n.º 95, San José, Costa Rica.

Malcom J. and Braimah F. (2004). Feasibility study for the application of Community-Led Infrastructure Finance Facility (CLIFF) operations in Ghana. Homeless international. Ghana.

Mwai, A. (2008). Slum Upgrading Facility Experiences. In: Local Government Conference, Slum Upgrading Facility SUF. Human Settlements Financing Division. UN-Habitat. Nairobi, Kenya.

Ministerio de Vivienda (MIVAH), República de Costa Rica (2008). Plan de Ordenamiento de la Atención del Programa de Erradicación de Asentamientos en Condición de Precario y Tugurio [Management Plan of Care Eradication Program of Settlements in Precarious and Slum Condition]. San José, Costa Rica.

National Development Planning Commission (2009). Draft Medium-Term National Development Policy Framework 2010-2013. Ghana.

Ooi, G. and Phua, K. (2008). Urbanization and slum formation. Thematic Paper 13. Knowledge Network on Urban Settings 2008. WHO Centre for Health Development. National Institute of Education, Nanyang Technological University, Singapore. National University of Singapore. Singapore.

UN-Habitat (2009). Housing Finance Mechanism in Chile. The Human Settlements Finance Systems Serie. Nairobi, Kenya.

----- (2008a). Housing for all. The challenges of affordability, accessibility and sustainability. The experiences and instruments for the developing and developed worlds. Nairobi, Kenya.

----- (2008b). UN-HABITAT and the Kenya Slum Upgrading Programme Strategy Document. Nairobi, Kenya.

----- (2008c). Slum Upgrading Facilities (SUF). Local Finance Facilities: what they are, why they are important, and how they work. Working Paper No 8. Nairobi, Kenya.

----- (2006a). State of world's cities report 2006/7. The Millennium Development Goals and Urban Sustainability: 30 Years of Shaping the Habitat Agenda. United Nations Human Settlement Programme. Nairobi, Kenya.

----- (2006b). Analytical Perspective of Pro-poor Slum Upgrading frameworks. Nairobi, Kenya.

----- (2003). The challenge of slums: Global report on Human Settlements 2003. Nairobi, Kenya.

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

APPENDIX 1
PLANNING DEPARTMENT
FACULTY OF PLANNING AND LAND ECONOMY
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

This questionnaire is part of the research “Financing housing improvement in slum communities in Ghana: The case of Kumasi Metropolis” for the Master Programme in Development Planning and Management of the KNUST. The objective of the questionnaire is to know the socio-economic characteristics of this community, housing conditions and the use of financial schemes to improve housing.

QUESTIONNAIRE FOR COMMUNITIES

A. HOUSES

Date: _____

Basic information:

1. Name of the community: _____
2. Status of the respondent: _____
3. Sex: M ☐ F ☐ Age _____
4. Marital status: _____
5. Number of children: _____
6. Length of stay: _____ years

Socio-economic information:

7. What is your level of education?

a. Primary	complete <input type="checkbox"/>	incomplete <input type="checkbox"/>
b. Secondary	complete <input type="checkbox"/>	incomplete <input type="checkbox"/>
c. Vocational	complete <input type="checkbox"/>	incomplete <input type="checkbox"/>
d. Tertiary	complete <input type="checkbox"/>	incomplete <input type="checkbox"/>
8. What is your occupation or main activity?

Trading	<input type="checkbox"/>	Which type of trading? _____
Civil service	<input type="checkbox"/>	
Other (please, specify)	_____	
9. Do you own the house?

a. Yes <input type="checkbox"/>	b. No <input type="checkbox"/>
---------------------------------	--------------------------------
10. If yes, how did you get the house?

11. How many bedrooms do you have in your house? _____

12. Do you own the land? a. Yes ☐ b. No ☐

13. If yes, how did you get the land?

Government ☐ Family ☐

Bought ☐ Community ☐

House characteristics:

14. What materials did you use for building your house?

Block ☐ Zinc/Aluminium ☐

Wood ☐ Recycled Materials ☐

Others _____

15. Which part of your house would you like to improve?

16. What is the current condition of your house?

a. Roof bad ☐ regular ☐ good ☐

b. Floor bad ☐ regular ☐ good ☐

c. Exterior walls bad ☐ regular ☐ good ☐

d. Foundation bad ☐ regular ☐ good ☐

17. Do you have access to:

a. Water? Yes ☐ No ☐

If yes, is it in your house? Pipe ☐ borehole ☐ bought ☐

b. Electricity? Yes ☐ No ☐

c. Garbage collection? Yes ☐ No ☐

If no, how do you dispose the waste?

In a hole ☐ burnt ☐ in the river ☐ in an open space ☐

18. Have you improved or expanded your house lately?

Yes ☐ No ☐

19. If yes, what did you add to the current structure?

20. How did you pay for the expansion?

Personal money ☐ Loan ☐ Communal scheme ☐ Rent proceeds ☐

21. Do you consider important to improve the conditions of streets and paths in the community?

Yes ☐ No ☐

Financing characteristics:

22. How did you finance the building of your house?

Personal money ☐ Loan ☐ Communal scheme ☐ Rent proceeds ☐

23. Are you member of a savings organisation? If yes, please answer 26 to 28.

a. Yes ☐ b. No ☐

24. What type of organisation?

a. Communal saving organisation ☐

b. Cooperative ☐

c. Other _____

25. What is the main purpose for the saving groups?

26. What does your contribution represent in your monthly income?

27. Are you interested to participate in financial projects for improving your house?

a. Yes ☐ b. No ☐

28. Has the Government implemented any project for improving your community?

a. Yes ☐ b. No ☐

29. What type of project? _____

30. How can you improve on the financing of your housing improvement?

31. What are the main expenditure items in your household? (classify it from 1 to 4, 1 being the most important)

a. Food____ c. Water and electricity____
b. Health and education____ d. Rent____

32. What is the monthly income of your household?

a. Between 0-50 GHC ☐
b. Between 51-100 GHC ☐
c. Between 101-150 GHC ☐
d. Between 151-200 GHC ☐
e. Between 201-250 GHC ☐
f. More than 251 GHC ☐

APPENDIX 2
PLANNING DEPARTMENT
FACULTY OF PLANNING AND LAND ECONOMY
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

This interview is part of the research “Financing housing improvement in slum communities in Ghana: The case of Kumasi Metropolis” for the Master Programme in Development Planning and Management of the KNUST. The objective of the interview is to know the planning and housing conditions in slum communities as well as the initiatives for improving the area.

INTERVIEWS

B. COMMUNITY INTERVIEWS
TRADITIONAL LEADERS

Date: _____

General information:

Name of the respondent: _____

Name of the organisation: _____

Position in the organisation: _____

1. How are the housing conditions in your community?

2. How is the service provision in your community?

3. What are the major problems to improve the conditions in your community?

4. Have been implemented any programme to improve the conditions in your community? Describe it, please.

5. Do you have any financial scheme in your community? Which type?

6. What were the difficulties and the effectiveness of the financial scheme?

APPENDIX 3
PLANNING DEPARTMENT
FACULTY OF PLANNING AND LAND ECONOMY
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

This interview is part of the research “Financing housing improvement in slum communities in Ghana: The case of Kumasi Metropolis” for the Master Programme in Development Planning and Management of the KNUST. The objective of the interview is to know the planning in Kumasi and the formation of slum communities as well as the government initiatives for slum upgrading.

INTERVIEWS

C. INSTITUTIONAL INTERVIEW

Date: _____

C.1 TOWN AND COUNTRY PLANNING DEPARTMENT

General information:

Name of respondent: _____

Name of the organisation: _____

Position in the organisation: _____

1. Where are the slum communities in the Kumasi Metropolis?

2. What was the process of slum formation in the Kumasi Metropolis?

3. Did you plan the areas which degenerated in slums? Please, indicate.

4. What are the main difficulties in planning in the Kumasi Metropolis?
Zoning _____
Development control _____
Waste management _____
Traffic management _____
5. Have you implemented any slum upgrading programme? Describe it, please.

6. Do you have any special plan for slum communities in the metropolis?
a. Yes ☐ b. No ☐
7. If yes, what are your interventions for slum communities?

8. Is there any collaboration with other institutions? Please, mention them.

APPENDIX 4
PLANNING DEPARTMENT
FACULTY OF PLANNING AND LAND ECONOMY
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

This interview is part of the research “Financing housing improvement in slum communities in Ghana: The case of Kumasi Metropolis” for the Master Programme in Development Planning and Management of the KNUST. The objective of the interview is to know the planning in Kumasi and the service provision in slum communities as well as the government initiatives for slum upgrading.

INTERVIEWS

C. INSTITUTIONAL INTERVIEW

Date: _____

C. 2. ELECTRICITY COMPANY OF GHANA

General information:

Name of respondent: _____

Position in the organisation: _____

1. Where are the slum communities of Dakodwom and Ayigya-Zongo?

2. What is the type of electricity service provided in slum communities?

3. What are the main difficulties for providing electricity to slum communities in the Kumasi Metropolis?

4. Have you implemented any slum upgrading programme? Describe it, please.

5. Do you have any special plan for slum communities in the metropolis?

a. Yes ☐ b. No ☐

6. If yes, What are your interventions for slum communities?

7. Is there any collaboration with other institutions? Please, mention them.

APPENDIX 5
PLANNING DEPARTMENT
FACULTY OF PLANNING AND LAND ECONOMY
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

This interview is part of the research “Financing housing improvement in slum communities in Ghana: The case of Kumasi Metropolis” for the Master Programme in Development Planning and Management of the KNUST. The objective of the interview is to know the planning in Kumasi and the service provision in slum communities as well as the government initiatives for slum upgrading.

INTERVIEWS

C. INSTITUTIONAL INTERVIEW
C. 3. GHANA WATER COMPANY

Date: _____

General information:

Name of respondent: _____

Position in the organisation: _____

1. What is the type of water service provided in slum communities?

2. What are the main difficulties for providing water to slum communities in Kumasi Metropolis?

3. Have you implemented any slum upgrading programme? Describe it, please.

4. Do you have any special plan for slum communities in the metropolis?
a. Yes ☐ b. No ☐
5. If yes, what are your interventions for slum communities?

6. Is there any collaboration with other institutions? Please, mention them.

APPENDIX 6
PLANNING DEPARTMENT
FACULTY OF PLANNING AND LAND ECONOMY
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

This interview is part of the research “Financing housing improvement in slum communities in Ghana: The case of Kumasi Metropolis” for the Master Programme in Development Planning and Management of the KNUST. The objective of the interview is to know the planning in Kumasi and the formation of slum communities as well as the government initiatives for slum upgrading.

INTERVIEWS

C. INSTITUTIONAL INTERVIEW

Date: _____

C.4 KUMASI METROPOLITAN ASSEMBLY

General information:

Name of respondent: _____

Name of the organisation: _____

Position in the organisation: _____

1. Where are the slum communities in the Kumasi Metropolis?

2. What are the main difficulties in planning in the Kumasi Metropolis?

Zoning _____

Development control _____

Waste management _____

Traffic management _____

3. Have you implemented any slum upgrading programme? Describe it, please.

4. Do you have any special plan for slum communities in the metropolis?

a. Yes ☐ b. No ☐

5. If yes, what are your interventions for slum communities?

6. Is there any collaboration with other institutions? Please, mention them.

APPENDIX 7
PLANNING DEPARTMENT
FACULTY OF PLANNING AND LAND ECONOMY
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

This interview is part of the research “Financing housing improvement in slum communities in Ghana: The case of Kumasi Metropolis” for the Master Programme in Development Planning and Management of the KNUST. The objective of the interview is to know the planning in Kumasi and the formation of slum communities as well as the government initiatives for slum upgrading.

INTERVIEWS

C. INSTITUTIONAL INTERVIEW

Date: _____

C.5 WASTE MANAGEMENT DEPARTMENT KMA

General information:

Name of respondent: _____

Name of the organisation: _____

Position in the organisation: _____

1. What are the main difficulties in waste management in the Kumasi Metropolis?

2. What is the type of waste collection service provided in slum communities?

3. Have you implemented any slum upgrading programme? Describe it, please.

4. Do you have any special plan for slum communities in the metropolis?

a. Yes ☐

b. No ☐

5. If yes, what are your interventions for slum communities?

6. Is there any collaboration with other institutions? Please, mention them.
