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KUMASI, GHANA**

**Exploring Potential Interventions for Improving Affordable Housing for Low
Income Earners in Ghana**

by

Alex Adzinku (B-Tech in Building Technology)

A dissertation submitted to the Department of Building Technology, College of Art
and Built Environment in partial fulfillment of the requirement for the degree of a

MASTER OF SCIENCE

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DECLARATION

I hereby declare that this submission is my own work towards the MSc Construction 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.

ADZINKU ALEX (PG 9126713)

Student's Name & ID

.....

Signature

.....

Date

Certified by:

DR. DE-GRAFT OWUSU-MANU

Supervisor(s) Name

.....

Signature

.....

Date

Certified by:

DR. T. ADJEI-KUMI

Head of Department Name

.....

Signature

.....

Date

ABSTRACT

On the onus that Affordable housing includes not just the inert structure known as a house but then the gamut of some aspects of the environment which enhance living making it more acceptable and satisfactory. The study's aim was therefore to identify prospective interventions for improving affordable housing deficits of low income earners in Ghana. An extensive literature review was conducted on accessibility to affordable housing; challenges in providing accessible housing; intervention for improving accessible housing. The results obtained from the literature review provided the basis of the development of structured questionnaires and interview for the field survey. Philosophically, deductive reasoning to knowledge was adopted culminating into the adoption of quantitative methods in which information was elicited from 150 and 10 respondents using questionnaires and interviews respectively. All distributed questionnaires were retrieved representing a 100% response rate. Successfully, the statistical analytical tools utilized in data analysis include Relative Importance Index and descriptive analysis. The key findings of this study led to establishing the fact that, most people in Ghana live in houses which do not belong to them and also considering the affordability of accommodation of respondents' majority of the population considers their accommodation not affordable. Results from the study also shows that the two main challenges in providing affordable housing are Weak housing policies and Poorly developed housing institutions and Improved financing mechanisms to low income earners and Innovative financing to help housing developers are the two main strategies which aid in improving affordable housing in Ghana. The study recommended that government should come up with mechanisms to help people to afford housing, make available access to better security, water as well as sanitation of tenure in affordable housing units and strengthen its weak housing policies and poorly developed housing institutions. Finally, the study concluded that improved financing mechanisms to low income earners and Innovative financing to help housing developers are the two main strategies that are essential in improving affordable housing in Ghana.

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DEDICATION

This Thesis is dedicated to the ALMIGHTY GOD

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Among the foremost challenges confronting humans as far as the twenty-first century is concerned is housing the urban poor (Olotuah and Bobadoye, 2009). Even though studies have revealed that housing problem has become a global worry, it is nevertheless more serious considering less advanced countries like Ghana. In emerging countries like Ghana, the problem of housing fundamentally connects to both quantitative and qualitative inadequacies. On the side of supply, a number of government approaches have been devised in the past for the attempt of incapacitating the mammoth shortage by way of a number of housing restructuring schemes. In spite of the past efforts, housing still remains as a mirage to the low income earner in Ghana. Low income earners in Ghana enormously find it difficult to afford three square meals a day let alone afford comfortable accommodation (Abongo, 2009).

Affordable housing includes not just the inert structure known as a house but then the gamut of some aspects of the environment which enhance living making it more acceptable and satisfactory (Abongo, 2009). Among them include access to basic need like water, good access routes, sanitation as well as proper ventilation systems. The affordability of housing therefore includes the households' ability to make use of other pertinent requirements of life like clothing, food etc. as well as accessing adequate accommodation Aikins and Ofori-Atta, 2007). Housing, most especially affordable housing is extremely complex and as well income exhaustive for the involved parties (CHF, 2004). However, it should be made known to all parties that, the least recognized accommodation standards contrast between countries, as geographical and economic

conditions become factors. Generally, the acceptable standards upsurge with levels of income, and what is being contained in the home likewise expands.

From the UNHabitat (2011), it enshrined in the Habitat Agenda the global call of human settlement and shelter that, it is the right for everyone to have access to a safe, healthy, secure, inexpensive and adequate housing. However, a recent estimate of the population of slum and squatter settlement dwellers in Ghana is 5.4 million (Aikins and Ofori-Atta, 2007). The critical short supply of housing resulting in huge housing deficits is a sign of under-development (Todaro and Smith, 2009), which echoes the health state of a country. For any country to gain the benefits that come along with the consumption of the aforementioned basic good, the good should be affordable to virtually every household. In Ghana, the case of affordability of the basic good is totally different. There are not enough units of housing in the country; even majority of these housing units are underdeveloped lacking basic amenities to render them fit for human habitation (Boamah, 2009). Ghana undergoes a rigorous housing deficit due to the low housing distribution comparative to growth of households. In 2002, the Home of Finance Company Limited (HFC) estimated that, Ghana had a projected malcontent housing need of about 1,232,835 units, with a probable yearly demand of about 133,000 units. Nevertheless, just about 25,000 units of housing are being produced yearly aside the unsatisfied yearly demand of about 108,000 units. According to the Ghana Statistical Service (GSS) (2002), over 52% of the housing units in Ghana provide accommodations to between two and four households. The housing shortfall within the country as Mahama and Antwi (2006) stated was about 1,526,275 units of housing. As at the year 2000, the deficit in housing just within Kumasi was about 164,219 according to the GSS (2005) and the city of Tamale stood at about 18,690 housing units. Base on

the housing deficit in Ghana, majority of Ghanaians today “sleep rough” most especially in the cities of Accra, Sekondi-Takoradi, Tamale, Tema and Kumasi. Example, 1.9% out of the entire Ghanaian population depends on shift dwelling units like tents, containers, attachment to shops, offices, kiosks, and cargo containers for shelter; this is plus the 3% of the homelessness (GSS, 2002) as well as those in market places, lorry parks, and on the streets. Approximately 6,000 households in the city of Kumasi as well as 1,700 households in the city of Tamale sleep one or the other on the streets, in front of shops, lorry parks, or in markets (GSS, 2005). There exists therefore increased policy interest with the usage of explicit planning levers for promoting or securing explicit affordable housing prospects through residential expansion and revamping processes.

In view of the important function of housing considering the complete well-being as well as man’s productivity, this study states that the quandary of the inner-city poor or low income earners, who are considered the least able for the affordability of decent housing, merits distinct consideration if they are to underwrite meaningfully towards the economies of the country’s cities most especially as well as the nation’s economy overall.

1.2 PROBLEM OF THE STUDY

The United Nations has declared housing to be a basic human right (UN-Habitat 2002). However, the rapid and continual growth in the urban areas has not been matched with the equivalent and relevant housing stock. This situation of disproportionate population growth as against housing development has led to the current heightened housing deficit that the country faces. According to Abongo (2009), the country's housing shortfall stands a million (1,000,000) and over units of housing. This implies that, there is the need for a minimum of hundred thousand housing units annually for the next ten years and over to meet this deficit. Currently, the housing stock in Ghana, averagely of about 25,000 units of housing per annum, thus falls below the desired levels (Aikins and Ofori-Atta, 2007). The resulting imbalances of urban population growth and provision of affordable housing units is the formation of informal settlements in Ghana. Again, this imbalance has led to the development of slums and squatter settlements of previously well maintained neighbourhoods and communities in the nation's cities. A recent estimate of the population of slum and squatter settlement dwellers in Ghana is 5.4 million (Aikins and Ofori-Atta, 2007).

The Centre on Housing Rights and Evictions (2004) blames the problem of poor housing supply to low income earners in Ghana on the lethargy of government policies as well as civil society's incompetence of providing housing for both the poor and the middle-income citizens through appropriate interventions. Furthermore, housing deficits and an upsurge cost of rent for just a decent accommodation is burdening the poor with limited choices, which include squatting illegally on private or public property. Failure to improve the housing deficiency of low-income residents in Ghana is likely to result in serious social, economic and political challenges (Farvacque-

Vitovic and Godwin, 1998). There is, therefore, a need to look at other approaches or interventions which have the potential to improve low-income people's access to affordable housing.

1.3 AIM OF THE STUDY

The study aims to explore prospective interventions for improving affordable housing deficits of low income earners in Ghana.

1.4 OBJECTIVES OF THE STUDY

The research objective was mainly to search the potential interventions for improving housing affordable to low income earners in Ghana amidst the growing urban population. The study specifically sought to:

1. Identify the accessibility options to affordable housing in Ghana;
2. Identify the challenges of providing affordable housing for the low-income households in the country; and
3. Identify strategies for improving affordable housing for low income earners.

1.5 RESEARCH QUESTIONS

On the basis of the direction as well as the emphasis of this research, a number of critical questions are deemed necessary to be answered. Below are these questions:

1. How accessible is affordable housing in the in Ghana?
2. What are the challenges in providing affordable housing projects for low the income households in the country?
3. What are the various strategies for improving affordable housing for low income earners?

1.6 SIGNIFICANCE OF THE STUDY

Currently the measures and policies to resolve the social, economic and environmental problems of slums and squatter settlements in Ghana have eluded successive governments of Ghana and left authorities perplexed about policies to adopt. Previous efforts have achieved little in terms of addressing the underlying dynamics which are responsible for the development and sustenance of affordable housing projects for low income earners. There is a popular adage that, homelessness strangles the flow of democracy that runs low through a nation. Therefore, this research could be very useful to policy makers, researchers, stakeholders and the general public. Currently, there is a national housing policy in the draft stage according to the Ministry of Water Resources, Works and Housing, to see to the head on the Ghanaian housing shortfall which currently is in excess of about 1.7 million. The policy looks at six key areas including housing design and construction, land for housing, institutional reforms, a national housing vision, goals and objectives, housing governance, and housing finance. This University of Ghana research will be very significant given the fact that a national housing policy is still in the draft stage and yet to be approved by cabinet. The findings of this study will contribute to the effective realization of the objectives set out in the policy yet to be approved.

The present research aims to fill the gap between the drafted policy and the realities on the ground and contribute to the knowledge by providing a strong empirical foundation for discussions and a starting point for detailed social and economic assessment of improving inexpensive housing to the Ghanaian low-income earners. Meticulous analysis of the grey area of limited information provided by Ghanaian literature on affordable housing may provide answers to the many questions surrounding slums and squatter settlements of low income earners in Ghana and beyond. The research findings

will also offer a foundation for recommendations for policy measures, to enable planners and policy makers to make informed decisions about affordable housing for low income earners. This thesis, therefore, focuses on assessing the plausible interventions for improving inexpensive housing to the Ghanaian low-income earners. Of equal importance is the fact that the study provides data which improves the understanding of affordable housing projects for low income earners and enhances efforts to help low income earners living in deplorable housing conditions in many Ghanaian communities.

1.7 SCOPE OF THE STUDY

The scope of this research is limited to identifying the various affordable housing projects in Tema, accessibility to affordable housing, the interventions for improving affordable housing for low income earners, the success and failures of the intervention policies of affordable housing, and the challenges of the reasonably priced housing projects for low income earners in Ghana. Geographically, this research was restricted to the Tema Metropolis in Ghana. This was due to proximity of the Tema Metropolis to the researcher which made questionnaire retrieval easier.

1.8 SUMMARY OF METHODOLOGY

This study adopted the mixed method, thus both quantitative and qualitative research approach. The mixed method defines a research design which has a philosophical assumptions and methods of scientific investigation. Primary as well as secondary sources of data were employed for the study. The use of both gives credibility to the study (Patton, 1990). Data were collected from residents by use of questionnaires which were mainly administered face to face to selected households and professionals.

Interviews were also carried out in the ministries. Statistical analysis of the results was done with the use of Relative Importance Index (RII) to rank sections C and D. Non-parametric statistical testing such as descriptive statistics and mean score index was also utilised.

1.9 LIMITATION AND DELIMITATION OF THE STUDY

In spite of the expedient findings of this research, there are several limitations which must be acknowledged. Findings of this research relies on respondents' honesty. Respondents would agree further on socially required answers and disagree towards the opposite before fully and truly expressing their feelings and sentiments. Another limitation of this study is the collection of data through the surveys, as a result, the inaccuracy of information gathered stands probably high. Furthermore, the small sample size keeps a tight rein on the reliability as well as the generality of the research. Regarding the delimitation of this research, the study limits itself to the affordable housing accessibility, the success and failures of reasonably priced housing intervention strategies, and the challenges of reasonably priced housing policies in Tema in the Greater Accra region of Ghana.

1.10 DEFINITION OF TERMS

Urbanization - Urbanization defines the process through which huge numbers of people become concentrated permanently on comparatively small areas which forms cities. The internal rural to urban migration refers to people moving from the smaller towns to the major ones. Consequently, the population size of the people within the cities upsurges as compared that to the people living in the smaller towns and their suburbs. Natural upsurge in urbanization can thus occur on the condition that the natural

population expansion within the cities becomes higher compared to that of the rural areas. Scenario like this infrequently occurs. For a country to be considered as urbanize, 50% of the country's population must live in the major cities as Long (1998) stipulated.

Urban area - An urban area is a settlement with more than 5000 people, and has modern facilities such as electricity, schools and some industries (the 2000 population and housing census of Ghana).

Population growth - Population growth defines the upsurge in the number of people living within a particular jurisdiction be it a country, state or city (UNFPA, 2007)

Slum - A slum is a densely populated area with low standards of living. According to UNHABITAT 2011, slum is a run-down of a particular area within a city which is characterized by subnormal housing, filth, and requiring tenure security.

Housing Deficit: This refers to the deficiency in the number of housing units require to provide lodgings for the population within a particular area (BoG, 2007).

Supply of housing: The supply of housing is produced through the usage of land, labour, as well as other inputs like building materials and electricity. Supply of housing is the total units of houses that can be put up and made available on the markets for consumers to buy. The supply quantity is ascertaining through the inputs' cost, the worth of the current stock of housing units, as well as the technology used in production (Payne and Majale, 2004).

Affordable housing: This defines the accommodation system befitting the requirements of a series of low to temperate income homes and priced for the purpose of these family units also being able to afford other pertinent costs of living like education, medical care, transport, food, clothing etc. Housing itself is generally

considered as being affordable should the costs be less than 30 percent of the gross household income.

Access to housing: Accessibility refers to the degree to which housing units available is able accommodate the entire population of an area. Accessibility can also be looked at from the perspective of being the "ability to access" as well as benefit from a particular system in this case from housing (MWRWH, 2009).

1.11 ORGANIZATION OF THE STUDY

The structure of this thesis is in five interrelated Chapters. The first chapter, that is, the chapter one introduces the topic and as well gives the background information concerning the study area, the aim and objectives of the study, research problem, limitations as well as the study's significance. The Chapter two primarily reviews other pertinent literatures which in relation to affordable housing provision to low income earners or the urban poor. In the Chapter three of this study, the methodologies employed are emphasized. The Chapter Four deals with the presentation and interpretation of result, data analysis from both a qualitative and a quantitative viewpoint. In conclusion, the chapter five makes discussions on the results, as well as providing an over-all review of the study's achievements and failures. The Chapter five additionally outlines some conclusions as well as recommendations which were made in phases of the research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The chapter two as stated earlier reviews pertinent literature of other researchers both locally and internationally in the area of housing in Ghana, government housing interventions over the years, policy responses, policy interventions as well as the delivery of housing in Ghana, and the formal finance and delivery of housing in the country. The chapter further explores studies on housing affordability issues, affordability policies, the effects of declining housing affordability, and the challenges of housing affordability.

2.2 HOUSING OVERVIEW IN GHANA

Housing is an issue of importance to every Ghanaian. Comparing Ghana to other African nations, housing of the urban population is very poor in terms of the number of persons per room occupancy and the substandard nature of our dwellings (UNHABITAT, 2010). The principal stakeholders in the housing sector in Ghana are predominately individuals, private developer, the Government of Ghana and some Non-Governmental organizations. NGO's such as UNHABITAT and Shelter for Humanity have been engaged in housing especially in rural Ghana (UNHABITAT, 2011; UNHABITAT, 2010). Urban housing has however been the responsibility of mostly individuals with the private commercial developers and the government contributing very little towards it.

The Government though, from history, has been of support to the housing sector. In the era of pre-independence, the administration led by British was included in housing systems financially supported by the federal administration. The Department of Social Welfare and Housing (DSWH), was primarily responsible for the implementation of these housing schemes. The department oversaw the construction of seven funded estate housing within the cities of Accra, Takoradi and Kumasi between 1946 and 1948. These estates provided only for colonial administrators, urban public, war veterans, and civil servants. These schemes did not benefit the majority of low income families outside urban centres.

By 1982, after the combined efforts of the different governments and regimes: from Sir Gordon Guggisberg through independence of Nkrumah and the coup d'états of General Ankrah and General Acheampong to that of Flt. Lt. Rawlings, public housing, provided by government with both internal and external funding, had contributed only a low of 10% of total house delivery in the country; as compared to 80% of individuals' developers. BY 2006 contribution to the country's housing stock by individuals has clocked to 90% of the total stock available (Kwofie et al., 2011). The issue of the government's involvement has been really lacking since the 1980's to date. Planned housing schemes of the various governments have either not been completed or failed to even start. Private developers contributed an average of 5.5% in 1982. This performance can only be attributed to the downturn of the economy within the nation state during the period. Private developers however raised their stake to about 8% in later years.

Government's contribution to housing over the past decade has been very minimal. This is manifested by the reality that all Affordable Housing schemes brought forward by the government of Ghana from 2001 to 2008 have never completed. In many of the cases, poor planning, final lacks of funds and administrative hurdles and disagreements have led to the unfortunate abandonment of project to be started or even projects half way through completion. Recent examples of such failures is the Government's Affordable housing scheme and STX housing project which collapsed due to mainly lack of funds and management and administrative disagreements- reasons attributable per instance. It is therefore easy to say without reference and with the benefit of hindsight that there has not been any housing contribution from the government in the past decade and there is not sole ministry dedicated to housing as per concrete evidence in Ghana. It is thus prudent to state that the government has played no active role in the delivery of housing in past three decades.

Heightened rural-urban migration has cause an increase in the urban population resulting in shortage of housing in the country's major cities. Arguably, the shortage can be attributed to the fall in supply beyond expectation; and consequently the rise and intensification of slums and squatter settlements (Songsore, 2009; Kwofie et al., 2011). The known traditional compound households which served for families are no longer being built. Urban dwellers in the country occupy rooms in all sorts of multi-occupied residential facilities. Houses in urban areas are mostly built without the local government authority and are thus classified as informal. These unauthorized building make up about 90% of all constructions (UNHABITAT, 2011). Again, these buildings are considered as substandard as per building classification methods, due to their lack of access to adequate water, warmth, and sanitary facilities.

2.3 DEFINING AFFORDABLE HOUSING

Affordable housing defines the accommodation system befitting the requirements of a series of low to temperate income homes and priced for the purpose of these family units also being able to afford other pertinent costs of living like education, medical care, transport, food, clothing etc. Housing itself is generally considered as being affordable should the costs be less than 30% of the total income of a household. Generally, the affordability of accommodation is in connection with the ease with which various family units in all the income groups are able to access accommodation. The Maribyrnong City Council (2008) defined housing affordability as “a well-sited and energy efficient housing system apt in meeting a particular household needs, (with access to transport, employment, as well as goods and services) with the cost (be it rent or mortgage repayment) not been more than 30% of the income of that household”. The cost of housing which exceeds this 30% generates ‘housing stress’, mainly for the people within the lower 40% of the scale of income distribution.

Worldwide, the negative impact due to the concentration of urban poverty is increasingly become a societal and economic impasse. Such concentration of poverty results in socio-economic problems such as: reduction in social contacts, safety and security, investment opportunities and consequently rise in crime and vandalism. It is also perceived that the concentration of low income households leads to rapid and increased neighbourhood deterioration and decay. This situation accordingly, affects the quality of life in the neighbourhood with unavailability of services and social infrastructure due to lack of maintenance (Beckhoven and Kempen, 2003; Kempen et al., 2009; Songsore, 2009).

A high level and rate of need for housing in Africa has been one of the fundamental basis for restructuring on the continent. Restructuring endeavours in Egypt and South Africa for example, have mainly been undertaken to help provide housing and basic social amenities for the ever increasing urban population of these countries. The end result of rural-urban migration, mainly for underprivileged citizens, is the constant build-up of informal settlements around and within many cities. Restructuring actions and activities in Egypt and South Africa have succeeded in improving the economic and social viability of the communities involved (Hassan, 2012; Watson, 2009)

Specific factors must serve as prerequisite in the analysis for implementation of a restructuring housing scheme. These variables also help ascertain an area's eligibility for a restructuring intervention as well as the analysis of success or otherwise of the end result of a scheme. Such assessment of variables has been examined and dealt with by author such as Beckhoven and Kempen (2003); Chan and Lee (2008), Adarkwa and Oppong (2007); and Kempen et al. (2009). The variable of consideration includes: Household income, Availability of social infrastructure, residents' satisfaction with dwellings and with housing environment, Preservation of local characteristics, Townscape design, Accessibility, Ability to fulfil psychological needs, Availability of job opportunities, motivations in the neighbourhood and confidence in the neighbourhood. In many cases, communities with high concentration of low income people faces challenges economically and socially and therefore disproportionately tolerate the economic and social weight of unemployment, corruption, deteriorated housing, as well as poor health (UNHABITAT, 2010).

The availability of social amenities such as: schools, health centres, accommodation, opened and green spaces enhance social interaction in the restructured community. In a

case study of Dutch cities, Beckhoven and Kempen (2003) asserted the fact that the fundamental principle underlying the Dutch restructuring was to enhance social interaction within the restructured areas; through the provision of social amenities and services, hence improving the social wellbeing of the residents. To emphasize this viewpoint, Adarkwa and Opong's (2007) also outlined the benefits of the provision of social infrastructure to the social wellbeing of people. Herein, the authors stressed the fact that the provision of rooms with less density than previous ones, in some selected rural areas of Ghana by Habitat (accompanied with the delivery of basic facilities like sanitary facilities as well as storage) has improved the quality of life in these areas. In addition, the availability of communal facilities such as water points, medical centres and educational infrastructure has greatly enhanced social contact and interaction and consequently developed social network within the communities. It is well established in literature that many low income earners are not satisfied with the dwelling conditions of the inhabitants. On this basis, the fundamental is on verifying if the housing units meet the basic standard of classification of a house. This is on the viewpoint that housing units should have basic amenities such as: a toilet, kitchen, bathroom, and refuse facility (UN-HABITAT, 2008; Adarkwa & Opong, 2007). The satisfaction of low income earners with regards to housing environment can be measured on the basis of room densities, appropriateness of landscaping and other factors that impact on environmental hygiene, safety and security and disease prevention and control; thus, improving on the general wellbeing of the people. Accordingly, what links poverty reduction and improved housing environment and good health is well valued upon one's consideration of the impact of the physical environment on improved surroundings and health, in addition to the physical environment's services and facilities delivered by the unit of housing (Adarkwa and Opong, 2007).

To increase the affordability of housing to low income earners there is the need to make available job opportunities. Availability of jobs enhances social contact and reduces social vices (Chan & Lee, 2008). Employment boosts the social welfare of people. Employment produces income and provides social contact as well as interaction. Omann and Spangenberg (2002) affirmed that when employment increases, social and psychological problems decrease. It is also believed that spatial concentration of the poor, especially through increased unemployment, puts such areas (areas with high concentration of poor and unemployed) under pressure (Beckhoven & Kempen, 2003). The authors further explained that residents in areas with less job opportunities are restricted in their choices as individuals and again by norms and values prevailing in these communities (Beckhoven & Kempen, 2003). Other assertions furthermore assert that communities with concentration of poor people due to unemployment produce more criminal youth, with poor academic records as compared to restructured communities with job availability (Kempen et al., 2009). This situation is as a result of the high criminality in these areas which sway the youth on the criminal path. In a more specific sense, the creation of houses has led to the creation of employment in some selected rural areas of Ghana; enhancing lives and creating sustainable communities (Adarkwa & Oppong, 2007). According to Chan and Lee (2008), accessibility has proven to be a vital part to attaining vitality in a restructured area. The authors affirmed that the freedom in moving from places to places becomes the fundamental human right and should be encouraged in a community. Regardless of age, every individual in a community should have access to communal facilities and should be able to move freely in their daily activities. In addition, people prefer to work and participate in communal activities without having to travel out of their communities. Adarkwa and

Oppong (2007) for example, confirmed of the opening-up and improved accessibility by road and well defined edges in communities where re-planning and housing was undertaken by Habitat, thereby helping to achieve the basic human right to movement.

The townscape design of houses and their environs defines affordability of quality housing schemes. According to Chan and Lee (2008), the visual image of a community: the streets, furniture, and pavements, the interconnectivity of the streets and layout, bring out the uniqueness of a place and develop a sense of belonging among the people. When the visual appearance of a community is pleasant (in the terms of density, height, massing etc.), the people are able to relate more to it; hence having a positive impact on the social sustainability of the place. Security is an essential component of the basic human need which also encompasses affordability of quality housing. This could be in the form of physical or social security. According to Chan and Lee (2008), the physical security of a restructured community is very crucial to the social sustainability of the community. People feel comfortable to live in areas which are burglar free and vandalism is absent. The authors further explained that involving the residents in the planning and design process of a restructuring process help fulfil aspects of their psychological need; as they develop and feel a sense of responsibility and belongingness. The involvement of the public also contributes to a high level of public surveillance system as individuals are informed of happenings in the community. According to Adarkwa and Oppong (2007), the beneficiaries of the Habitat for humanity housing in Ghana have gained a life- long security through the initial acquisition to the superannuation of the mortgage which was a wealth creating act. This act has given them the opportunity to invest in themselves to change their circumstances.

2.3.1 Affordability of Housing in Accra

Provision of housing in the Ghanaian urban areas has been characterized by an ever-increasing and a very high cost for both public buildings and residential (Osei-Tutu and Adjei-Kumi 2009). Affordability is basically one's capacity to afford housing. Affordability has to do with whether the cost of housing, form, and technology are attuned with the flow of income for a particular prospective customer of housing and as it stands income groups are the low, middle and high incomes depending on the different economic backgrounds. According to Yalley and Ofori Darko (2012), affordable housing is a residence in which the housing units available is within your means to the people living in them. The Bank of Ghana (2007) stated that, housing is generally one major item that is found in the budget of a family. Expensive housing can strain the budget of the family, limit the availability of incomes purposed for other needs like education, utilities, saving for retirement and emergencies, health care, transportation etc. The United Nations Global Report on Human settlements emphasizes this by saying that, the price for a complete housing unit could be about 2.5 to 6 times the yearly wage in average wise as Okpala *et al.* (2006) opines.

An individual's ability to afford a particular residence or even rent an accommodation in Accra, largely depends on the type of house or accommodation being offered as well as the level of income flow of the prospective buyer. There are times when people with low incomes wish to have the best of facilities when it comes to housing which becomes a huge challenge. This is because unlike the western world where structures for long term loan facilities are made available even for the low income earners to be able to own a house, this is absent in a developing world like Ghana. According to Tomlinson (2011), the urban areas in Africa are facing the challenge of high rates of

development, causing expansion of unplanned settlements in their cities. These unplanned settlements served as homes for the people both the poor and the middleclass, since affordable housing is inadequate.

In the housing sector of any emerging country, it is to be noted that unlike the other world, private sector is well-organized as compared to the public sector in the provision of housing units (CHOHAN, 2010). Governments these days do very little when it comes to housing supply because of the challenges associated with it. It is agreeable that the private sector delivers the greater share of housing in Accra, valued to be approximately 80%, (Songsore, 2003), it becomes a bit problematic in terms of affordability for the middle and the low income groups to access affordable housing units. This is because the private sector is said to be willing to make profits at the expense of the current deficit than just supplementing the housing shortage. To go on further, when one takes into consideration the many challenges they also go through in terms of land acquisition, cost of building materials and also providing infrastructure like roads, electricity and drainage, their building units which is ideally the responsibility of government, the ones put on the market are way beyond the means considering the groups of low and lower middle income.

According to the UN HABITAT (2011), Ghana Real Estate Developers Association (GREDA) typically put up first-class houses, mostly gated with expensive estates, and in comparatively small quantities, with a total of approximately 2,100 between the years 2000 and 2007. They also have the tendency to give prices of most of these units of housing in dollars to the disadvantage of the low and middle income groups. Low price tags on any housing unit supplied by the private sector makes it very difficult for them as they rely on the forces of the market and the economic indicators for survival. By way of the ever increasing interest rates together with other hitches, it becomes

challenging for people to put up housing units accessible to the lower income group in the market according to a BoG (2012). Prices currently ranges between US \$18000 to US\$100,000.

Mortgage facilities provided by banks for the purpose of helping Ghanaians to access low-cost housing units comes with high interest rates alongside extreme conditions. According to a research by Bank of Ghana (2007), a small number of Ghanaian banks give mortgage loans and mostly their foremost clients are high net worth patrons meaning that only the rich are considered when it comes to mortgage facilities because they are more likely to pay back with interest than low and middle income earners. Just 8% of the entire population of Ghanaians will be able to afford in buying an asset without mortgage and even that, 15% Ghanaians can get mortgages (Segbawu, 2010). The leading Ghanaian housing finance institutions currently are the Home Finance Company (HFC) and Ghana Home loans.

In spite of the wish of individuals to personally own a house or dwelling, the inability to afford the terms for accessing housing and its related challenges has pushed many urbanites of which many fall in the middle and low income brackets to renting of accommodation which is relatively cheaper than ownership in Accra. Rakodi (1995) notes that greater attention has been paid to rentals in recent years and the most significant of rental housing to low income earners in the cities of emerging nation state has been underlined (World Bank, 1984).

The projected cost of rent averagely in the urban areas is said to fall within 100 and 200 Ghana cedi for each 2-bedroom facility for every month, forming approximately 80-120 dollars (Yalley and Ofori Darko, 2012). They further added that, averagely, the cost involved in renting exceed the annual income of a household in the urban areas, particularly when payments of rent are demanded by Landlords in advance from one to

five years and this is a major challenge renters face even in the midst of a Rent Control Act (act 220) which clearly states that rent advance should not exceed 6 months. Because of its lack of enforcement, it has become dormant and most landlords use it to their advantage. The Rent Control Division (RCD) was established under the Rent Act of 1963 with the aim of being in charge of checking as well as establishment of guiding principles which relates to rules for house owners and tenants 'relations for the creation of conducive environment for socio-economic growth of the country. RCD is usually enforced when misunderstanding between house owners and their tenants fails to be resolved cordially. RCD begun its carrying out its mandate in 1963 under the Act 220 having offices all over Ghana precisely in the ten regional capitals.

If the duties of the Rent Control Division be performed more effectively, there would be the assurance of adhering to this provision. According to Hefley and Curtis (1998), rent regulation is important for preventing residents from paying absurd rents quoted by some landlords and also too free many people in order to access better accommodation. Nevertheless, the rent regulations could also remain biased to landlords as the regulations may perhaps not permit charging the actual rent delaying quick investment returns. Tipple (1987) and Songsore (2003) have argued that though the cap on rent introduced by government some years back was intended to make housing affordable to the low as well as middle income earners, the cap on rent however had unintended consequences of discouraging individual developers from the creation of rental units of housing. Consequently, rental accommodation has been made more difficult to the low-income households in the urban to access.

Another phenomenon which has emerged considering the rental of units of housing is the use of housing agents who act as middle men between the clients interested in renting of any apartment and the Landlords or landladies owning those apartments.

These housing rent agents charge their own commission on the services they render and this adds to the overall cost of accessing an apartment to rent. Some real estate developers have even added this kind of service to their activities because it is becoming a lucrative endeavour. These and many more factors add to the demand for housing being more expensive in major urban cities like Accra than rural areas.

2.3.2 The Affordability Issue

Affordability is argued to be featured in two concrete distinct policy grounds: one of this policy grounds deals with the normal tenure of ownership and the relation it has with the state economy, whereas the second policy ground deals with the invest in the social rented subdivision. The first one is more effective in its influence on policy. Affordability defines the relationship existing between household's income and its expenditure. Affordability in the housing sector is now a normal means for briefing on the challenges associated with housing in most market-based systems of housing. A lot of authors have argued that, affordability of housing is affected by the distributions as well as levels of home prices, structure of financing costs, and household incomes as stated by Bramley (1994) and Ludwig et al. (2002). According to Wilcox (2003), affordability of owning housing is defined according to the regulations of mortgages finance access. Within the market of owner-occupied, affordability has improved primarily by rate of interests (notwithstanding there is a substantial price increase on houses). Affordability is again regarded to relate to housing cost, employment, incomes, housing availability, patterns of new construction, and maintenance of the existing affordable housing stock.

Quite a few efforts have been made for the purpose of understanding how as well as why problems relating to affordability are created. The exercise on aiding to better on

accommodation affordability for the lower income earners is properly established by the rent support provision to the ones inside the private rental market and through the delivery of subsidies to people in public housing according to Turner et al. (2009). Progressively, apprehensions have been raised on affordability effects for working families who are facing the challenge of renting or purchasing private housing that is nearby to their work places and who consequently bear the encumbrance either of weighty cost of housing or of substantial transport costs. Most of these households possibly will not be given any housing assistance in most nation states. These middle income groups were made to face their own challenges to enter home tenure, a dream desires by everyone. The increase in house prices, particularly in the urban areas has heightened the initiation of inaccessibility for the middle income groups in the housing sector. The middle income households are of interest as affordability turns to affects not only their ability in becoming a homeowner, but then the size as well as the type of home these groups are able to buy. Problems relating to affordability can be perceived to be operating at dissimilar levels, extending from direct experience of crucial problems concerning homelessness and poverty, through a halfway risk level, to an expansive challenge of access to the market. Quite a number of authors (Yates and Gabriel, 2006; Cairney and Boyle, 2004) have argued that the affordability of housing is subjective to the levels as well as the distributions of household incomes, prices of home, as well as the financing costs structure. Sustaining 'affordable housing' as a term would therefore refer to the housing planned typically to meet household needs of those with incomes which are not adequate to allow them access suitable housing within the sector without support. This study accepted that the most important contributing factors of the housing affordability: housing price, household income, and mortgage rates. As affordability is significantly affected by the levels as well as home prices distributions,

incomes of individual households as well as the financing costs structure, affordable housing with regards to the middle income households would be defined as the situation where payment of housing is less than 33% of gross income of a household. The study again contributes to the mien “affordable housing” which is in connection with the association of median incomes as well as market prices for a particular community. Mostly, it is basically an expression of material as well as social experiences of individuals, constituted as homes, relating to their housing conditions. Housing affordability articulates the problem individual household faces in the balance of the cost of its potential housing, on one side, as well as its non-housing expenses on the other side, all within the limitations of the household income.

Problems of housing affordability for the middle income earners in countries like Malaysia are prevalent in most urban areas in the Malaysian jurisdiction where many of these households find it hard in purchasing a home. The emergence of new townships, industrial parks, commercial hubs, and offices complexes certainly causes the upsurge in the working residents. The increasing population in major cities centres results an acute affordable housing shortage. Incessant exertions are carried out to ensure that the people of Malaysia of all levels of income will afford adequate and quality homes, especially the low-income earners (Ninth Malaysia Plan, 2006-2010). Nevertheless, citing Kuala Lumpur Structure Plan 2020 (CHKL, 2004) as an example does not involved low/medium housing cost group in the plan of units of housing to be constructed by 2020. Even though the stress on Structure Plan is purposed to provide more housing units in average cost range (for low/medium cost), precise policies on this were not stated clearly.

In this research, the middle income earners are categorized base on family income. It is on the basis of cultural and economic reflection. Additionally, cultural perspective of

the middle income earners appears to be the situation where the family is the characteristic unit of income. Important structural alterations have happened within families considering the last two decades, as result of large scale contribution of married women into the working force. The upsurge among household types contributes added drives to engaging the household in examining alterations in the middle income earners size.

2.3.3 Affordable Housing Policy

Policies relating to housing involve some form of multifaceted issues. A number of academic as well as policy contributions shows the degree of which policy relating to housing is mostly inconsistent and conflicting, rather than being in unintelligible course. The diverse tenure forms, the existence of distinct housing classes, regional variations, and the various physical characteristics of residences put forward some coinciding policy areas instead of a joined policy area where the possession of clear objectives by the state (Houlihan, 1988).

For housing analysis, it becomes significant not to think that markets function in precisely the similar way with the same influences having comparable effects in dissimilar settings. The very procedures through which costs of goods are formed and the factors of prices vary from one place to the other as Rodney (2008) opines. The fundamental concept of the market stands effective but contextualizing is indispensable should policy processes be better understood as well as policy ideas perfectly framed. Any evaluation on policy in a particular country is taking into account for both specific political and national economic factors as well as extensive forces working in the economy of the world in total (Haworth, 2004). This concept has been amassed in a formula that every country turns to be affected by these identical factors: the force of epochs and the force of national trajectories.

Housing is decisively fixed into the economic, political and social fabrics in most nations, making housing difficult to be studied in seclusion from wider scopes of governance as well as policy. Housing is affected by a number of forces within the society which operates over long times. According to Kajimo and Evans (2006), in addition to being a valuable property, housing has much wider cultural, social, personal, and economic importance. Housing has two significant dimensions: housing as a material for shelter and real estate, as well as housing as a spatial locus of life for families and individual where right to use as social as well as economic structural prospects starts, and where security in addition to privacy are located (Thalman, 2003; Bratt et al., 2006). There is a comprehensive consent that housing has core significance to everyone as it offers one of the rudimentary needs of every members of the society that is shelter, a number of writers argued that, significance of housing exceeds this. For example, Van Weesep (2000) stressed on housing that, it gives the inhabitants the offer in developing a preferred life style. Housing location has an effect on opportunities for work as well as access to service and conveniences.

A number of people are thoughtful of the physical as well the social characteristics of a resident when choosing a place to reside. Certainly, housing is of an enormous psychological significance as it is an essential part of one's definition concerning a social status and desirable quality of life.

In spite of the social implications of housing importance as a basis for public life, housing's real estate worth requires a comparatively large piece of one's revenue. As housing's task in providing a steady family life, privacy, security, citizenship, as well as opportunity is acknowledged, the housing policy framing in relation to affordability has been rhetorically developed simply on its worth as a material good. Since accommodation is usually professed to be provided via the market, there exist two

substitutes for the country to assist its citizens in the provision of housing. First of all, to assign housing particularly to family units who are not capable of providing for themselves concerning the general market. Secondly, to arbitrate in the implementation of the broad market for the purpose of making it likely to complete the accommodation needs of all family units as Bengtsson and Kock (2000) stated. These two methods match up to the difference between an extra and a complete housing policy as Lundqvist (1986) suggested. Again, Lundqvist (1986) argued that, the two dissimilar patterns of government intervention in accommodation alarm the range of intervention. He further suggested that, the more accompanying form of housing policy is narrowed to the scope whereby government intervention is geared towards meeting specific requirements as well as solving particular problems.

The most important objective concerning housing policy in most nation states was on one occasion just to build more residences. Consequently, it became the response to the need of market-driven supply on a state of affairs of socially professed large scale accommodation need according to Priemus and Dieleman (2002). The economic roles in such conditions are quite clear-cut. It proposes instruments of policy that would encourage production. In modern state of affairs, policies on housing have a number of objectives and are infrequently restricted to a box tagged 'housing'. They include, for instance, macroeconomic and environmental objectives and they reach into the territory of policies that come under such headings as 'health', 'social exclusion' and 'urban regeneration'. The interest of policy in housing prices may not be for the reasons of housing access and its affordability but the influences of expenditure of housing on inflation and economic steadiness.

2.3.4 Measuring Housing Affordability

The affordability of housing is mostly determined with a ratio measure of the level of household compared to income spent on a unit of housing. On the other hand, it can as well be determined with the level of a remaining income after costs of housing are covered. The rule of 30/40 is generally used as the basis for determining housing affordability. This rule outlines high-priced housing as housing which cost 30% or more of the income of a household for family unit in the last 40% of distribution of income. This rule reflects that higher income earners could elect in spending a higher amount of their income on housing while still financially strong. The rule of 30/40 is as well engaged in defining housing stress; nevertheless, this rule can be a biased determinant, with some adequate income family unit likewise undergoing stress. Yates et al (2011) explains the 'residual income' technique of determining affordability of housing as a substitute to the 30% income of the above definition. Residual income technique examines the income remaining after the exclusion of expenditure on pertinent items. If inadequate amount of income to cover rent as well as mortgage refunds sets in, then affordable housing challenge may exist. According to Yates et al. (2011), determining housing affordability with the residual income level displayed a higher occurrence of affordability hitches.

Residual income measure cause dissimilar effects. Whereas the 30/40 disposable income technique presented 23.9% of households having problem with affordability, the residual income measure revealed 33.6% may have problem with affordability. This report therefore suggests that the reflection of the fact of the 30/40 rule recognizes social housing tenants to be having problem with affordability, while the residual income measure proposes most of these tenants do. Furthermore, the rule of 30/40 does not recognize absolute owners to be having problem with affordability, in spite of

possible problems of affordability these family units may have as a result of living costs. Yates et al. (2011) therefore suggested that, for tenure in depth analysis, the composition of household as well as income type, the method of residual is likely to be precise.

2.4 GOVERNMENT HOUSING INTERVENTIONS OVER THE YEARS

Ghanaian governments over the years have made efforts to address the housings needs of the population through different schemes aimed at lessening the housing deficit of the country. Housing provision under the pre independence era was mainly committed to the provision of housing for workers for companies. These schemes were funded directly by the colonial government (Kwofie et al., 2011). Notably, no provisions were made for the poor in the society. During the era of Sir Gordon Guggisberg, as stated earlier, housing provision was solely for workers until the earthquake of 1920 which displaced native residence. Upon this state of affairs that the Government made attempts to take responsibility in providing shelter for the affected through The Dispossessed Person's Housing Scheme. Under the Dispossessed Person's Housing scheme, the victims were given loans and building materials for construction of new homes. The scheme was discontinued in 1933 until the 1939 earthquake. This second earthquake led to the creation of post disaster settlements such as: North-West Korle Gonno, Chorkor, Osu, Kaneshie, Mamprobi, and Abossey –Okai for public and civil servants; as well as rental units for the general public through hire purchase (Kwofie et al., 2011).

On the other hand, Governor Allan Burns' administrations come up with two schemes to help the housing sector. The first scheme was to construct houses with local materials

for people at affordable cost (Kwofie et al., 2011). The second scheme was to assist individuals, financially and technically to develop their own housing which met the standards of the Department of Social Welfare responsible then for the housing sector (ibid).

The colonial governments' activities in housing increased extensively in the early 1950s. It formulated a Development Plan in 1951, allocating £2.5 million for publicly-financed systems and offering up to £1600 loans for individual developers. There was also the allocation of £500,000 for slum clearance. Notwithstanding, these state interventions could not meet the demands of the urban populace which was rapidly rising. Consequently, rural parts were left out unfortunately (Arku, 2009).

The independence of 1957 saw the government making housing the core of its social agenda (Arku, 2009). The CPP government paid keen attention to the housing issue concentrating on urban centres which were having housing shortage due to heightened urban growth during the period. About 98% of urban growth between 1948 and 1960 was as a result of rural-urban migration. This state of affairs was as a result of the post war economic boom and the fact that the new CPP Government had initiated urban industrial and infrastructure developments; using the urban areas as growth nodes (Songsore, 2009). In the face of these events, efforts were thus made by the government to provide housing during the late 1950s and 1960s (Arku, 2009). The government hence devised three developmental plans. The first plan occurred between 1951 and 1956 and led to the formation of the State Housing Corporation (SHC) and the Tema Development Corporation (TDC); with TDC focusing on Tema and SHC on the other nine regions of the country at the time.

Tema Development Corporation was established with the mandate of providing housing units for the industrialized Tema Township with its working class. TDC dealt with the acquisition and the organization of Tema lands for the residential establishments, leading to the creation of communities 1 up to 8 complexes. The SHC on the other hand was established to provide housing in the nine regions for public and civil servant. It also was tasked to provide long term home financing options for government workers (Kwofie et al., 2011).

In the second Development plan from 1959–64 the government proposed 6700 housing units to be constructed. 200 units were for the middle-income earners, 1500 units for the low-income earners and 5000 housing units for labourers at prices of £2000, £500, and £200 per unit in that respect (Arku, 2009). The second plan also had aspects to continue with the provision of houses through the granting of roof loans (funding of individual buildings to roof) under the UN commission recommendation to workers to finance their homes. This plan also sorts to provide housing by imitating the mass post WWII residential construction of the European governments (Kwofie et al., 2011). This ideology for provision of housing units, led to the construction of some nine storey flats at areas like Lartebiokorshie in Accra under the SHC. This second initiative however failed to fully materialize with the overthrow of the government in 1966). The third plan formulated was a Seven-Year Plan from 1964–70. It involved a proposal for the construction of sixty thousand (60, 000) new housing units all over the country at a price of £44.5 million: £31.3 million for public housing as well as £13.3 million for low-income earners (Arku, 2009).

The two establishments TDC and SHC as well as Ghana National Housing Corporation (GNHC) and other quasi government agencies, like the Low Cost Housing Committee and the Bank for Housing and Construction were responsible for the construction, financing and marketing of the housing schemes under the development plans. All these agencies had their funding from the government until the 1990's when SHC and TDC were revamped into limited liability companies (Kwofie et al., 2011; Arku, 2009). Some parts of Accra, Kumasi and Sekondi-Tarkoradi were also developed by the Schockbeton Housing scheme also under the first developmental plan. This scheme was however abandoned due to the fact that the precast members introduced to make construction cheaper turned out to be expensive after production and was thus not sustainable (Kwofie et al., 2011).

The UP government from 1969-1972 had a one-year developmental plan to produce eight thousand (8000) housing units. It achieved about 22.2% numbering thousand seven hundred and seventy-six (1776) units in total. The failure to reach the planned target was attributed to lack of funds and a declining economic outlook that had geared-up in the 1970's. General Ankrah's regime, under the National Liberation Council (NLC) which had an ambition of total eradication and slow growth of slums had a two-year developmental plan. The target of this plan was to produce two thousand (2000) houses annually in collaboration with TDC and SHC. The NLC remained in power for 3 years and achieved a total of thousand (1000) housing units constituting a sixth of the planned target, given the time in office (Kwofie et al., 2011; Yeebo, 2007).

The PNP government from 1979 to 1981 developed two thousand two hundred and eighteen (2218) rental housing units through the SHC and TDC (Kwofie et al., 2011). The heightening decline in the economy with lack of external funding led to the

government introducing the use of local materials for construction. During the period also, the world construction industry has come to a halt and import of building materials had becoming extremely expensive. It must be noted that the economic hardship in the late 1970's compelled people to establish informal and unplanned neighbourhood in locations where they had access to markets and other social amenities. This led to the formation of informal settlements such as Kwashieman and Abeka in Accra. Particularly in 1979, the economic hardship then being experienced led to the development of Old Fadama, popularly known as Sodom and Gomorrah in the heart of Accra. This neighbourhood was predominantly occupied by people from the northern part of the country (Kwofie et al, 2011). Meanwhile, the challenges in housing deteriorated in the 1980s. This situation was demonstrated by poor physical housing conditions, unaffordable prices of housing, poor sanitation services and overcrowding (Arku, 2009).

The PNDC/NDC government, from 1981 to 2000 devised several housing intervention plans. Examples include: The Structural Adjustment Programme (SAP) and Economic Recovery Programme (SAP/ERP), Ghana Vision 2020, and The National Shelter Strategy (NSS) to help tackle the housing problems of the nation. Under the NSS in 1986, the national housing commission was formed to examine factors to ease the housing delivery crisis in the country. The commission came out with a policy geared towards creating an enabling environment for the private sector to take leading role in the delivery of housing units from 1987-1990.

The Vision 2020 plan from 1997-2000 was formulated to facilitate low income housing through Social Security and National Insurance Trust Scheme. The concept was to

enable contributors draw part of their funds to acquire housing. The plan was however not effective due to its unsustainable nature as of the period under review. Notwithstanding, the idea of contributors drawing part of their funds to acquire housing is being revisited under the Tier 2 of the country's new pension scheme (Nsiah-Gyabaah, K. (2009).

The financial crisis which had trickled down from the 1970's into the 1980's had led to the introduction of the SAP in order to allow cash flow in the system. The liberalization aspects of the SAP led to the government losing control over the housing industry. The effects of high rents as a result of expensive building materials led to the development of more slums and informal settlements in the urban centres. In effect and on the basis of these economic developments, the PNDC/NDC government made no visible contribution to housing from 1985-2000. It can however be said that, agencies affiliated to the government such as the Social Security and National Insurance Trust (SSNIT) with its interventions in housing projects and other accommodation units help relieve the government of housing crisis throughout the nation from 1988 to the late 1990's. SSNIT had expanded its intervention in 1988 in social housing for the public, providing housing units below the market price for the general public (Kwofie et al, 2011). The scheme provided housing units in Adenta in Accra, Sakumono in the Tema area, Anaji in Takoradi, Koforidua, Wa, and Kumasi (Kwofie et al, 2011). Due to financial crisis SSNIT was unable to continue with its social housing and sold out most of its units (Kwofie et al., 2011).

By 2001 the housing deficit in the country had swelled; with a housing requirement of about 2,240,220 with a yearly requirement of 58,896 (Kwofie et al, 2011). The NPP government from 2001- 2008, introduced a twenty thousand (20,000) units affordable

housing in 2001. By 2007, four thousand five hundred (4,500) of these units had been started but none had been completed before the change in governments 2009. Unfortunately for the country, the uncompleted units have now become the home for squatters. The following administration of the NDC from January 2009 to July 2012 did not continue with the affordable housing which had been initiated by the previous government. It embarked on a new housing plan known as the Ghana Housing Project; a private and public corporation between the STX Engineering and Construction Ghana and the Ghana government. Administrative and management disagreements so far have seen the project collapsed.

2.5 FORMAL FINANCE AND HOUSING DELIVERY IN GHANA

The formal finance institutions have made minimal contribution to housing delivery in Ghana. For instance, the total mortgages originated by the HFC in 2001 were US\$4.9 million; about 95% of all mortgages created in Ghana for 2001. The financial institutions have demonstrated that they attach little importance to mortgages as a form of investment (Boamah, 2009). The Commercial Banks have not been interested in housing finance; they focus on Treasury Bills and Bonds (Akuffo, 2006). High inflation rates have increased the credit, interest rate and liquidity risks for lenders in Ghana (Boamah, 2009). Long and medium term investments (such as housing credits) were therefore disfavoured by most banks. Though there is potentially large market size, the mortgage products in the country are inadequate; only few banks provide funds for housing investment, especially to their few worthier customers. The banks investments in the housing sector are insignificant. The financial institutions have provided extremely limited affordable housing finance to households in Ghana. The outstanding mortgages in the country are about US\$50 million and the share of housing credit in the

total loans of the banks are marginal (Bo G, 2007). None of the commercial banks have specific, stand-alone departments that engage in home mortgage finance (CHF, 2004). The ratio of Mortgage Debt Outstanding (MDO) to Gross Domestic Product (GDP) was 2.5% in 2004 and 3.9% in 2006 (BoG, 2007) indicating that the mortgage market is under-developed.

The effects of mortgage distribution channels in solving housing affordability problems by availing housing finance have been discussed by Green and Wachter (2007). Mortgage distribution channels can be divided into four major types: depository systems (lending funded by savings), directed credit (including provident funds and raised by taxes), specialized mortgage lending (through government regulated or owned banks or “covered bonds”), and, more recently, lending linked to secondary mortgage market systems achieved through securitization (Green and Wachter, 2007). Depository mortgage distribution channel is dominant in the UK mortgage system where home ownership rate is at 68 percent while Germany uses both depository and securitization. Home ownership in Germany is at 40 percent. In Korea, mortgages are currently funded almost entirely through private depository institutions that have evolved to replace government entities. This is the most common evolving practice in both Asia and Europe of relying on depositories, instead of the securities market, for mortgage funding (Green and Wachter, 2007). In the USA securitization has provided an important source of funding for residential mortgages across the country, including loans on housing for low- and moderate-income families. The effects of housing microfinance as a mortgage distribution channel in making housing finance accessible and affordable to the poor households who are often outside the reach of formal institutional intermediaries in housing finance has been acknowledged (Manoj, 2010).

Manoj (2010) in his paper titled “prospects and problems of housing microfinance in India: evidence from “Bhavanashree” Project in Kerala State asserts that housing microfinance is one of the growing portfolios of MFIs worldwide.

In India, to accelerate housing finance for low-income groups the Reserve Bank of India set up the National Housing Bank as a wholly owned subsidiary (LaSalle, 2012).

Okpala (1994) in his paper titled “Financing housing in developing countries: a review of the pitfalls and potentials in the development of formal housing finance system” argues that the availability of formal mortgage distribution channels is indispensable for effectively addressing the quantitative and qualitative housing problems in developing countries. United Nations, (2005) in their article titled “housing finance systems for countries in transition: principles and examples” asserts that there is no universally applicable model of a housing finance system. Every national housing finance system is a result of specific circumstances, such as the macroeconomic conditions, banking regulations, the size of the banking system, taxation, subsidy programmes and the structure of the housing market. These factors shape the path between bank-based and capital market-based mortgage loan delivery channels. Some studies have examined the effect of competition among mortgage distribution channels on interest rates charged to the borrowers (Gual ,1999; De Bondt ,2005; Allen et al., 2011; Allen ,2011).

Gual (1999) in his paper titled “financial structure and the interest rate channel of ECB monetary policy”, tests for the impact of banking competition on the transmission process related to euro area bank lending rates and finds that higher competition tends to put pressure on banks to adjust lending rates quicker when money market rates are decreasing. Also, higher competition tends to reduce the ability of banks to increase lending rates when money market rates are moving up. De Bondt (2005) in his paper

titled “retail bank interest rate pass-through: new evidence at the Euro area level “also argues that stronger competition from other banks and from capital markets has helped to speed up the euro area banks” interest rate adjustments to changes in market rates. Allen et al. (2011) in their paper “discounting; in mortgage markets” posits that the positive correlation between mortgage rates and branch concentration strongly suggests that mortgage rates are higher in less-competitive markets. Allen (2011) in his paper titled “competition in the Canadian mortgage market” also asserts that as competition in the housing finance market became more intense in the past few years, notably with the entry of new competitors, the consumers benefited from increasing choice in terms of rate and term options and payment features for their mortgage loans.

2.6 POLICY RESPONSES

The housing problem in many third world countries is said to be part of the general development problems. Thus, the seriousness of urban housing conditions largely results from a policy that encourages mass rural migration to a few urban centres. To solve this, National development plans should place emphasis on rectifying imbalances between town and country by the development of the rural areas, their villages and service towns, leading as far as possible to self- reliant regional groupings.

Urban growth has been accelerating for the last few decades and shows no sign of stopping in the foreseeable future. Attempts by many governments to control urban growth have proved expensive and inefficient and are possibly incompatible with the principle of freedom of movement enshrined in most democratic constitutions. Page and Seyfried (1970) note that it is unlikely that the housing problem can ever be solved satisfactorily so long as population continues to grow and with the excessive size of cities.

In broad terms, Ghana's housing policy has been branded as fragmented and piecemeal, and not comprehensive enough (NDPC, 2010; GoG/MWRWH, 2009). A recent research conducted by Owusu (2010) revealed that late 1950s to the early- 1980s marked the period which can be described as active and direct involvement of the state in the provision of mass housing. Two state institutions were set up, that is the State Housing Corporation (SHC) and the Tema Development Corporation (TDC) to provide housing units. While the TDC was recognized for the purpose of developing houses for the industrial city of Tema as part of a major industrialization drive, the SHC was formed to develop residential units in all the regions of Ghana. In addition, state-owned financial institutions such as the Bank for Housing and Construction (BHC) and the First Ghana Building Society were also time-honoured to provide financial support for public housing. This active involvement of the state in housing provision as explained by Owusu continued through the 1970s under the various military regimes of the time, of which special mention can be made of the construction of Low-Cost Houses in district and regional administrative capitals under the Supreme Military Council (SMC) regime of General I.K. Acheampong. The impact of the state provision was significant largely due to the period's low level of urbanization. However, deepening poor economic conditions of the country, especially in the late 1970s, due to economic mismanagement and political instability, resources allocated to public housing agencies ran dry (GoG/MWRWH 2009; Nsiah-Gyabaah 2009). These government housing agencies consequently turned out to be a near drain on public wealth and incapable of pursuing their fundamental mandate of public housing provision (Songsore, 2003; Nsiah-Gyabaah, 2009). The year 1985 marked the peak of the period and was still characterized with delivery deficits of 250,000 units. It can therefore be deduced from these that the schemes did not meet the national objectives (Gyamfi-Yeboah and

Boamah, 2003). A National Housing policy and Action Plan 1987-1990 then emerged as government's effort to boost the supply of housing units after appointing a committee on 2nd June 1986 (Gyamfi-Yeboah and Boamah, 2003). Government went on to increase the rate of developing housing units and dealt with bureaucratic processes for land acquisition and ownership, encouraged maintenance of existing units, promoted the construction of more affordable housing, improved government program and encouraged an expanded role of the private sector. According to NDPC, (2010), the present government is undertaking affordable housing schemes in the nation's capital Accra, to deliver housing units for the urban inhabitants so as to ease the housing delivery deficit which is presently pegged at 500,000 units. The aim of the program is to build 100,000 housing units for the middle and low income groups through public-private partnership. According to Payne and Majale (2004), a proper regulatory framework will have a significant bearing on urban development in general and in particular on planning, zoning, land use and plot development, space standards and University of infrastructure services. They went on to say that a good framework is also one of the few instruments available to governments to influence urban land and housing market and the investment decisions of private-sector developers.

It is however incomplete to ignore the efforts of the private sector as far as urban housing supply is concerned since government liberalized the supply of housing schemes to include private real estate developers to also help supplement the growing deficit. According to Owusu (2010), a number of policy documents on housing since the mid-1980s have emphasized strongly the role of the private sector in housing delivery. Although there has been no National housing policy guiding the activities of some private real estate developers, the private sector oriented policies concerning

housing has been under the umbrella of the Ghana Real Estate Developers Association (GREDA) whose members have been using international ethics of building codes over the years. According to Ahadzie (2007), the largest number of registered property developers in the country is found in the Greater Accra Region, mainly the Accra and Tema Metropolitan Area. These constitute not less than 70% of the total number of developers in the country under the Association. According to Bank of Ghana (2007), private real estate developers have built over 10,954 new homes since the establishment of the association in 1988.

2.6.1 Individual Households and Housing Delivery in Ghana

Majority of Ghanaian households make use of their long-term investments, loans, sweat equity, and transfer of funds from family members to construct their individual homes. Individual family units provide approximately 90 percent of the housing stock in the country. CHF (2004) proposes that, unofficial way of upsurge construction of housing generates a larger deliver of affordable housing currently in the Ghanaian jurisdiction. The supply of housing is determined by family units rather than the private housing developers or the central administration in Ghana (BoG, 2007). The normal ways assumed by various family units is to buy naked land and then start constructing their own units of housing. The yearly delivery of housing is approximately 30,000 units which are mostly provided via unofficial procedures; the official private housing developers' deliver about 2,500 units of housing at its peak as Akuffo (2006) opines. The informal sector consequently provides about 92 percent of the yearly housing production across Ghana. It is both expensive as well as unproductive to deliver units of housing via the incremental building course. This way of housing delivery significantly upsurges the cost of construction of housing and as well seizes resources which could

have been invested into income engendering projects for at least some amount of returns according to Boamah (2009). The incremental building process is extremely pricey aside it wasting resources and at times these properties turn out to be artistically as well as functionally out of date after completion.

2.7 POLICY INTERVENTIONS AND HOUSING DELIVERY IN GHANA

The government of Ghana's participation in provision of affordable housing has been prepared via a range of housing policy proposals as well as schemes. The stress of the different policies, on the other hand, diverges and relied mainly on the political thoughts of the incumbent administration. In the colonial era, policies on housing never made provision for the housing requirement of the inhabitants. Delivery of housing by the colonial administration was just the provision of army and police garrison, lone rooms for social workers and miners, as well as bungalows for higher-ranked social workers as Owusu and Boapeah (2003) stated. The colonial administration provided overhauled building plots but plots were rented to only the wealthy members among the inhabitants. There was nothing like affordable housing delivery during these times. The only most important housing projects were the expansion of the New Zongo Estate in the year 1929 as well as the establishment of Labadi and James Town in the year 1939 for the purpose of providing accommodation to the victims of the 1924 pestilence in Kumasi and the 1939 earthquake in Accra. The gratis market structure regulated family units right of entry to land for low cost housing in the colonial times (Songsore, 2003).

Policies after independence on housing focused first and foremost on housing construction, giving of sponsored housing loans, the giving of sponsored construction finance as well as housing market liberalization. The federal administration arbitrated

via provision of commercial housing and both demand or supply financial assistance. Commercial housing in Ghana was provided as result of the State Housing Corporation as well as the Tema Development Corporation. For example, between 1957 and 1966, the TDC as well as the SHC constructed 10,700 and 1,052 low-cost units of housing respectively. Again, from 1972 to 1979, the TDC constructed 7,380 sponsored units of housing. All commercial units of housing were sold to either the sitting occupants or to anyone as a citizen and the organizations completely or partly slackened. The SHC as an example now constructs a just a few middle-income units of housing for auction to the general public.

Housing financial supports was one opportunity with which federal administration provided reasonably priced housing units. Example, between 1957 and 1966, the central administration approved a loan worth £G2,150,000 for housing, granted roof loans also worth of £G 200 each to more than 3,000 citizen of Ghana an interest rate of 2.5 percent per annum, and as well gave rental financial assistance to the inhabitants of the labourer's residence (GoG, 1959). Again, the Bank for Housing and Construction (BHC) which was established by the central administration for the purpose of providing concessionary building funding to housing developers as well as concessionary loans to house purchasers. According to Konadu-Agyemang (2001), the BHC gave about 223,895,588 cedis housing loans to 363 mortgagors just by the year 1988. The liberalization of the housing sector in the year 1987 resulted the investiture of the Ghana Real Estate Developers Association (GREDA) in the year 1988 as well as the establishment of the HFC in the year 1991. The burden of the delivery of housing became permanent in the private sector. Citing the HFC as an example, the institution granted approximately US\$44.4 million to 3,639 mortgagors by the year 2001.

2.7.1 Financing mechanism

According to Stein & Castillo (2005), housing investment sources in the low-income as well as the middle-income nation states could be grouped under three classes. The first class comprises the business-related private financial and banking organizations, which gives funds to upper-income earners at market rates of interest ahead of evidence of their wages level and the given of deposit and assurances. These pecuniary organizations normally keep away from any housing finance for the lower income earners since these persons lack concrete collateral as well as adequate, firm income. The second supply of funding for accommodation is the public sector, which more often than not offers sponsored funds for the middle-income earners as well as social servants via specific or non-specific housing mediators.

Nevertheless, schemes as such in low-income nation states frequently fall short in reaching the lower income earners. The qualified recipients normally function in the economy, have essential house tenure capacities, as well as some access to funds. Public schemes endeavouring to make the lower income earners their target have more often than not been weighed down as a result of lack of political force, an outflow of resources to non-qualified people or a malfunction of the socioeconomic as well as political changes of the circumstances where the lower income earners reside as well as work. (Stein & Castillo, 2005).

2.7.2 Innovative financing

The costs of housing for the low-income earners are more and more burdensome. On a wider perspective, revenue allocation has broadened and financial supports have moved from object to subject funding causing demand-side means-tested assistance upsurge the prerequisites for properly considered subsidy devices (Gibb, 2002).

It is imperative to imagine the contribution in gathering funds, raising community competencies and as well authorizing family units. Creating a friendly environment for organizations that perk up the competence of the poor in accessing practicable social, procedural and pecuniary way out and funds are essential drivers for the accomplishment of the Sida-supported schemes. In addition, the subsidy arrangement for housing upgrading should be apparent, and should as well centre on the require side instead of the rate of interest. Financial supports should be handled in a scheme accountable to all clients as well as financial mediators. (Stein & Castillo, 2005)

2.7.3 Affordable materials

Construction materials are supposed to make up approximately 55 to 65 percent out of the entire construction input cost. In order to attain a sustainable delivery of housing in Nigeria, building contractors should change the attitude of over-dependency on foreign materials and rely on using the locally made construction materials like inexpensive and long-lasting roofing, walls, and floor materials (Ademiluyi, 2010).

2.7.4 Privatization of public housing

The increase in privatization—the purchase of public services for job training, employment placement, social services, and housing management from organizations in the non-profit and for-profit sectors—has blurred the lines between public- and private-sector functions and roles. Accountability and clear avenues for consumer participation, grievance, and advocacy are increasingly obscured (Mulroy & Ewalt, 1996).

2.7.5 Loans

The central government participation in the financing housing system has been broad, including the financing private secondary mortgage market bodies, formation of systems heartening or necessitating financial organizations to give means for housing,

sustainment of banking organizations that concentrate on housing finance, giving of mortgage indemnity as well as assurances, and in other cases, securing loans to house purchasers (Carliner, 1998)

2.7.6 Housing programs

The U.S. has had numbers of schemes aimed at improving cost of housing for the low-income earners from the time when the central administration became gravely concerned on this action in the year 1937. Many schemes have been existing and each of these schemes has on average a series of alternatives, with every alternative producing a new program within its regulations (Olsen, 2003).

2.7.7 Subsidy

A family unit that take the delivery of a rent subsidy, a mortgage subsidy, a certificate¹⁴, or a rent voucher; living in public housing; or living in a rent-controlled residence is regarded to be paying a smaller amount compared to the market price on housing as a result of government schemes or policies. In the model for every family unit in near-poverty, government subsidy schemes and policies intended to lower cost of housing extensively reduced the likelihood of housing-induced poverty (Kutty, 2005).

2.8 EFFECTS OF DECLINING HOUSING AFFORDABILITY

Report from the Senate Committee (2008) on Affordable Housing in Australia indicates that reasonably priced as well as available accommodation plays an essential role in the well-being of the people and the economy of the country. As summarized by the Productivity Commission (2004), access to inexpensive and eminent accommodation is fundamental to the well-being of the community in general. Aside meeting the indispensable need for housing, it delivers the grounds for households as well as social

constancy, and adds to improving health as well as educational upshots and useful personnel. Consequently, it improves performance of the economy as much as that of social capital'. Deteriorating accommodation affordability could result a lot of repercussions for folks as well as family units, and the society at large.

Families as well as persons who go through the challenges in housing, mostly those groups which puts in effort to pay usual rent fees, are probable to undergo sharp physical as well as emotional stress as the Senate Committee Report on Housing Affordability in Australia (2008) suggest. Inadequate social solidity could result, as families move regularly to offset rising rent intensities or abridged family's income. The focus of inferior cost as well as inferior rental households in small accessible settings can cause the rise of spatial remoteness. This could cause a rise in the sternness of accommodation stress, as families are time and again forced in making payment of extra costs on transport to their job places. Likewise, the detachment of lower income accommodation and jobs could decrease one's ability to acquire job. One more upshot of deteriorating accommodation affordability is homelessness; nevertheless, it should be considered that the cause of homelessness is more crucial compared to housing cost.

On a broader note, declining affordability could have some impacts on a country's economy. In unswerving terms, persons going through housing stress have less income to expend on others for utilities, health, food etc. (AHURI, 2007). A smaller amount of consequences is also experienced: economic competence could be affected via work market obstructions, with families and folks not capable of migrating to new locations. Raising the prices on housing could cause unfairness, as the wealth of active house owners grows while non-owners progressively affect the housing market.

Local as well as regional economic influences could be as a result of flagging affordability. The SGS as well as Capital Strategy in 2008 formed the effect of inadequate housing on the country's economy for the Bay of Plenty Region in New Zealand. The study made known that the performance of the country's economy can be linked with affordable housing provision. It was realized that approximately 5,000 jobs opportunities were reliant on inexpensive housing provision in the country. Unsuccessful provision of affordable housing might cause a decline in local production increase by about 500 million dollars for the Bay of Plenty, with local production from 2001-31 decreased by approximately 24 million dollars yearly, and value added production decreased by 9.4 million dollars yearly (Beer et al., 2011).

Housing stress could particularly be experienced by the young and single individuals as well as family units with kids. In general, tenants may go through series of issues relating to affordability. AHURI (2007) reported that approximately 50% of personal renter families in Australia go through harsh affordability challenges. Family units which normally face risk are the low income groups as well as those groups which are physically or mentally challenged. The most at risk groups are the ones renting what is referred to as 'strugglers'. Strugglers go through higher series of financial challenges, and are as well normally single or lone parent family units having unstable source of income (AHURI 2007).

Between buyers, 'stretched purchasers' refers to the people with very small remaining income after mortgage settling. These people are mostly exposed to the danger of alterations in income through losing of job, changes within individual households, as well as issues relating to health; they are as well prone to changes in interest rate as AHURI (2007) reported. A lot of threats may intensify individual vulnerability to

stresses set within housing. Parties in contract, be it casual or part-time duties may face greater risk in terms of income hesitancy; whereas an alteration in family unit relationship may as well create accommodation stress. As Beer et al. (2011) considered the forces behind the supply of housing as well as its demand in both the rural and regional settings. Some areas of this particular study made an inclusion of an analysis of stress in housing precisely in the rural and regional settings through a case study process. The details of the research realized that tenants normally go through higher levels of accommodation trauma compared to the buyers in smaller towns and villages as well as regional settings. Date of renting is one major key factor to landlords considering the stress in housing. New tenants mostly in the smaller towns and villages as well as regional settings currently face the challenge of drastic upsurge in prices, and thus percentage of tenants in these stresses may upsurge.

2.9 CHALLENGES OF URBAN HOUSING SUPPLY

Increasing the supply of land is said to be one of the first challenges governments have to tackle to increase the supply of housing. According to Bank of Ghana (2007), one significant issue which challenges the owning of housing in the country is the insecurity as well as lack of transparency in accessing land designation. Land ownership and administration is reported to be very complex with the recognized contemporary system attempting to operate in conjunction with the chiefs and the various stool houses whereby chiefs are mostly permitted to allocate lands. Although the latter is said to be more accepted means of land dispensation in the smaller towns and villages, it as well applies in the major towns and cities especially the developing neighbourhoods (World Bank, 2002). Asare and Whitehead (2006) also note that because of discrepancies and inefficiencies in land administration in Ghana diffidence in land designation as well as land occupancy upsets the land market. This means that it cannot function well to either facilitate expansion of the recognized market for finance or to take action in defence for mortgage.

There has been a drastic upsurge in the cost of construction materials in this recent time as it has doubled just in two annual seasons. The cost of cement blocks in addition to the prices of roofing sheets have all increased tremendously. Experts in the construction sector report that, the introduction of external construction materials into the country are preferred by the local people instead of the local building materials even though these foreign building materials relatively lesser in quality. Also, report from the UN-HABITAT (2011) shows that, the Ghanaian market is full of low-priced imported construction materials which weakens the market share of the local industries as price inconsistencies sets in comparing price of the local building materials to the foreign

ones. Pozzolana cement, compressed earth and burnt clay bricks as local building materials can cause a reduction in the prices of housing units by twenty percent.

The challenge in relation to home funding has been a major one upsetting housing supply in the city of Accra. Private housing developers find it hard to secure loans from financial institutions in putting up enormous units of affordable accommodation as well as from time to time partner with external shareholders who ensure sustainability of their stashes. The central administration is included in issue relating to finance as subsidy becomes a major challenge to the supply of enormous units of affordable accommodation plans to the urban masses aside the delivery of substructure such as water, electricity and good roads. Recent UN research conducted on Ghana shows that the country refrains from borrowing money to construct houses to bridge the country's housing deficit; instead the country borrow money for business as well using profits to construct houses. Though there exists predictable official system of finance, particularly through the Home Finance Company, which is in existence to provide services to the average households in Ghana. At present, banks however deal particularly with the small number of the rich citizens and inflict great down-payment as well as upsurge rates of interest according to UNHABITAT (2011) report. In April 2010, rate of loans was projected to be about 30 percent per year. These together with other barriers render housing supply to be challenging most especially in Accra.

2.9.1 Weak housing policy

Most often, the sourcing of rental accommodation to awfully low-income family units diminishes. From nineteen ninety-one to nineteen ninety-nine, a lot of rental housing which were inexpensive or within the means of the low-income group decreased by 14 percent. Additionally, state investment made directly into housing for the low-income group, predominantly through the market of rental accommodation, has decreased from

eighty billion dollars as in the year 1978 to twenty-seven point five billion dollars just in the year 2002 as Dolbeare & Crowley (2002) stated.

One basic way state administration assists in the renting of low-income accommodation now is with subsidies to public housing authorities and private owners to pay the difference between thirty percent of a family unit's income as well the state certified rent fee per a housing unit. Other subsidies meant for private owners assist housing expansion initially constructed or reconstructed with resources from the state plans. Additional aids which come in vouchers where its holders rent accommodation from keen house-owners. Further state plan formation as well as subsidies on housing are meant precisely for the less privilege ones in the society.

There are approximately 5 million central funded units of housing of different forms for about 11 million citizens as residence, with a steady family income of approximately \$9,500 per annum. This extremely diverged the method to accommodation policy-a worldwide prerogative funding as a result of the tax arrangement for landlords as well as tenants, non-entitlement funding hooked on yearly expectations for the low-income tenants which favours landlords while disfavours the low-income tenants. More to this, the refusal of investing instead of low-income accommodation plans for the past twenty-five years backed the current shortage in housing affordability as well as the development of vagrancy in the nineteen eighty's and nineteen nineties'.

Fair housing is the other basic central role for housing policy. Policies on federal housing passed in the year 1968 and later amended in the year 1988 forbid bias within the sector of housing be it race, gender etc. These departments (Department of Housing and Urban Development and Department of Justice) are in charge of the implementation of the provision of housing of the public rights laws with constitutional

as well as political drawbacks on how effective these departments can be. It is as result of its housing precedence, plan, as well as system that the central national administration completely influences residential flexibility for the low-income households, on occasions positively, but most frequently unfavourable. Existing policy concerning owning of house, assisting in renting of house, production of rental housing units, as well as residential flexibility by means of fair housing challenge are discovered in minutiae below (Crowley, 2003).

Mixed-income housing system is currently the new direction being followed by the U.S housing policy; but the effectiveness this system is still in doubt. As at now the understanding on the system's essential requirements, its costs as well as its social benefits remains little. According to Schwartz and Tajbakhsh (1997), unless questions in the above are answered, the system stands to be founded basically on faith as much as on discontent considering the preceding impetus of low-income housing policy.

To maintain a housing policy, all householders' interest must be given the necessary consideration. That is to say, everyone must have the same access without any bias. Nevertheless, as clarify in the above, inside the housing policy, apart from contributors no one can enjoy from the scheme's loans service as Aribigbola (2008) opines.

2.9.2 Poorly developed housing institutions

As a final point, "marketization" impact according to Hutton (1995) on housing institutions (i.e. those in the public sector) would profit from additional consideration. Although some commentators like Reid (1999); Le Grand (1990); Walsh (1995) channelled their focus on the impact considering delivery of service, yet still there is still much to be done in terms of describing from wider perspective the importance of

the changes. Social constructionist research which focuses on constructional challenges, misunderstandings as well as influences, can clarify that which links ideology, social, as well as economic vicissitudes (Jacobs, K., & Manzi, T., 2000). On the other hand, redevelopment of neighbourhoods enhances the proliferation of landlord-occupied housing in the major cities. Additionally, redevelopment of neighbourhoods causes the associations under the local state and housing to be in charge of housing sector as well as social threats. In spite of these alterations, social-rental accommodation still stands at an idiosyncratic aspect of the system of housing of the Dutch. A lot of the social-rental residences are in the ownership of about 500 associations under the non-profit housing association. Although these associations are private and are as well deregulated, the law however demands them to invest their respective profits in the housing sector so as to improve the urban areas in novel dimensional growth (Gent, 2013).

The reform of the Ghanaian housing policies encompasses the following:

1. Withdrawing the country strictly from the production of accommodation as well as financing;
2. Enhancing the development of the housing sector;
3. Opening of the housing industry to land markets as well as building material;
4. Motivations to the private sector for construction of rental units of housing; and
5. Restructuring institutions in the housing sector.

The general idea of these policies reform was to open the sector of housing to competition so as to enhance the efficiency for the development of the housing system of finance and to also cause to rise in the supply of housing across the country through commercial growth, individual housing and attraction of foreign investors. The sector of housing is currently tied to the macro-economic policies as well as the growth of

cities too free up the entire economy; the federal administration has renounce its budgetary funding to the institutions in sector of housing (Arku, 2009).

From the 1960s, institutions and policies on the sector of housing have been established analytically and expansively to improve social development as well as growth of the economy (Phang, 2001).

2.9.3 Price of building materials

The top ten factors are found to be very severely affecting cost of construction of affordable housing according to the evaluation of the professionals in the industry. These are: inadequate labour availability; material standard; design quality; lack of coordination; duration of contract period; cost of material; previous experience; disputes on site; design change; and poor financial control on site (Assaf *et al*, 2010).

Constructing fewer housing units reduces the supply of low-cost housing effectively for the reason that it constrains filtering. Furthermore, regulation can decrease housing units' supply that is having the lowest cost like apartment buildings. Measures for building materials, construction methods as well as maintenance increase the costs as they demand the owner of the unit to purchase costly materials or do away with building methods that could have kept costs low. That is, the larger the housing unit the more expensive the inputs engaged during the construction phase and the more the unit is valued (Feldman, 2002).

One important factor behind the high cost of construction in Nigeria is the restriction on cement importation, which constitutes approximately 40% considering the total cost of building materials. Whereas the country does not produce sufficient cement domestically in meeting demand, cement importation has been restricted and thus it is subject to a process of quota distribution. The situation has led to sharp upsurges on cement price. Nevertheless, there exist signs of optimistic change in the policy of the

government on cement importation, like the reviving the Ibeto Cement Factory, an entity of importation. To bring cost of materials down so as to stimulate construction and make housing more inexpensive to the entire population of Nigeria, the government ought to carry on its adjustment of restrictions on cement importation as well as other construction materials. One more alternative that could be discover in the long-run is the conduction of research concerning how Nigerians can make use of the local materials like clay as well as other local construction materials (Akeju, 2007).

2.9.4 Change of government

The central government manipulates the economic and socio-political objectives of the country thus instigating continuous fluctuations in policy concerning low-income housing (Huang, 2012). The developers' investment profits would be limited to no more than 3 percent. Government controlled banks as well as civic housing fund administration centres were invigorated to distribute funds and give loans on favourable terms to buyers for affordable housing. The target group for new government assisted rented housing remained very small and in cities implementing this policy, fewer than 5 per cent of households benefited (Wang & Murie, 2011).

2.9.5 Supply of land

Most often, it is argued that limiting the source of land zoned for units of housing on the urban fringe will generate land shortage for housing that influences every aspect of the market all through the metropolitan area. Moran (2006) stated that, should it happen that no such limits exist then the price of housing would decrease effectively. Arguments that further substantial land release policies will moderate house prices on the fringe in a different place assuming that the supply of residential land for constructing new housing defines prices of houses through the entire market. Nevertheless, in reality, there exist various housing sub-markets in a single district or

local government authority, much less across the whole urban area. The degree to which housing in one side of the metropolis may characterize an appropriate 'substitute' for housing in the other places depending on the specific needs of the individual household, but then will frequently be limited certainly. Thus, there might be sufficiently inexpensive housing on the boundaries of the metropolis or within the metropolis itself or in locations of low amenity or accessibility, but scarcities of units of housing as well as high prices in different localities (Coiacetto, 2006; Gurran, 2008).

2.9.6 Funding

The public housing still in operation today, obtains its funding from the central government which is being operated and as well managed by the local autonomous organizations called public housing authorities (PHAs) (Turner et al., 2003).

According to Millennial Housing Commission (2002), below a third of over 13 million lowest income family unit that qualifies for rental accommodation supporting point of fact receive it, as a result of inadequate federal financial supporting levels. In addition to scant funding which is for novel housing checks and reduced entree to all leasing housing support from vouchers, public housing, and privately-owned sponsored housing improvements, federal housing programme rightly contributes to the decrease stock of reasonably priced leasing housing in two most important ways. More threateningly, additional to decreasing the source of housing, the two policies put out of place the existing residents, directly subverting housing for some households who falls in the category of the lowest income. Whereas a number of actions could be taken by HUD, the actual impairment to aiding poor households in achieving housing stability is the lack of capital. The need arises for congress to act as quickly as possible in increasing fund for preserving and rehabilitating public as well as sponsored accommodation, to increase the housing check scheme, and as well to construct new

accommodations which are within your means for lowest income households to rent (Crowley, 2003)

2.9.7 Slum dwellers

The new slum policies on market design as well as partial inclusivity have unbridled profitable renovation opportunities together with inadequate relocation offers; nonetheless the policies have also produced huge natural features of dispossession upsetting residents of slum in diverse ways. Consequently, redevelopment of slum has advantaged to the local as well as the transnational elites by combining a negotiated approval to the dislocation and involuntary eviction. They emphasized the benefits that runs through the resettlement amenities including piped water and toilet for every slum resident most especially women. Formalized resettlement housing stood conjectured as being the most hopeful path for the slum in the direction of a more contented and appropriate being (Doshi, 2013).

The residents of slums, and whose pecuniary risk factors are in connection to the housing and delivery of service condition in the slums, have the ability to forecast the influence that a public intervention may have towards their economic state. Predictions as these normally manifest in fear (Huchzermeyer, 2008).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter weighs up the research methodology employed in achieving the research aim as well as the objectives with the view of discovering the best research approach and method in answering the research questions raised. The ontological and epistemological considerations of the research was emphasised, the deductive and inductive reasoning was also explored, including the research design, strategy, sampling approach and technique, analysing the data and the data collection instrument were also discussed in this chapter.

3.2 PHILOSOPHICAL CONSIDERATIONS

Christou et al. (2008) opines that, the choice of a research instrument is shaped by philosophical matters such as axiology, epistemology and ontology. These philosophical queries of value, knowledge and existence have a very great impact on the research design (Koetting, 1996; Christou et al., 2008). The idea of how we know the world and the reality of nature are epistemology and ontology respectively, with methodology being how we acquire knowledge of the world (Jacob, 1987). A researcher's viewpoint on ontology and epistemology accentuates and directs the theoretical perspective and the process of the whole research whether interpretivism or positivism (Marsh and Stoker, 2002). The choice a researcher takes on this issue is very important since "they shape the approach to theory and the methods" used (ibid).

3.2.1 Deductive and Inductive Reasoning

Deductive and inductive reasoning can also be used when classifying the research approach and which one to use. The movement from a general to the particular and

frequently needs substantial data as the deductive method. It can be inferred from Perry (2001) in his explanation of deductive research as testing empirical observation of a theory where general influences are deducted from particular instances.

Saunders et al (2003) explains that, collecting data with the idea of developing a theory is known as inductive approach (building a theory). A study from which a theory is developed by observing empirical reality; thus from a particular instance general inferences are drawn, which is the opposite of deductive method.

Deductive research design is used for this research as it uses a substantial amount of data which functions from a broad-spectrum to explicit viewpoints drawing from inferences founded on facts as stated by Burney (2008).

3.2.2 Ontological and Epistemological Considerations

Ontology as explained by Marsh and Stoker (2002) refers to the existence of occurrence where things appear in a different way in different traditions of philosophical thinking. It helps the researcher to choose whether the reality is external or objective or socially constructed and only understood by examining the perception of the human factor (Thurairajah et al, 2006). Positivism and constructionism are the two traditional philosophies that exist (Harty and Leiringer, 2007). Meanwhile, relativist and realist ontological positions have been indicated by Fitzgerald and Howcroft (1998).

Epistemology embraces the various the various philosophies of research approach and depicting the data that are known to be true. Epistemological issues handle the question of knowledge adequacy concerning a particular discipline. It is “how we know” as well as the approaches use in acquiring knowledge. Position of epistemology can either be interpretivist or positivist. This study embraces the positivist epistemological position. The position stresses on repeatability, objectivity, and measurement. It is possible

therefore for the researcher to be impartial from a separate position of the research status quo. Even-handed observation of reality must occur devoid of bias from the perspective of the researcher as Fitzgerald and Howcroft (1998); Bryman (2004) stated.

3.3 RESEARCH DESIGN

A research defines the complete strategy chosen to integrate dissimilar components of a study in an intelligible and analytical way, in so doing, safeguarding the study to well address the problem of the research; it essentially includes the plan for data collection, data measurement as well as data analysis. Trochim (2006) stated that, research problem determines the design type you can engage.

The purpose of a research design is to make ensure the evidence acquired will aids you to correctly answer problems of the research clearly. The three main research design types include casual, descriptive, and exploratory research designs. All the three designs when employed properly will assist the researcher in organizing the study in an effective manner. Each of the three designs gives a guide in solving dissimilar problems. Trochim (2006) explained that, the problem of the research shows which type of research design to employ, thus a sample survey was chosen for this study.

Surveys are extensively acknowledged research design. It involves gathering information from participants of a questionnaire and an interview. Data in here are gathered in a standardized form as well as from carefully chosen samples to maximize the representativeness of a larger population. A survey is useful means of visualising the present circumstances of groups. Survey involves greater numbers of participants as compared to experimental design and can comprise variables' perceptions and behaviours relationships as Bryman (2004); Fellows and Liu (2008) and Janes (1999) stated.

3.4 RESEARCH STRATEGY

Bouma et al. (1995) stated that, research strategy defines the way with which the objectives of the research are questioned. Baiden (2006) also added that, the three main research strategies include qualitative, quantitative, and triangulation research approaches. Deciding on which research strategy to employ will depends on the research purpose as well as the research type and the availability of the information been needed.

3.4.1 Qualitative research

According to Denzin and Lincoln (1998), qualitative research highlights the process in determining the construction of a social meaning and hits on the relationship existing between the researcher and the topic studied. Qualitative research defines the meanings, description, characteristics, definitions, metaphors, concepts, and symbols of things.

3.4.2 Quantitative research

Quantitative research defines the study made into a human or social problem, founded on testing a theory or a hypothesis made of variables, measured with numbers, and analysed with statistical processes, for the purpose of determining the truth holds in a hypothesis or a theory (Creswell, 1994).

In this study, both approaches were adopted. The use of both methods delivers better appreciation of phenomena as well as a descriptive account of triangulation and illuminates important research results. The mixed method defines a research design which has a philosophical assumptions and methods of scientific investigation. As a methodology, it includes philosophical assumption which guides the collection and analysis of data as well as the mixture of quantitative and qualitative approaches in man stages of the research problem and procedure (Tashakkori & Teddlie, 2003).

3.5 DATA COLLECTION METHOD

In meeting the research problem, it is important to technically separate the relationship existing among and between variables in an instance and then analyse the relationship without inessential influences as Nenty (2009) stated. As a result, Nenty (2009) stated again that, research design includes procedures use in order to identify and analyse the relationship existing among variables in our problems and thus to dispute the preference of specific procedures to others. Therefore, research design becomes the master plan which directs how the research is to be carried out. Together the primary as well as the secondary sources was employed for the study. The use of both gives credibility to the study (Patton, 1990).

3.5.1 Primary data source

Primary data sources are manly involved with field survey in the collection of empirical data. Field work according to Naoum (2002) can be linked with three concrete approaches including the case study approach, the problem-solving approach and the survey approach. The survey approach was used for this study. Data were collected from residents and interviews were also carried out in the ministries. This approach was the most convenient and economical for the study (Hagget et al, 1977)

3.5.2 Secondary data source

These were identified and gathered from technical journals, articles, books and from databases. This forms an important part of the study as it sets the pace for questionnaires and interviews development (Owusu, 2010). The secondary source of information was gathered from two main sources including internal and external sources.

3.5.2.1 Internal secondary source

Internal secondary sources are available in companies or organizations, like yearly reports, brochures, magazines, financial reports, information booklets, plant and equipment registers, magazines, and financial information memoranda. These were gathered from the ministries.

3.5.2.2 External secondary source

These are primary literature sources of data; external secondary source is the most precise since it comprises the original study. These sources of these data include technical journals, internet sources, magazines, textbooks and newspapers.

3.6 RESEARCH POPULATION AND SAMPLING TECHNIQUE

3.6.1 Research Population

The targeted people for the study was the Tema West Metropolis. A hundred and fifty (150) house owners and ten (10) senior expertise from the Ministry of Water Resources, Works and Housing were sampled.

3.6.2 Sampling Procedure and Sample Size

Punch (1998) asserted that, it not possible for one to study everyone, everywhere, doing everything; consequently, sampling decisions are essential not only about which people and events to observe, but likewise about settings as well as processes.

Collection of data was from households within the Tema Metropolis. The research selected the Tema West quadrant of the Metropolis because of the time period for the research. This procedure safeguarded the neighbourhoods selected to fully reflect the study area. The units of housing were carefully chosen from this neighbourhood using systematic and purposive sampling technique at every ten houses' interval. One-Fifty (150) units of housing were sampled for the research. Among the selected units of

housing, data were gotten from all the households using designed questionnaires. It similarly engaged personal interviews to acquire data from 10 housing experts from the Water Resources, Works and Housing Ministry (Accra) using the purposive sampling technique.

3.7 DATA COLLECTION INSTRUMENT

Questionnaire and interview guide were the main instrument engaged in the gathering of information for the study. The design of the questionnaire contained closed ended and open ended questions type for the purpose of sourcing response from participants. The interview was also structured for easy collection of data.

3.7.1 Questionnaire

Crawford (1995) stated that, a questionnaire which well-designed gives respondents the ability to give the needed information for the interviewer to also record answers which will result a sound analysis as well as better interpretation of results. Questionnaire defines the set of carefully designed questions made to draw reliable as well as statistical valuable data from respondents on the topic of the research. Saunders et al. (2003) also stated that, questionnaires expedite data collection by inquiring the sample to answer back to the similar questions. I have attempted to follow a very simple style to aid the respondents to the questionnaires

These questionnaires were mainly administered face to face to selected households and professionals. These were all done to ensure that the objectives of the study could be achieved. The design of the questionnaire gave no room for bias as it was in consistent manner in its presentation. Most items within the content of the questionnaire were closed making it easier for respondents in comparing each item's response.

3.7.2 Content of Questionnaire

Generally, survey questionnaire was developed for the purpose of collecting data from house owners in the Tema Metropolis. Questionnaire was grouped in categories to collect data on potential interventions for improving housing for low income earners. Section A, solicited demographic background from the respondents using objective test and open ended questions.

Section B, solicited information on accessibility of affordable housing. Do you own the house you live in and how did you get were some of the information required? Questions were also solicited on whether they had access to better water, security and sanitation of tenure.

In section C information was solicited on the challenges in providing affordable housing which was rated from 1-5 with the statement strongly agree, agree, neutral, disagree and strongly disagree.

Section D brought out the intervention for improving affordable housing which was scaled from 1-5 with the statement strongly agree, agree, neutral, disagree and strongly disagree.

Lastly in section E a space given to answer the success and failures of intervention policies.

3.7.3 Questionnaire Administration

Primary data was collected through a system sampling technique of household owners in the Tema West Municipality. Data was collected through the use of a designed questionnaire and interview guide administered to participants in their homes and offices. Questionnaires were filled out by participants and the researcher had to go for

the questionnaires in three days' time. However, the researcher interviewed experts at the Ministry of Water Resources, Works and Housing.

3.7.4 Pilot Testing

The pilot questionnaire was given to 20 people to answer to correct errors which could take the form of repetition of questions and typological mistakes and the avoidance of double questions.

3.7.5 Interviews

An interview guide was designed to elicit information from selected experts at the Ministry of Water Resources, Works and Housing. Data retrieved from the interviews and the questionnaires are subsequently discussed in the next chapter.

3.8 ANALYSIS OF DATA

Questionnaire retrieved from respondents are coded and later analysed with the use of Statistical Package for Social Science (SPSS) version 23.00 and Excel Spread sheet. The data retrieved from the questionnaires and interviews were interpreted using the above specified tools. To expound on the discussion in this study, the data acquired is presented in tabular as well as graphical forms. Background information of respondents is presented using bar graphs and pie charts. The result of this research is correspondingly assessed with the objectives and questions of the research.

In succession, statistical analysis of the results is done with the use of Relative Importance Index (RII) to rank sections C and D. Non-parametric statistical testing such as descriptive statistics and mean score index is also utilised.

3.9 CHAPTER SUMMARY

This chapter revealed the various methodologies employed in this study in addition to the reasons behind using these methods for the study. The method of data collection as

well as the research approach engaged was discussed. The conclusion of the chapter was the research process as well as covered issues like, the population, sources of data, questionnaire design, content and design of the questionnaires, sample size determination, and data presentation and analysis.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

This particular chapter details the analysis and discussions of the data received after the administration of the questionnaire. The data from the questionnaire will provide the foundation for analysis in this chapter. The data analysed in this chapter is entirely primary data which is very substantial when you want to get factual responses in knowing the truth when competitiveness in private sector procurement is concerned. The chapter makes introduction of data analysis as well as discussions of results through the usage of the Statistical Package for Social Sciences (SPSS) and Excel. The data on the demography is analysed by the use of descriptive statistics.

The survey was focused in the communities in the Tema Metropolis concentrating on the people in households off the community. It also looked at some selected professionals from the Ministry of Water Resources, Works and Housing. Questionnaire as well as interview was distributed to the above respondents which aided in the presentation of the following data. Therefore, the basis of the findings that are used in the analysis are from these respondents.

4.2 DEMOGRAPHIC DATA OF RESPONDENTS

After analysing section 'A' of the questionnaire which contained the demographic variables, it was discovered that 49% of the respondents were females and 51% of the respondents were males. Results illustrated in Figure 4.1 below

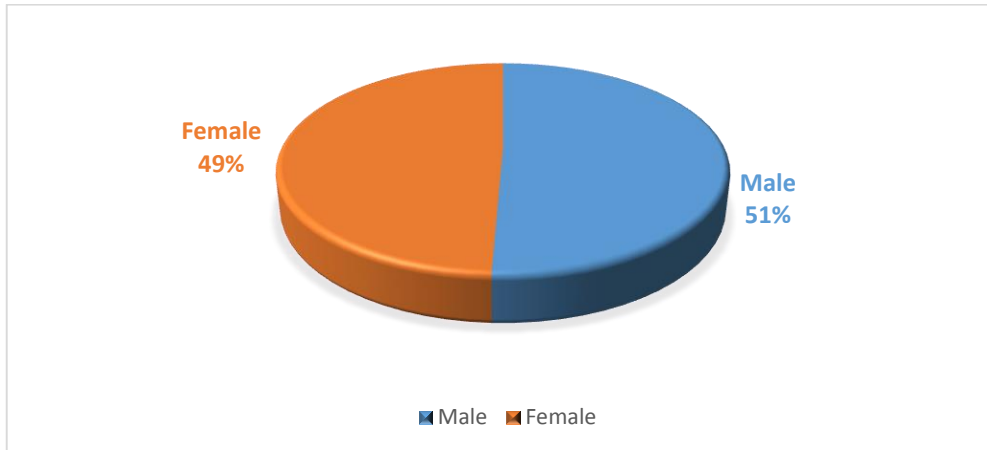


Figure 4.1: Respondents sex

Source Field Survey, 2016

Analysis of the data received revealed that 150 questionnaires were retrieved from respondents. This data revealed that 68 persons were public sector workers representing 45% of the respondents, 82 persons were Private Sector workers representing 55% of the respondents. Figure 4.2 graphically illustrates the results.

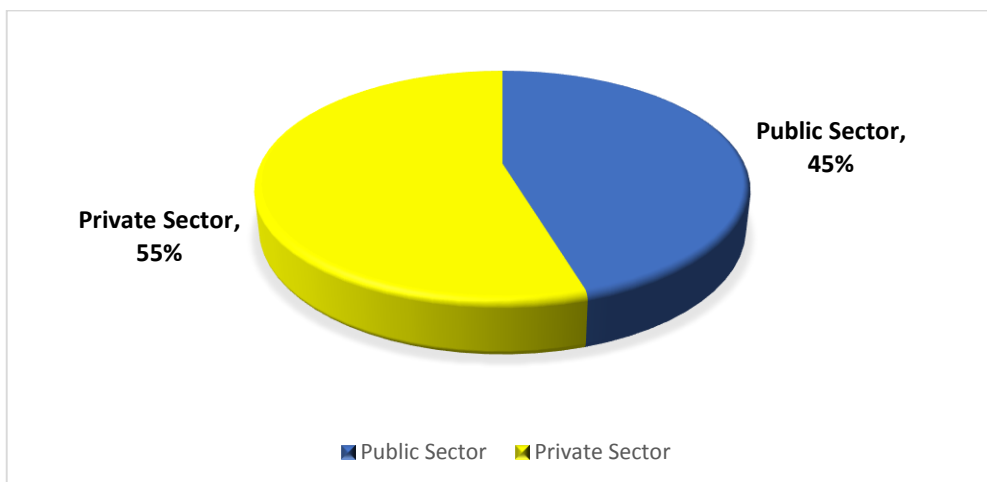


Figure 4.2: Respondents work sector

Source Field Survey, 2016

4.3 ACCESSIBILITY TO AFFORDABLE HOUSING

These questions were sought to know how respondents get access to affordable houses. The first question was, do respondents own the houses in which they live, and results showed that 53 people representing 35.3% of the respondents owned the houses in which they live in. On the other hand, 97 people representing 64.7% of the respondents lived in houses in which they do not own. The second question was would respondents consider their accommodation at affordable. After analysis results identified that 65 people considers their accommodation at affordable which represents 43.3% of the respondents, 85 people stated that their accommodation was not affordable which represents 56.7% of the population. The last question was to know if respondents had access to better water, security as well as sanitation of tenure. Results reviewed that 67 people representing 44.7% of the population answered YES to the question and 83 people representing 55.3% of the population answered NO to the question. Table 4.1 indicates the accessibilities of housing.

Table 4.1 Access to affordable housing

QUESTION	FREQUENCY		PERCENTAGE	
	YES	NO	YES	NO
Do you own the house you live in?	53	97	35.3	64.7
Would you consider your accommodation as affordable?	65	85	43.3	56.7
Do you have access to improved water, sanitation and security of tenure?	67	83	44.7	55.3
TOTAL	185	265	123.3	176.7

Source: Field survey (2016)

From the results the first question showed that 34.3% of the population have house of their own and 64.7% of the population do not have houses of their own, they lived in

rented houses. From this results it can be discussed that a high population of the Ghanaian population have housing difficulties.

The second question sort to find out if the respondents considered their place of accommodation as affordable. Results showed that 56.7% of the population did not consider their place of residence as affordable but another section of the population considered their place of residence as affordable, which represents 43.3% of the population. It can be discussed that majority of the population have no access to affordable accommodation.

The third question sort to identify if respondents had access to better water, security as well as sanitation of tenure, it was found out that out of the total population of respondents 55.3% does not have access to improved services. On the other side 44.7% attested that they have access to improved services.

Also, from the interview conducted people could get access to the building by contacting the appropriate authorities for a lease to the building. The buildings are also designed to suit average income earners per the interview conducted.

4.4 CHALLENGES IN PROVIDING AFFORDABLE HOUSING

Respondents were tasked to rank the various challenges in providing affordable housing. Table 4.2 indicates the challenges in providing affordable housing in terms of mean responses to a range ‘strongly disagree’ (1) to ‘strongly agree’ (5).

Table 4.2 Challenges in providing affordable housing

No.	CHALLENGES	Degree of relative importance quoted by the respondents					Total number of respondents	(ΣW)	RII= $\Sigma W/(5*N)$	Rank
		1	2	3	4	5				
1	Weak housing policies	6	9	41	58	36	150	559	0.745	1
2	Poorly developed housing institutions	8	18	35	44	45	150	550	0.733	2
3	Price of building materials	4	13	47	55	31	150	546	0.728	3
4	Change of government	9	12	38	58	25	150	540	0.72	4
5	Difficulty associates with the supply of land and policy	6	17	44	56	27	150	531	0.708	5
6	Funding	8	21	38	58	25	150	521	0.695	6
7	Eviction of slum dwellers	10	18	35	44	45	150	520	0.693	7

Source: Field survey (2016)

From Table 4.2 it is identified that amongst the challenges in providing affordable housing; Weak housing policies was ranked 1st with an RII value of 0.745. Poorly developed housing institutions was ranked 2nd with an RII value of 0.733. Third ranked was Price of building materials which had an RII value of 0.728. Change of government was ranked 4th with an RII value of 0.72. Difficulty associates with the supply of land and policy was ranked 5th with an RII value of 0.708. Funding was ranked 6th with an RII value of 0.695. Eviction of slum dwellers was ranked 7th with an RII value of 0.693.

The following results are asserted in the 1990s research that, policy as well as practice drove rates of homeownership to record levels through making it more and more available to the low-income as well as minority customers. According to Retsinas and Belsky (2002), currently, homeownership is regarded as the basic way any low-income household can amass resources and make progress into the middle class. National appropriations for homeowners in tax expenditure form exceeded \$120 billion as in the year 2002 according to Dolbeare & Crowley (2002). Also in American the housing sector is fundamentally dependent on the market forces; the responsibility of the central government in controlling, shaping and directing the housing sector is significant. Possession of a single-family home has become the perfect form of housing for majority of the Americans; and central policy has been and remains to be centred on encouraging homeownership.

The payment of the remaining instalments for the house becomes a problem as people tend to delay in their payment because they have access to the building when their first instalment is paid. The acquisition of land for housing and financial means to support its construction also becomes a headache to the department in charge of this as revealed in the interview.

4.5 STRATEGIES FOR IMPROVING AFFORDABLE HOUSING

Respondents were tasked to rank the various strategies for improving affordable housing. Table 4.3 indicates the strategies in providing affordable housing in terms of mean responses to a range ‘strongly disagree’ (1) to ‘strongly agree’ (5).

Table 4.3 Intervention for improving affordable housing

No	STRATEGIES	Degree of relative importance quoted by the respondents					Total number of respondents	(ΣW)	RII= $\frac{\Sigma W}{(5*N)}$	Rank
		1	2	3	4	5				
1	Improved financing mechanisms to low income earners	11	7	26	61	45	150	457	0.763	1
2	Innovative financing to help housing developers	8	14	45	55	28	150	531	0.708	2
3	Affordable building materials and skilled workers	7	21	40	49	33	150	530	0.707	3
4	Privatization of public housing	6	16	54	49	25	150	521	0.695	4
5	Concessionary loans to homebuyers	9	18	44	53	26	150	519	0.692	5
6	Supporting co-operative housing programmes	10	29	34	59	18	150	496	0.661	6
7	Subsidised public housing policy initiative and programmes	13	27	45	38	27	150	489	0.652	7

Source: Field survey (2016)

From Table 4.3 it is identified that amongst the seven identified strategies for improving affordable housing; Improved financing mechanisms to low income earners was ranked 1st with an RII value of 0.763. Innovative financing to help housing developers was ranked 2nd with an RII value of 0.708. Affordable building materials and skilled workers was ranked 3rd with an RII value of 0.707. Privatization of public housing was ranked 4th with an RII value 0.695. Concessionary loans to homebuyers was ranked 5th with an RII value of 0.692. Supporting co-operative housing programmes was ranked

6th with an RII value of 0.661. Subsidised public housing policy initiative and programmes was ranked 7th with an RII value of 0.652.

According to Stein & Castillo (2005), customers are given credits as interest on these credits is charged, but not essentially at market charges. In most of the programmes, there is a reflection in the interest rates which do not certainly match the market charges on mortgages considering the formal sector. The programmes take an extensive range of collateral as well as security from the households (particularly co-signer loans, deposited objects and mortgages). Collateral flexibility has permitted the contribution of low income earners in the programmes even when they have not totally set on the validity of their land tenure. This has served as a financing mechanism to help low income groups.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This research aimed to identify prospective interventions for improving affordable housing deficits of low income earners in Ghana and to assess the affordable houses in terms of quality, accessibility and affordability to low income earners. To achieve this aim four objectives were looked at; determine the accessibility options to affordable housing in Ghana, identify the challenges in the provision of affordable housing projects for low income earners in the major Ghanaian cities, explore the various interventions for improving affordable units of housing for the low income households and identify the success and failures of the interventions policies of affordable housing of government institutions. The focus of this chapter is to present the conclusions as well as the various recommendations founded on the findings of the study.

5.2 REVIEW OF OBJECTIVES

As earlier discussed the study's aim was to identify prospective interventions for improving affordable housing deficits of low income households in the major Ghanaian urban areas and to assess the affordable houses in terms of quality, accessibility and affordability to low income earners. Consequently, the objectives of the study were structured to accomplish the research aim. Four research objectives were set for this study.

Objective 1: Determine the accessibility options to affordable housing in Ghana.

The objective sought to help the researcher identify how many people among the respondents have access to affordable housing. In view of this four important questions were asked to be able to fulfil this purpose. After analysis comparing results from all the four questions it was realised that majority of the respondents did not have good access options to affordable housing in Ghana.

Objective 2: Identify the challenges of providing affordable housing projects for low income earners in Ghana.

In bid to achieve this objective, an extensive literature was reviewed based on the challenges of providing affordable housing projects for low income earners. Seven challenges in providing affordable housing were obtained from literature. The challenges were ranked using the Relative Important Index. After analysis it was noticed that all the challenges identified were all significant in Ghana.

Objectives 3: Explore the various Strategies for improving affordable housing for low income earners.

To attain this objective, literature on the various strategies for improving affordable housing was reviewed. Seven strategies for improving affordable housing were obtained from literature. Respondents were required to rank them in relation to their level of importance. The data retrieved were ranked using the Relative Importance Index.

5.3 FINDINGS OF THE RESEARCH

In conclusion to this research, the following findings were identified after a succession of thorough review literature and analysis of results relating to the research topic. Below are the most important and significant factors were acknowledged from the results.

- Most people in Ghana live in houses which do not belong to them.
- Considering the affordability of accommodation of respondents' majority of the population considers their accommodation not affordable.
- Greater share of the population has no access to improved water, sanitation and security of tenure.
- Results from the study shows that the two main challenges in providing affordable housing are Weak housing policies and Poorly developed housing institutions
- Improved financing mechanisms to low income earners and Innovative financing to help housing developers are the two main strategies to be taken to improve affordable housing in Ghana.

5.4 CONCLUSION

On the onus that affordable housing includes not just the inert structure known as a house but then the gamut of environmental factors which enhance living making it more acceptable and satisfactory. The study therefore aimed to identify prospective interventions for improving affordable housing deficits of low income earners in Ghana. At the end of the study, the result of the survey gave an indication that, considering the affordability of accommodation of respondents' majority of the population considers their accommodation not affordable. Results from the study shows that the two main

challenges in providing affordable housing are Weak housing policies and poorly developed housing institutions. Finally, improved financing mechanisms to low income earners and Innovative financing to help housing developers are the two main strategies in improving affordable housing in Ghana which was also recommended in the study.

5.5 RECOMMENDATIONS

The findings of this contribute to exploring potential interventions for improving affordable housing for low income earners in Ghana. To achieve this aim, this research proposes a set of recommendations to the various stakeholders involved;

- Most people in Ghana live in houses which do not belong to them and therefore government should come up with innovative ideas to accommodate them.
- The government should come up with mechanisms to help people to afford housing.
- Government should provide access to improved water, sanitation and security of tenure in affordable housing units.
- Government should strengthen its weak housing policies and poorly developed housing institutions.
- Improved financing mechanisms to low income earners and Innovative financing to help housing developers are the two main strategies are essential to in improving affordable housing in Ghana.

5.6 DIRECTION FOR FUTURE RESEARCH

This study revealed some areas which needs attention in research. Below are some suggestions stated for research in the future;

- Further directions for research is to explore potential interventions for housing studies for different income earners in Ghana.
- In addition, further research can be also conducted in other regions and cities in Ghana.

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APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI

FACULTY OF BUILT ENVIRONMENT

DEPARTMENT OF BUILDING TECHNOLOGY

(MSc Construction Management)

SURVEY QUESTIONNAIRE

(This questionnaire has been designed to aid in collecting relevant information necessary for this research for the completion of Master of Science degree in Construction Management in KNUST, Department of Building Technology. This questionnaire is to achieve the aim of identifying prospective interventions for improving affordable housing deficits of low income earners in Ghana. I will be very grateful to you if you could give us part of your valuable time in responding to the following questions. Your opinions will only be used for this study only and as well kept confidential)

Research Topic:

***EXPLORING POTENTIAL INTERVENTIONS FOR IMPROVING
AFFORDABLE HOUSING FOR LOW INCOME EARNERS IN GHANA***

By:

ADZINKU ALEX

Supervisor:

DR. DE-GRAFT OWUSU-MANU

QUESTIONNAIRE FOR COMMUNITIES

Please, kindly respond to the questions by ticking [] in the appropriate box for each item.

A. DEMORGRAPHIC BACKGROUND

1. Name of the community
2. Sex: Male [] Female []
3. Age
4. Length of Stay: Years
5. Which sector do you work?
Public Sector [] Private Sector []

B. ACCESSIBILITY TO AFFORDABLE HOUSING

6. Do you own the house you live in?
Yes [] No []
7. If yes, how did you get the house?.....
8. Would you consider your accommodation as affordable?
Yes [] No []
9. Do you have access to improved water, sanitation and security of tenure?
Yes [] No []

C. CHALLENGES IN PROVIDING AFFORDABLE HOUSING

10. Please rate the following objectives on the challenges in the provision of affordable housing for low income earners by ticking once (√) as appropriate for the following in order of degree of agreement.

KEY: 1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

Item	Challenges	Rankings				
		1	2	3	4	5
1	Difficulty associated with the supply of land and land policy					
2	Prices of building materials					
3	Change of government					
4	Funding					
5	Eviction of slum dwellers					
6	Weak housing policies					
7	Poorly developed housing institutions					

D. STRATEGIES FOR IMPROVING AFFORDABLE HOUSING

11. Please rate the following objectives on the potential interventions for improving affordable housing for low income earners in Ghana by ticking once (√) as appropriate for the following in order of degree of agreement.

KEY: 1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

Item	Strategies	Rankings				
		1	2	3	4	5
1	Subsidised public housing policy initiative and programmes					
2	Affordable building materials and skilled workers					
3	Innovative financing to help housing developers					
4	Concessionary loans to homebuyers					
5	Supporting co-operative housing programmes					
6	Privatization of public housing					
7	Improved financing mechanisms to low income earners					

Thank you

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

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DEPARTMENT OF BUILDING TECHNOLOGY

(MSc Construction Management)

INTERVIEW GUIDE

(This questionnaire has been designed to aid in collecting relevant information necessary for this research for the completion of Master of Science degree in Construction Management in KNUST, Department of Building Technology. This questionnaire is to achieve the aim of identifying prospective interventions for improving affordable housing deficits of low income earners in Ghana. I will be very grateful to you if you could give us part of your valuable time in responding to the following questions. Your opinions will only be used for this study only and as well kept confidential).

Research Topic:

***EXPLORING POTENTIAL INTERVENTIONS FOR IMPROVING
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ADZINKU ALEX

Supervisor:

DR. DE-GRAFT OWUSU-MANU

INTERVIEW GUIDE FOR INSTITUTIONS

This semi-structured interview guide consists of detailed but not restricted to the following questions that will be discussed during the interviews with targeted respondents aimed at identifying prospective interventions for improving affordable housing deficits of low income earners in Ghana.

Part A: Background Information

Name of interviewee:

Position in the Organisation:

Date and time of interview:

Part B: Interview Guide on strategies for improving affordable housing deficits

1. How do people get access to the houses built by the organisation?

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

2. Are buildings designed in your organisation designed for specific people?

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

3. What are some of the challenges your organisation faces in providing affordable housing for low income earners?

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

4. What are some of the measures the organisation has put in place to provide affordable housing for low income earners?

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

5. Does your organisation have any intervention policy concerning the provision of affordable housing for low income earners?

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

6. If yes, what are some of the policies?

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

7. Have these policies been successful in its implementation?

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

8. What type of housing programmes is your organisation currently implementing?

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

9. Are there any housing programmes targeted at the low/moderate income households living in urban areas?

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

10. What are some of the recommendations you can give to help in providing affordable housing for low income earners Ghana?

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