KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

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ASSESSING THE MAJOR FACTORS CAUSING HOUSING DEFICIT IN GHANA HEALTH SERVICE (A CASE STUDY OF WESTERN REGION)

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A thesis submitted to the Department of Construction Technology and Management, College of Art and Built Environment, in partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE

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DECLARATION

I hereby declare that this thesis 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 the award of any other degree of the university, except where due acknowledgement has been made in the text.

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ABSTRACT

Across the world and especially in the developing world, housing remains one of the critical development challenges because of the huge gap between the supply and demand for housing. This study explored the challenges facing housing delivering for health sector in Ghana. The study was carried out along the tenets of a preliminary literature review and followed by a survey using a structured questionnaire. Seventy-Five (75) questionnaire were distributed by simple random sampling, and 44 completed questionnaires were considered valid for the analysis. The data collected were analysed using Mean score ranking. The study reveals that, Lack of comprehensive national policy and regulatory framework for housing provision, Failure of MMDAS to provide housing for health institutions, Lack of institutional and regulatory framework in MMDAS for housing, Lack of stakeholder's support and community participation and Lack of continuity due to consistent change of government are the major critical factors causing housing deficit. Considering the challenges in order of extremity, respondents indicated that, High competition in rental charges, Difficulties in responding to on call duties/emergency cases, Payment of high utility bills due to landlords/ladies failure to pay their part, Unnecessary threat by the Landlords/ladies and High transportation cost are the challenges faced by the staff of GHS in assessing alternative housing. Further, a number of strategies to improve housing delivery were suggested which includes; Government should partner with NGOs to provide housing for all health facilities, use public- private partnership initiative (PPP), Five percent (5%) of health facilities internally generated fund (IGF) should be set aside for housing development, Government of Ghana should re-establish Bank for housing and construction to provide support for

Keywords: Housing, Development, National Policy, housing construction in all the health institutions. Government, Stakeholders

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LIST OF ABBREVIATIONS AND ACRONYMS

BHC	Bank for Housing and Construction
BMC	Budget Management Centre
CLDF	Community-Led Development financing
CLIFF	Community-Led Infrastructure Financing Facility
DACF	District Assembly Common Fund
DHD	District Health Directorate
ECG	Electricity Company of Ghana
EDP	Environmental Protection Agency
FGBS	First Ghana Building Society
FHWA	Federal Highway Administration
GHS	Ghana Health Service
GREDA	Ghana Real Estate Developers Association
GSS	Ghana Statistical Service
GWCL	Ghana Water Company Limited
GWSA	Ghana Water and Sanitation Agency
IGF	Internally Generated Fund
MHBPs	Mass Housing Building Society
MLGRD	Ministry of Local Government and Rural Development
MMDAs	Metropolitan Municipal and District Assemblies
NDP	National Development Plan
NGOs	Non-Government Organizations
PPP	Public-Private Partnership
RHD	Regional Health Directorate
SAPs	Structural Adjustment programme

SHC	State Housing Corporation
SSNIT	Social Security and National Insurance Trust

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DEDICATION

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

In economic disadvantaged countries across the world, researchers and analysts have identified the provision of housing as one of the challenges crippling the economies of most nation. This challenge is described by Tipple (1994) and Awuvafoge (2013) to be equated to a global crisis. This challenge came in light of the demand for housing and infrastructure outstripping the supply of the same. This challenge cut across all sectors of the economy and the focus of this study being on the health institutions. Tipple (1994) suggested that in instances where there are such housing facilities available, the exorbitant prices that came with it, is an overhead of what the health institutions are capable of affording with funding majorly being from their Internally Generate Funds (IGF).

Arguably, it is opined that the myriad of challenges encountered by the health institutions in the Ghana Health Service can be grossly attributed to the housing deficit within the country (UNFPA, 2007). As noted by Songsore and McGranaham (1993), even though every constituent of the habitat surrounding us exerts a level of influence on the health and well-being of mankind, the greatest of all such influences is derived from their immediate environment being the home and the neighborhood. Again, as argued by Vaid (2013), the environment provided by the housing and the neighborhood within which one resided was capable of either supporting or limiting the mental, social or the physical well-being of its occupants. Newman (2008) was of the view that providing adequate housing facilities correlate positively to the socio-economic benefits residents and the society at large enjoyed. The effects of adequate provision of housing on the health and well-being of occupants have continued to be stressed on due to its subsequent effect on all other socio-economic aspects of the well-being specifically the productivity of the occupant. According to Bonnefoy (2007) the materials used,

equipment installed during the life of the structure and the design or the size of the individual compartmentalized dwellings are directly or indirectly affected because of the health problem that associated with the building structure itself.

Again, it is a well-known fact that housing is fundamental to human survival in addition to food and clothing. In developing worlds and cities, housing is a paramount issue to all citizens, (Ametefe et al. 2011). The importance of housing to individual lives, community living and society as suggested by (UN-Habitat, 2011) cannot be over-estimated. Ebie (2009) stressed that, housing is the most important of all rights. This is because of the importance attached to its provision. Housing in all its ramifications is not just a shelter because its encompasses social sector and utilities that go to make a community livable environment. Having identified housing as a sector of any economy and as an area of dealing with poverty, social stabilization and growth in economy, many governments globally have been committed in improving housing situations for their countries which Ghana is no exception (GoG/MWRWH, 2012). However, the gap now between intentions and achievements is wide in the health sector setting (UN-Habitat, 2010). Ghana is facing housing deficits of well over one million houses (GoG/MWRWH, 2012). The deficit as a matter of fact has kept widening annually due to government inability over the years to develop schemes to close the housing deficit for the people especially health service employees (Mahama and Antwi, 2006).

For many developing countries Ghana not being excluded, the provision of decent housing at affordable prices has continued to be one of the major restraints of the government in the attainment of developmental goals. The problem of inadequate housing in our health institutions is a major challenge to all the employees of the Ghana Health Service especially in Western Region. The problems of inadequate housing in our health institutions need to be properly addressed.

1.2 PROBLEM STATEMENT

Despite most institutional housing across the country being provided by the Government of Ghana, there still existed a housing gap that urgently need to be filled to curb the problem of housing deficit currently faced by the Country especially in Ghana Health Service. The provision of decent housing scheme for the personnel and staff of the health sector continued to remain a major challenge for many health institutions within the country (Daily Graphic, 2014).

As result of the housing deficit in our health institutions in the country, majority of health professionals have to rent outside their work places. Most of the health professionals who leaved in rented apartments faced constantly deal with eviction by homeowners. One of the challenges to them is diminishing psychological and ontological security.

It appeared about 85% of the Health staff resided in low-income, deteriorated and overcrowded accommodation facilities lacking basic facilities and amenities such as proper waste disposal systems, potable drinking water, adequate drainage facilities and good road networks. UN-Habitat report (2011) revealed that the ministry responsible (ministry of works and housing) is not properly informed on the reality of living conditions existing in the formal housing and development schemes as well as the needs of the health workers. This thus presented a situation where the Ministry is unable to present an all-inclusive planned approach to the housing and accommodation needs of the affected employees (UN-Habitat, 2011). This therefore resulted in the housing deficit especially for non-clinical and junior ranked staff of the GHS. This has forced a majority of the affected employees to seek for rent accommodation thus contributing to low levels of productivity especially where residence is significantly far from the places of work. Against this backdrop hence, an investigation is conducted into the formalization and acceptance of an alternative housing solution to the housing needs of the health sector.

1.3 RESEARCH QUESTIONS

The questions necessary to facilitate this research are:

1. What are the factors causing housing deficits in the Ghana Health Service?
2. What are the challenges faced by the staff of Ghana Health Service in accessing alternative housing facilities?
3. What strategies can improve housing delivering in Ghana Health Service?

1.4 RESEARCH AIM AND OBJECTIVES

1.4.1 AIM

The main aim for the research was to examine the challenges facing housing delivering for health sector in Ghana.

1.4.2 OBJECTIVES

In order to realize the above stated aim, these objectives were necessary:

1. To establish the critical factors causing housing deficit within Ghana Health Service.
2. To establish the hurdles confronted by staff of Ghana Health Service (GHS) in accessing alternative housing facilities; and
3. Determine strategies that can improve housing delivering in Ghana Health Service.

1.5 SIGNIFICANCE OF THE RESEARCH

As a result of the overwhelmingly high housing deficits present in our health sector worsened by the rapidly growing population and the high costs on the provision of public housing facilities, the private sector has come to be seen as the key provider in housing facilities. Research has shown that provision of housing in less developed nations housing facilities is normally through the individual efforts to provide shelter for themselves. This study hopes to provide valuable source of information to stakeholders in the housing sector of Ghana

especially the government of Ghana about housing deficit and challenges faced by health service staff in accessing alternative housing. It also sought to suggest strategies on improving housing conditions in the Ghana Health Service. I am therefore motivated by the fact that if public and private sector could come together to provide solutions to housing deficit in the country especially in Ghana Health Service. Ghanaians health delivering system will be one of the best in the world. Also, it would provide information on present trends in the housing deficit in the health sector in the western region of Ghana. More importantly, the study would contribute to available literature in the field of housing deficit and serve as reference for those who want to advance a study in the area.

1.6 THE SCOPE OF STUDY

In identifying the scope for the study geographically, the Western Region was selected. This selection was founded on two major reasons. First, due to the overwhelming numbers of housing deficiencies recorded within the region. Secondly, through PPP initiatives, real estate developers and micro-finance institutions currently in abundance within the region can liaise to provide housing and accommodation facilities for health institutions.

1.7 RESEARCH METHODOLOGY

In pursuance of the aim and the objectives identified for the study, the quantitative approach was used for the study. Literature is properly reviewed and a well-structured questionnaire was designed and administered to solicit responses from respondents chosen for the study.

1.8 THE STRUCTURE OF STUDY

The basic structure for this work is in five chapters. Chapter one introduces background of the study, problem statement, aim and objectives for the study. The chapter also captures scope

and justification as well as organizational structure adopted for the study. The Second Chapter reviews literature relevant to the issues raised in the course of the study. Chapter three discussed the methodology adopted in carrying out the study. The fourth Chapter delves into a detailed analysis of the data collected for the study. The final and fifth chapter concludes the study and provides recommendations based on the findings from the study.

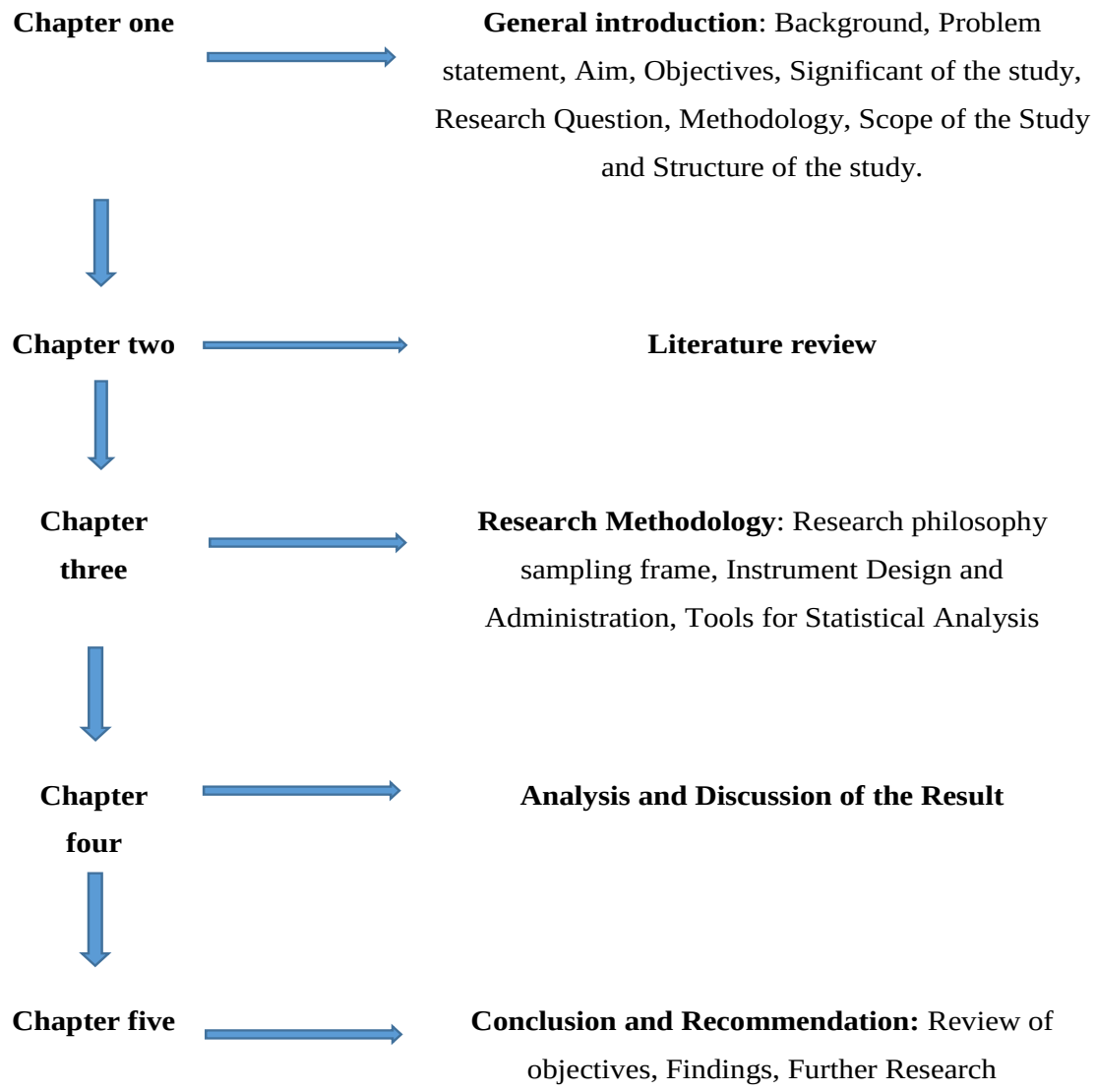

Fig. 1.1 Organisation Chart and Workflow of the study

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Most of the difficulties encounted by the GHS staff could be connected to housing. With this, the housing environment is challenged on whether it can affirm or diminish the social, mental and physical welfare of occupants (Bonefoy 2007, Sonsore and McGrannahan 1993). This is to say that the impact of proper housing can bring mutual socio-economic advantages to the residents and the whole surroundings (Newman 2008).

The high growth of population in Ghana has resulted in large housing deficit in the country, especially in GHS institutions. There are a lot of short-comings in public housing in majority of Ghanaian institutions hence the need to adopt strategies to curb down the situation. As a result of housing deficit in our public institutions, most private individuals are now producing houses through self-help approach. This self-help approach seems to be good and incremental housing strategies. The challenges of self-help approach appear to lead susceptible tenants to psychosocial distress and neglecting ontological safety and also a relentless terror of eviction by the owner. This chapter focused on the review of literature on the subject

2.2 DEFINITION OF TERMS

2.2.1 Housing

Housing can be defined to encompass all the conditions and pre-requisites for producing a dwelling, adequate and decent in nature. Housing comprises of the shelter being physical in itself, the services available within the shelter and the infrastructure in-house and in the environs of the neighbourhood. Additionally, it comprises of the inputs needed to produce the shelter as well as maintain it for durability Moffitt (2008). Essentially, housing concepts

revolved around the physical shelter and its surrounding environment. It also comprises of the solutions that are geared towards enhancing the shelter and its surrounding environment. Housing when reduced to represent just the shelter or the living space only, tends to be constructed with no regard for the environment in which it exists and the supporting services needed (GoG/ MLGRD, 2012).

The United States Census in their (2012) report defined a housing unit as "either an apartment or a house, a multiple or a single room, a mobile or stable house that is to be filled (or if not filled, is meant to be filled) as a divided dwelling units." From the definition provided by the report, any form of shelter is covered encompassing structures used as living quarters such as semi-detached houses, separated houses, compound houses, kiosks, tents, containers and even huts.

Moffitt (2008) identifies housing as the practice where the members of the community are sheltered in a dwelling or a lodging and provides comfort to the soul.

The World Health Organization (WHO) explanation of housing is that the fact that one lives in an adequate shelter means more than a roof over one's head: it entails that one have a home, a place that guards one's privacy, add on to one's physical and psychological welfare and affirms the improvement and socializing of its occupants.

Members of the United Nations during the 2nd HABITAT Conference affirms the definition of housing by the World Health Organization as being more than a roof over one's head but also a home that provides privacy, space, security and so on. They also added that housing should be structurally stable and durable and have all common necessities such as lighting, ventilation heating, water supply, waste management, near to access to basic amenities and work and should be obtained at an affordable price.

2.2.2 Housing deficit

The deficit in housing is concerned with the gap that exists between the demand and the supply of housing units. The deficit is measured primarily by considering the present housing availability and quantity of occupants in every unit. When the submission of housing fails to effectively meet the request, it results stress placed on the current housing and infrastructural stock.

2.3 OVERVIEW OF HOUSING DEVELOPMENT IN GHANA

Ghana Statistical Service Housing Census (2010) reported that for the most part of the urban areas, the high growth of the Ghanaian population has caused the huge housing deficit. This has led to the prediction that while the normal supply of housing is figure at 35% of the whole requirement, Ghana requires a supply of housing units of not less than 100,000 housing units. According to (ISSER, 2013) the yearly total deficit with 30-35% between 70,000 and 120,00 housing unit is needed to be delivered.

Again, according to the CEO of Danywise Estate and Construction, Ghana's housing deficit will hit 2,000,000 by 2018. Mr. Frank Aboagye Danyansah indicated that government have to provide 190,000 to 200,000 housing every year for the next decade to bridge the gap. This is estimated to cost the state US$ 3.4 billion for the 200,000 units (Business world Ghana, 2018). With a consistent history of national economic planning, housing in Ghana has never really been a major component and is normally viewed as a function for the sector of welfare.

The construction of housing development in Ghana was seriously emphasized and commenced most probably during the late fifties (50s) to the early sixties (60s) towards the attainment of independence from colonialism. During the period of 1960- 1965, a National Development Plan (NDP) was formulated out of which the State Housing Corporation (SHC) and the Tema Development Corporation (TDC) was borne. This came as a result of the central focus being

the provision of housing facilities key to the NDP. The TDC at its core sought to provide residential facilities and housing units in Tema whereas the SHC was aimed to provide same across all the regions of Ghana. This initiative took a downward slope as the resources to support it coming from subventions, loans and grants began to dwindle in light of the onset of the nations's economic struggles (Bank of Ghana, 2007). Speculative housing in the 1970s had begun to penetrate the Ghanaian housing industry through the efforts of quasi-government and private firms key among them being the Social Security and National Trust (SSNIT). Ahadzie and Amoah-Mensah (2010) posists that the late 1980s saw the government's active role as the key facilitator of hosing delivery rather than the direct provider. This resulted in the formation of the Ghana Real Estate Devlopers Association (GREDA) largely facilitated by government. Its membership currently spans over 120 corporate bodies. It stands a well-known fact that most of the members of GREDA developed most of the well planned communities in Accra, Tema, Takoradi and Kumasi. In previous times, GREDA has been able to build several housing units across the country with little or no governmental support.

It is imperative to note that since the flop of the Ghana National Housing Project, scheduled to be carried out by STX; a South Korean firm, the country currently exists in a consition where the provision of housing is a pressing and top priority need. The project was estimated to produce a whopping 200,000 housing units to a tune of $ 10 billion.

2.4 DRIVERS OF SUPPLY AND DEMAND OF HOUSING

The housing market can only function effectively with the proper connection between the forces of request and delivery of the housing units. The market inputs being building materials, finance, land and labour which are controlled the cost should be efficiently joined with the agents on the supply side comprising of producers, landlords and construction companies to

bring out housing units and its associated services, GSS report (2010). Renters and home owners to a large extent are viewed as supply agents should they engage in frequent maintenance and upgrades of their homes (Mayo *et al.*, 1986). The relative price throughout the entire process of producing houses is a critical component as it determines and largely decides if the housing units are presented by the stakeholders (Mayo *et al.,* 1986).

On the supply side, challenges encountered in the market for housing are normally sourced from the constraints of weak institutional frameworks and weak housing policies. Some instances of poor policy environments exist when rent control and prices of building materials and the land are imposed by the government and controlling authorities. Although these imposed policies are measures that aim to make the acquisition of housing more affordable to the general public, the consequent unintended results of demotivating and hindering developers from financing the housing industry is predominant. In the long run, new housing projects are rarely undertaken because developers would rather not deal directly with the increment in the prices and landlords are forced to bear the burden of maintaining housing units under these price controls established. This consequently leads to rent hikes and rising house prices which directly affect the poor and the low-income belt category of the population for whom the price control policies were meant to support. As a matter of fact, the present housing deficit experienced by the country arguably is charged by the living expenses and general control of price policies that were enforced commencing from the 1970s through to the 1980s.

The demand side however is significantly conditioned by the high growth rate of the population and the rate of urbanization. The situations of the natural population growth and rural-urban migration, the increasing preference for smaller household sizes and the growing middle- class populace have gone to provide an adequate ground for the high demand for housing units which by far significantly exceeds its supply leading to high rent costs in the end.

Within the urban regions, the demand for housing units especially by the rural urban immigrants coupled with the weak regulations and policy frameworks on housing and infrastructural development control has resulted in the formation and growth of slums and settlements informal in nature at odds with the principles of zoning and planning by the city authorities.

2.5 THE DEVELOPMENT OF MASS HOUSE BUILDING PROJECTS IN GHANA

Within the Ghanaian housing industry, the expression Mass House Building Projects (MHBP) was applied to define the technique of producing housing developmental projects on a mass or a large scale. Ahadzie *et al.* (2006a) defined MHBPs as "the design and construction of speculative standardized multiple housing units in the same location and are carried out within a similar project scheme". These comprise of multi-story or tower buildings, maisonettes, detached or semi-detached residences and/or a combination of all. The definition provided for MHBPs recognized the repetitive nature adopted in the construction process (Ahadzie *et al.*, 2006c). Four major features are for the purpose of this study extracted with regard to the defining concept of MHBPs. They are;

- The production of housing units should be established on one or more approved designs to check that the concept of repetition is met;
- In whatever form they come in, the construction of residential facilities should be involved;
- The end-products should be speculative in that the acquisition of inputs should not have any particular customer or occupant in mind; and

- All housing units produced should be a part of the same project scheme and be necessarily located in one particular area. They should therefore share the same contractual conditions

A review of the managerial practices of MHBPs within the Ghanaian building industry according to Ahadzie and Amoa-Mensah (2010) contended the adoption of such practices were relevant in aiding to establish the appropriate methods of managing future housing and construction projects.

2.6 Key actors in the Ghanaian housing sector

It is established that the Ghanaian housing industry or sector is highly populated with numerous actors or players which are the drivers in the provision of housing within the nation. This in part is attributed mostly to the highest proportion of the industry being informal and the poor regulations on the industry. This results in functions and roles and subsequently a large number of actors present within the industry. The key players identified within the Ghanaian housing sector are grouped into the public, private, the traditional, the international and the actors of NGOs. This is summed up in the Table 2.1 below.

Table 2.1: Key actors in Ghana's housing sector

Key Housing Sector Actors				
Traditional	Public	Private		NGO International
Chiefs	MWRWH	GREDAS	Habitat for	Cities Alliance
Queen mothers	MILGRD	GHACEM	Humanity	UN-Habitat
Family heads	MLNR	Universal Banks	People Dialogue	World Bank
Clan heads	NDPC	Mortgage companies	COHRE	GIZ
Land priest	ECG	NBFIs	Housing the Masses	
Individual households	GWCL	Building/Architectural	Amnesty	
Artisans/small-scale	GWSA	firms/consultants	international	
Contractors	DUR	Steel/roofing	GFUP	
(carpenters, masons	Land Commission	Manufacturing		
Electricians, plumbers,	MMDAs	Companies		
Steel benders, etc.)	TCPD			
Land/housing agents	EPA			
	State Housing Company Ltd			

Source: ***GSS Report (2010)***

Basically, the traditional actors are the informal players whereas all other categories are viewed as the formal actors. Customary land holders and owners namely the chiefs, the queens, family and clan leaders that possess the majority of the land to be given out for housing and other functions are in essence described as the informal players. Songsore (2003) and the UN-Habitat (2011) report indicated that about 80 to 90% of the housing available within the country is supplied with little or absolutely no support from the actors of the formal sector.

The formal sector on the other hand presents as more complex in nature and is dominated by the public sector. The formal sector in fact makes a contribution of only 10 percent of the total housing stock and is majorly focused on the middle and high-income households (UN-Habitat, 2010). Led by the MWRWH and its Directorate for Housing, actors within the public sphere are responsible for providing the policies for the housing sector in Ghana. Other public actors such as the utility agencies (Ghana Water Company Limited (GWCL), Electricity Company of Ghana (ECG), Department of Urban Roads (DUR), Community Water Sanitation

Agency(CWSA), etc.) are auxiliary agencies in the implementation of housing policies and provide the required neighborhood and settlement infrastructural services.

Again, the Non-Governmental Organizations (NGOs), may to a limited extent be involved in the production and provision of housing though a great number are advocates of proper developmental agenda and the protection of slum dwellers. They also recommend for the demand to bring affordable housing grounded on the basic right to housing of persons.

2.7 INSTITUTIONAL AND REGULATORY FRAMEWORK FOR HOUSING

Although the myriad of industries and subordinates involved in the housing sector coupled with the growth rate of the housing sector would entail that there are several organizations and institutions or agencies involved, the entire housing sector on the contrary lies within the auspices of the Ministry of Water Resources, Works and Housing (MWRWH). From its identity, it is purely evident that the ministry does not deal solely in Housing but is mandated to perform other roles. In actuality, the MWRWH was formed to support and provide directions on the policies formulated in the area of efficient water resource management and supply, promotion of sustainable rural and urban infrastructural facilities, the provision of housing and its associated facilities and the provision of social services, basic in nature (UN-Habitat, 2011)

The UN-Habitat (2011) report are of the view that Ghana has no dedicated Ministry of Housing although the onus falls on them to provide and formulate housing initiatives to serve either of the eight directorates of the MWRWH. This directorate is known as the Housing Policy Directorate. The document further reports that the Directorate is short-staffed with only three Technical officers comprising of the head of the Directorate and the Director of Housing as at 2011. The Directorate therefore requires the whole capacity and knowledge to implement and successfully execute a rigorous housing agenda within the country.

In addition to the MWRWH, the Ministry of Local Government and Rural Development (MLGRD) is mandated to provide the neighborhood structure and districting the efficient planning of the Metropolis, Municipal and the District Assemblies (MMDAs). The question then arises as to the efficiency of the roles played by the MMDAs in the planning of the communities and the provision of community and neighborhood infrastructure as well as the basic services. This is in part attributed to the growing rate of slums and poorly underserviced communities that have recently sprang up (Warschauer 2004; Owusu *et al.*, 2012; Yeboah and Obeng-Odoom, 2010).

Asides the poorly devised institutional frameworks for housing, the exiting legal environment within the country is lumped with the plethora of laws regarding the ownership of lands and management, controls on development, rent, financing and mortgaging of housing units, and so on which all directly and indirectly impacts on the housing schemes developed. These statutes and laws have been found to be inconsistent and incoherent amongst each other.

2.8 FACTORS CAUSING HOUSING DEFICIT IN GHANA HEALTH SERVICE

The major factors causing housing deficit in Ghana Health Service are:

- Political instability;
- Repeated change of Government;
- High increase in population;
- Insufficient mortgage financial organizations;
- Expensive building material;
- Expensive land;
- Faulty land tenure system;
- Lack of infrastructure and provision of utilities;
- Failure of MMDAS to provide accommodation for Health Institutions;

- Lack of institutional and regulatory framework in MMDAS for housing; and
- Lack of vision on part of leadership in our health institutions.

2.8.1 Political Instability

Frequent change of government has contributed to the significant cause of housing deficit in most of Africa countries of which Ghana is no exception. In Africa, the political parties have their own political ambitions to fulfill. In Ghana, lack of continuity lead to abandonment of many projects started by previous government Amoatey et al., (2015). Because the new government believe that when ongoing projects are completed, the credit would be given to the previous government. In our MMDAs, when there is change of political power it results to abandonment of most ongoing projects and even hatred between some institutional heads and political leaders. This sometimes call for transfer of the heads of institutions just because they do not belong or affiliate themselves to the new political party. Therefore, whatever projects or good thing these heads are doing are seen differently by the new political leaders. This seriously affected most public institutions in Ghana of which the health institutions are not exceptional. It also led to abandonment and neglect of lots of housing projects for both ongoing and new projects that need to be implement by the new political leaders for GHS institutions.

2.8.2 Lack of Continuity Due to Consistent Change of Government

Ghana has suffered a lot of setbacks in provision of public housing due to lack of continuity from the part of government. The result has contributed to the housing situation facing the country at the moment. For instance, with the help of private, public partnerships in Ghana, the Government embarked on several schemes like the affordable housing scheme in 2005 to provide over 100,000 housing units. (Bank of Ghana, 2007). However, just after a change of government in the year 2009 all the projects have been abandoned and left to squatters up till

now with no tangible reason given to complete them. This housing project when completed in any case could have accommodated hundreds of families (Ghana web, 2012).

On January 27th 2011, the president of Ghana John Evan Atta Mills cut sod for the commencement for the commencement of STX housing projects which was expected to have been the biggest investment made by the government in the housing sector. The project was expected to deliver 30,000 housing units for security personnel over a construction period of 5 years. Sadly, the death of Late President John Evan Atta Mill, six months after cutting the sod the project has not seen light till now. The company is yet to build a single unit as the project is frustrated as result of turf of war between the Korean and Ghanaian partners over the ownership and control of the company (Van, 2007 and Daily graphic 2012).

The Ghana government in her frustration contracted a Brazilian construction firm (OSA construction) to construct 5,000 affordable housing units across the regions of Ghana and it was to start at Prampram in Greater Accra Region. This projects has also not be complete till now. Likewise, the fiasco housing project which was started in 2001 and abandoned in 2008 as up to the time of this research not a single housing unit has been completed.

2.8.3 High Population Growth

Ghana's health institutions are at bursting streams from high demand of recruiting nurses into the service and bear the brunt of rapid growth that is taking place in the country. It is estimated that Ghana health service's current population has multiply ten times of the past decade in the total growth of the nation and centered in the increased growth and has cause resulted in a short fall and insufficient sanitation. An increased in population growth and employees demand had turned housing into a very critical problem currently happening to the government. The increase the growth of population in previous years has been added by a very decreasing rate in raising in housing in most areas of the country. The rapid population growth in Ghana for

instance is straining Health Service infrastructure, and degrading social amenities and shelter conditions, particularly in most MMDAs.

2.8.4 Inadequate Mortgage Financing Institution

Apart from the rapid population growth which is not met with increasing supply of housing, there is also a problem of mortgage financing. In the developed world, the industry of mortgage financing has continuously been proven to be a capable financier of the housing needs of the populace and the general masses (Bank of Ghana, 2007). Notwithstanding, the provision of decent and cheap housing for the populace is a great difficulty to most of the people in Ghana. This in part can be attributed to the unbalanced proportion of savings as against borrowing within the economy. Additionally, the resource demand in all the other sectors and industries within the economy, puts the housing industry in a huge deficit as resource is scarce and resource allocation is very poor (Okwonko, 1997). Posner (2014) points out that the biggest challenge of housing financing in Ghana stems from the fact that most of these institutions are merely portfolio lender. This is because most of them prefer to operate at a minimal and risky level where lending in dealing with other investment opportunities fits well. In other cases, the banks have a short-term lending scheme and so are unable to provide funding for medium and on a long-term basis.

2.8.5 High Cost of Land

Land is an important asset to every country's economic and social growth, when it is portrayed as an economic good more than just a social good. In time past, a small amount of money was paid as allegiance of holding the land for economic or social activities. The present state of the urban property market with its inherent issues of uncertainty of land ownership, delays in approvals and issue of titles, delayed provision of services and other infrastructure as well as the lack of compliance with planning and housing requirements and the re-occurring problem

of bribery and corruption have distorted and crippled the land market (CDD, 2000). Moreover, according to Dr. Tweneboah, the immediate past president of Ghana Real Estate Development Association also made this same assertion, Amakye (2017). He attributed the high percentage of vacant land available for development to behavior of some traditional rulers who treat stool lands which by the constitution of Ghana are not saleable but only alienable by lease and consideration payable thereof is ground rent (Daily Graphic, 2012). This implies that the price of the land to the buyer is much more that expected to be. With this, developers are only able to purchase few tracts of land for development and this affects the contribution of housing production.

2.8.6 Defective Land Tenure System

With the varying traditional land tenure systems in Ghana, each with its own system of ownership, administration and its attached legal incidents and rights, it is not so surprising that there exists a defective land tenure system within the country (Appiah, 2007; Ollenu, 1962). Ownership is therefore often unclear and the process is bogged down by bureaucracy. This has consequently lead to the inability of Real Estate firms and other land developers from obtaining large enough tracts of land. Moreover, the absence of an efficient system of ownership of the land inventory has resulted in the multiple sale of a singular land causing huge problems in the real estate business. This has often led to unnecessary delays from the resulting litigations and legal suits (Appiah, 2007).

2.8.7 High Cost of Building Materials

As 90% of the cost of building is highly influenced by the cost of the building materials used, any variation to the cost significantly affects the cost of the project as a whole. The provision of housing infrastructure and affordable housing units for the masses is more often than not

constrained by the high cost of building materials which results in the high cost of the final housing units (Asibuo, 1994; Glaeser, et al. 2005, Danso and Manu, 2013).

These high cost to a great extent is attributed to the over-dependence on imported building materials for which its substituting local materials could have been locally acquired given governmental backing and support (Yeboah, 2005).

2.8.8 Lack of Infrastructure and the Provision of Utility Services

Infrastructural development is one of the components in the construction industry. The provisions of these infrastructure boost the development and attracts potential investors to such areas. However, in many parts of Ghana such infrastructures and services are lacked. Therefore, the lag in infrastructure provision by Metropolitan and Municipal District Assemblies and service providers in newly developing areas have affected the production of housing (UN-Habitat, 2011).

As a matter of fact, Ghana's current situation of housing shortage in part can be attributed to the rent control and the general housing policies implemented through the 1970s through to the early 1980s. The housing deficit however differs based on the varying computations of the quantity of people in each household and the quantity of people in every room. When the deficit is calculated on the grounds of 6 people per every 2-bedroom housing unit, the deficit appears to have reached the highest point at about 960,000 units in the year2000 and fallen more than 700,000 units. However, once it is calculated on the grounds of 4 people per every 2-bedroom housing unit, the deficit rises from more than 2.4 million to 2.7 million in 2010 seen as gradual rise than the preceding years. In different regions and different city sizes the changes are similarly seen.

2.9 CHALLENGES FACED BY THE STAFF OF GHANA HEALTH SERVICE IN ACCESSING ALTERNATIVE HOUSING

2.9.1 High competition in rental charges

There is high competition of rental charges on rent apartments as a result of housing deficit in our health institutions in the country. Hence, majority of health professionals have to rent outside their work places since government is unable fill the gap. The trend that only government are capable of bringing out housing especially for health institutions because of inadequate funds affect the workers more. The decreasing role of the governments in public housing delivering have brought a situation where housing provision goes on to be ruled by the private sector. It is expected that 90% of the available housing is delivered by the private individual mostly through self-help approach in Ghana. The situation of housing deficit in Ghanaians Health Institutions have led to rampart increase in rental charges by the homeowners since there is high demand for housing. Due to the better offer of other people looking for accommodation, the owners often increase the rent of the occupants already living there to make additional payments to match or exceed the new offer. Failure to pay by the occupants already living there to pay this high prices could lead with refund of any outstanding balance from the past by the owner.

Adding to ability to pay for living expenses and presence of trouble is the nature of the rental payment system which leads to a heavy weight on many occupants. The Ghanaian house owners expect hires to make a lump sum payment of the rent from 2-5 years in the beginning. Those lump sum payments (generally called rent advance) can sometime be equal to 2-3 years' worth of accumulated yearly income. The combination of rising rental cost fewer housing opportunities, hyperinflationary pressure and the nature of the rental market system paint a worry picture for many renters and for sure presents likely dangers to their psychological health and welfare.

2.9.2 Insecurity

As a result of housing deficit in our institutions two or more families are force to stay in one bungalow which have given the opportunities to some older men to influence and seduced their neighbor's daughters with the promise to give them expensive gifts. Likewise, those staff who did not get accommodation in the facilities and find themselves in the mean of town people face similar problem. A lot of young girls have fallen victim of the manipulation of older men with the assurance of catering for their education. This has landed in a lot of self-induced abortions fearing the expression of their parents when they find out. Women and young girls also live in constant fear of the rise in assault and rape. Boys are also influenced by their colleagues who parents are rich. Because this rich provide their children with all sorts of expensive gifts. Some these boys also joined the colleagues who were criminals and commit all sorts of crime as peer influences.

2.9.3 Lack of privacy

In most of our institutions, married couples are living in a single room. Married couples living single room implies that there is complete absence of privacy for any family member. The absence of privacy is seriously felt by the women and when interviewed they were visibly suffering from the effects of overcrowding on their marital relations. The presence of a certain curtains uses to partition the room into apartments still do not sufficiently enough to offer the couple privacy. Some couples admitted that the situation is worse when their relatives pay them visit and they are sharing a single room with just curtain separating them. A lot of women admitted the fact that their husband stayed out late at night to avoid the crowding situations, ending up in a bar drinking beer. Some women also entertained fear that they might lose their husbands if they find places where privacy is guarantee.

2.9.4 Change of moral behavior

The mechanism where kids are forced to stay away at nights has led to a lot of immoral behaviours of boys and girls, which parents were more concerned about the effects of overcrowding on their kids. It common now to find the young girls in room of the so call sugar dadies while their wives have travel to their hometown or any other places. In consequences many of teenage girls became pregnant. All these happen as overcrowding and lack of adequate housing situation in our institutions. Even though congestion is the factor responsible for a change in the moral code of society, general lack of the other family members whose sole responsibility is to nature their brothers and sisters' daughter both the moral and sexual conduct has negatively impacted into lives of these girls. The absence of the exposure of relationships has left the raising of a girl on the mother alone. Parents find it hard to talk with their kids especially on these circumstances. Hence, the need for other family members to educate these teenage girls.

2.9.5 Difficulties in responding on call/emergency duties

The housing deficit in Ghanaians Health Institutions have led many people to rent accommodations of outside their facilities. As a result, staff on call or emergency duties find it difficult to attend to emergency duties especially those living far away from their facilities. Some staff are also afraid of walking from their homes to the facilities especially during the night. Again, some staff have to stay in vehicles for an hour or two before they arrive home after day's work. How could such staff respond to emergency calls whiles he/she is already tired? The housing deficit situation is seriously retarding the service delivering in Ghana Health service hence there is the need to give serious attention to it. So that the health needs of the people can be improve in order to meet the desire target.

2.9.6 High transportation cost

Payment of high transportation cost by the staff who resided out the due to housing deficit in our health institutions. Staff who resided far away from their place of work have to pay so much in transporting themselves to work. Sometime people have to joined two or more cars before coming to work just because their resident if far away from the workplace. Some people because of fear of being late and not to be fired by their Bosses, hired taxi to reached the work place on time. All these unnecessary expenditure and high cost of transportation reduced their income and they are unable to meet their basic needs. This sometime lower their moral to performed their duties effectively and lead to loss of production. Therefore, all effort must be made to bridge the gap of housing deficit that exist in our Health Institutions, achieved workers' comfortability and increase productivity.

2.9.7 Payment of high utility bills

As a result of housing deficit in Ghana's Health Institutions, majority of Health professional resulted in finding their own accommodation outside their workplace. Some homeowners have taken advantage of this shortfall and demanded high utility charges from the tenants. Some Landlord/Landlady failed to make available these utility bills to their tenants to even have a glance on them. Some Landlord/Landlady sometime threaten their tenants of being sacked if they failed to pay these bills. On the other hands, some Landlord/Landlady wanted their own bills to be paid by the tenants and failure to accept these demands sometime led to quarrelling, hatred and insults in these homes. Some Landlord/Landlady do not even allow the tenants to acquired their own separate meters with the fear that their bill would be left on them to pay hence expelled out these tenants from the rented apartments without being found guilty at all. If the tenants (Health Professionals) should have accommodations in their respective facilities and have controlled over their own utility bills all these problems would have been avoided.

Therefore, there is the need for more housing to be provided to curb the challenges faced by health staff as of renting accommodations outside their place of work. This would made respond to emergency calls and other duties on time early enough.

2.9.8 Fatigue

Fatigue can be explained as an overall feeling of tiredness or lack of energy. Fatigue is a common effect of a lot of medical disorders, with a variety from mild to serious. It's also a natural result of some lifestyle decisions, like lack of exercise or improper nutrition World Health Organization, (2001). Due to the stress that staff who resided outside go through as a result of travelling from their place of stay to the workplace and challenges they faced with Landlord/Landlady, they always arrived at workplace tirelessly and with frustration on the faces. Majority of these workforce contribute poorly at their various workplace hence productivity is always declining.

2.9.9 Loss of productive hours

Productive hours were loss due to persistent lateness to work and fatigue of workers for travelling a long distance before arriving at their workplaces. Mostly people who stay far away from the workplace spent at one to two hours in traffic before arriving to work. Some arrived as let as 10:00am morning and due to stress on the most became inactive during early hours of productivity. Again, some people the workplace before with the reasons to beat vehicular traffic on the road so that they can arrived home before 6:00pm in the evening. So, they can finish the house works without staying too long in the night. If all these people were accommodated at the work premises, these hours would not be wasted in vain and stress on the workers would be reduced. Hence there is the need to close the gaps of housing deficit that existed in the Health Facilities.

2.9.10 Education is drawn back

Housing deficit in Ghana Health Service High Density has also economic implication. The single room occupied by marriage couples is use for living room, study room, dinning, etc. means that children at school particularly those at higher levels would find it difficult to do homework or study under the overcrowded conditions particularly at night. If dependent on candles, the light is inadequate for reading purposes, and even where there are electric lights, its use is curtailed by the need of the older people of the family Chazovachii, (2011). Hamel and Prahalad, (1996) support this idea when they say that husband needs in the house override the needs of everyone else if they are staying in a single room. Children education was disturbed if ideas has to be obeyed.

2.10. EFFECTS OF HOUSING ON HEALTH

2.10.1 Housing and health

The causes of deadly diseases such as asthma, lead poisoning, mental problems and so on are as a result of poor housing conditions. Housing is an important determinant of health, inadequate and substandard housing is a major health issues in most health institutions (Sharfstein and Sandel , 1998). This is around 13.5 million nonlethal accidents that happen around homes in the United States (UN-Habitat, 2011), the number of persons that die of fire outbreaks in house are about 2900, and about 2 million asthmatic patients visit the emergency rooms. Kids with blood related problems that severely affects their behaviour and intelligence amount to about 1 million. 2 million Americans live in houses with severe physical conditions and an addition of 4.8 million live in homes with moderate problem (US Census, 1999).

2.10.2 Housing as a determinant of health

The rise to the collection of proof has related housing quality with dreariness from contagious infections, constant diseases, wounds, improper dieting, and mental issue.

2.10.3 Infectious diseases

Highlights of unsatisfactory housing, including absence of good drinking water, lack of heated water for washing, incapable waste transfer, interruption by malady vectors (e.g., bugs and rodents) and deficient sustenance stockpiling have for quite some time been distinguished as adding to the spread of irresistible infections. Swarming is related with transmission of tuberculosis Stein, (1950) and respiratory diseases, (Fonseca et al., 1996). Absence of housing and the congestion discovered casual housing for the destitute likewise add to grimness from respiratory contaminations and initiation of tuberculosis.

2.10.4 Chronic diseases

In later years, epidemiological examinations have connected unacceptable housing with the rise in danger of constant disease. Clammy, cold, and mildew covered housing is related with asthma and other incessant respiratory indications, even after conceivably perplexing elements, for example, smoking, swarming, and unemployment are controlled for Williamson et al. (1997). Water interruption is a noteworthy supporter of issues with sogginess. In 1999, 11 million involved homes in America had inside leaks and 14 million had outside leaks (Bureau, 1999). Congestion and insufficient ventilation likewise increment inside dampness. Clammy houses give a supporting situation to bugs, insects, respiratory infections, and molds, all of which assume a job in respiratory illness pathogenesis. Cross-sectional epidemiological examinations have additionally settled relationship among sodden and mildew covered lodging and repetitive migraines, fever, sickness and spewing, and sore throats ,Platt et al. (1989).

Old, dusty floor covering, frequently seen in inadequate housing, is a vital store for residue, allergens, and poisonous synthetic substances, Robert et al. (2009). Introduction to these specialists can cause hypersensitive, respiratory, neurological, and hematologic sickness.

The plague of pests, through their relationship with asthma, give another connection between insufferable housing and interminable disease. Cockroaches can cause hypersensitive sharpening and have developed as a vital asthma trigger in internal city neighborhoods. Kids with asthma who are sharpened and presented to cockroaches are at raised hazard for been put in the hospital. Auxiliary imperfections grant passage for cockroaches and rodents; spilling funnels and different wellsprings of water furnish them with water to drink. Lacking sustenance stockpiling and transfer offices give them open doors for acquiring nourishment. Dead spaces in buildings harbor bugs and grant course among condos in multiunit residences.

Changing of indoor temperature past a generally tight range has been related with expanded danger of cardiovascular ailment Collins, (1986). As indicated by Evan et al. (2000), staying in housing with no heat has been related with lower general wellbeing status and expanded utilization of health administrations. These wellbeing worries have added to the advancement of benchmarks for warm solace, Thermal Environmental Conditions for Human Occupancy, (1981)

Introduction to lethal substances found in homes can lead into perpetual medical issues. The relationship of detached presentation to indoor tobacco smoke with respiratory illness is very much recorded Laumbach and Kipen, (2012). Poor ventilation may expand introduction to smoke. As per Institute of Medicine (2000), Indoor presentation to nitrogen dioxide (from deficiently vented or inadequately working burning machines) has been related with asthma side effects. Presentation to unpredictable natural mixes (transmitted by molecule board and floor covers) might be related with asthma and wiped out structure disorder (Institute of

Medicine, 2000). Decently raised dimensions of carbon monoxide (from inadequately working warming frameworks) cause cerebral pain, though larger amounts result in intense intoxication, Ruth-Sahd et al., (2011). The connection between lead presentation (from leaded paints) and neurodevelopmental irregularities is obviously settled Nigg et al., (2010) and extra proof recommends a relationship with hypertension. Asbestos presentation (from breaking down protection) can cause mesothelioma and lung malignancy. Polyvinyl chloride ground surface and material divider materials have been related with bronchial deterrent amid the initial 2 years of life. Private introduction to radon, which is expanded by auxiliary imperfections in cellars, can cause lung malignancy. Old covering can contain pesticide buildups and different mixes, for example, polycyclic sweet-smelling hydrocarbons, Lewis et al. (1999).

2.10.5 Injuries

The significance of planning homes to avoid wounds has gotten firm consideration, Ranson (1991), particularly as to diminishing falls and burns. Traits of unsatisfactory housing that expanding the danger of damage incorporate uncovered heating sources, unprotected upper-story windows and low ledge statures, tricky surfaces, delicate window glass in locales with a high probability of contact, and ineffectively planned stairs with deficient lighting. Building structure and materials impact the danger of damage from flames. These dangers are habitually present in brief housing gave to vagrants and kids, Conway (1993).

2.10.6 Neighborhood effects

Past the state of the housing unit itself, the site of the home might be a determinant of wellbeing. Impacts of Neighborhood on wellbeing have been reported; these incorporate raised rates of deliberate damage, poor birth results, cardiovascular illness, HIV, despression, gonorrhea, , physical idleness tuberculosis, Brownson et al. (2003) and all-cause mortality, Yen et al. (1999) in neighbourhoods of low financial status, freedom of individual-level hazard factors. A few highlights of these areas may add to weakness. Air quality might be poor in view of their

vicinity to wellsprings of vehicle fumes discharges, for example, significant streets, transport terminals, airplane terminals, and trucking courses. These sources likewise make generous clamour presentation, which might be related with a scope of unfavourable wellbeing impacts. Destinations of ill-advised waste transfer can harbour bugs, which would then be able to plague homes. However, it is conceivable to plan neighbourhoods to advance wellbeing by considering walkway and road structure, the nearness of green spaces and recreational destinations, and the area of schools, work, and shopping inside strolling separation of homes, Frumkin et al. (2001).

2.11 STRATEGIES FOR IMPROVING HOUSING DELIVERING IN GHANA HEALTH SERVICE

2.11.1 Housing financing

The housing finance system of Ghana has aimed at a small portion of the total population that is the high-income households in the formal sector, Mutisya (2015). In the review of housing finance mechanisms in some nations comprising Ghana by, Schieber et al., (2012) saw that the national is rated very low when it comes to housing finance as a proportion of GDP: The average GDP of Africa is 15.7% while the whole of the Ghanaian finance in housing 0.5% of GDP. This has led to series of challenges that faces the housing financing system, the Bank of Ghana (2007) observed that on the average a household in Ghana is normally dealt with three decisions in the attainment of shelter, that is either to rent, build or mortgage a home.

In Ghana, majority of the population relies on their own effort to develop their own home by informal mechanisms that is funding it themselves. Meanwhile the informal mechanisms used in the funding of housing normally lead the rise of building price. It has been assessed that the procedure of steady structure could take as long as 15 years for a solitary structure to be

finished, with assets along these lines getting integrated with these uncompleted ventures and the expenses of development swelling in a shaky large-scale financial condition (Bank of Ghana 2007), tormented by high expansion and diligent devaluation of the neighbourhood cash, the Ghana cedi. For a low-pay worker, Obeng-Odoom (2008), it is assessed that it will take around 54 years for this person to procure a two-room house, accepting such an individual had zero costs. By the by, oneself financing alternative remains the key feasible choice for some, family units wanting to claim their homes, particularly inside the setting of Ghana's current restricted and seriously tested formal lodging account framework. This is on the grounds that it enables family units to procure homes in the long haul and to remove themselves from the weights of the unregulated rental market with its 2-3 years' rental development instalments. Also, one's self-financing choice has the upside of enabling families to work at their very own pace without undue money related weight.

2.11.2 Use of public-private partnership initiatives (PPP)

The *public-private partnership (PPP)* is designed that in development of some particular projects, the risk, decision and resources involved will be shared. Ghana has used in the event that to changing degrees of triumph Stadtler and Probst, (2012). In the midst of the 1990s structure financing was serious issue going toward Metropolitan, Civil and Area Gatherings (MMDAs) (Area Get together Common Finance, 1999, 2004, 2005). Neighborhood masters were puzzled roughly the issue of delivering agreeable wages from their traditional sources Badu et al., (2012). In response, the DACF, Act 455 was requested underneath zone 252 of the fourth Republican Structure of Ghana in 1992, and instructed Parliament to consistently circulate at the very least 5% of Ghanaian indicate salaries to the MMDAs for improvement. The MMDAs should also partnership with the private sector to build more housing for health staff. Since the MMDAs have means of generating their own revenue call DACF, the MMDAs can also partner with the Private Sector through other PPP initiatives such as

2.11.3 Community-led housing development financing

An example of Community-Led Housing Development Financing is Community-Led Infrastructure Financing Facility (CLIFF). It is an innovative financing practices that provided an avenue for financial products directly to "institutions of urban poor" to back community-led slum regeneration in collaboration with city authorities vis-à-vis government agencies Badu et al., (2012). The outcomes of CLIFF are Community empowerment and consequential societal products of urban regeneration.

The Department of Transportation of US Federal Highway Administration (FHWA), (2006) has found two mechanisms where raise in revenue is available. Begin, by raising the revenue generated traditional and already existing financial tools and followed by obtaining very low-cost funds. Communities can come together to form this Community-Led Housing Development Financing to aid infrastructure development in the Health Facilities in their Communities. This can be achieved by levying the individual people, churches, other organizations and support from outside partners. A small amount of money could also be added to market tolls to boost the revenue. The revenue collectors should be well trained and monitored for efficient collection and rendering of account for monies collected. Community-Led Housing Development Financing should adopt a mechanism for prudent management of the funds and realistic plan to follow in carrying out these developmental projects at the Health facilities within their communities. Health facilities that benefited from these housing should let their staff pay rent so that Community-Led Housing Development Financing would continue to run long.

2.11.4 Health institutions to set aside five percent of their internally generated fund for housing projects (5% IGF)

Most of Health Facilities have what we call Internally Generated Fund (IGF). The Health Facilities should set aside Five (5%) of their Internally Generated Fund (IGF) to build more quarters for their staff since this will go a long reduce housing deficit in most of Ghana's Health institutions. The management of every BMC be charge by Regional Directors to build at two Nurses Quarters for the Facility the work before their transfer. The Regional Health Directorate should provide every BMC with the approved plan of Nurse Quarters for the Facilities to be built. The BMCs should submit to their various Regions a comprehensive plan and programme of work so that the Region can easily monitor them.

2.11.5 MP Health fund

MP Health Fund for Health Institutions should be mainly meant for Health Infrastructure projects. Since Health facilities are faced with serious problems of housing deficit, it would be appropriate if this fund is reserved mainly for Building infrastructure projects. Then at least every facility would be able to 3-bedroom quarters for every two years. The MPs and Facility Managers should be committed in doing that to reduce this housing deficit situation in our Health institutions.

2.11.6 Five percent of mmdas common fund for GHS housing projects

Since Metropolitans, Municipals District Assemblies (MMDAs) have their traditional source of generating revenues for their respective MMDAs. The MMDAs should allocate Five Percent (5%) of the funds collected for Housing Infrastructure Projects for Health Institutions every year. Most health Institutions received a little support from their MMDAs whiles health facilities render excellent services to the communities they operate. Health professional can only render efficient services if they have good shelter and condusive working environment.

MMDAs can also lease with Health Institutions and Partner with stakeholders to support in building staff bungalows for staff to reduce housing deficit in Ghanaians Health institutions.

2.11.7 Re-establishment of bank for housing and construction

State owned organizations were originally founded to make available financial services to Public housing. The First Ghana Building Society and Bank for Housing and Construction (BHC) are some examples. There was still active involvement by the state during different military regimes in the 1970s by the state, observe 13 in the midst of the construction of Low-Cost Houses in district and regional capitals under the Supreme Military Council I (SMC I) regime. It must be observed that, although, during this era the private informal industry presented about 80% of the housing (Songore, 2003), nonetheless because the low-level urbanization, the state's effect when it comes to the delivery of housing was very low.

Some decades after post-independence these state-owned financial institutions seize operations and led to the birth of Ghana Real Estate Developers Association and many others. These Real Estate Developers and others are in business to make profits. Their interest was not to build bungalows for state institutions.

Hence, the First Ghana Building Society and Bank for Housing and Construction (BHC) was re-established to provide financial support for construction of Public Housing. I believe this would aid to reduce housing deficit in most Ghanaians Health Institutions.

2.11.8 Government to partner with real estate developers to provide housing for GHS institutions

According to Ghana Statistical Service (GSS) 2010 report in the middle of the 1980s to the early 1990s constitutes the period of Structural Adjustment Programmes (SAPs) and Economic Recovering Programmes the state withdrawal from provision of public housing gave way to the private sector. This has led to the establishment of the Ghana Real Estate Developers

Association (GREDA). Instead of Government of Ghana partnering and provide support to GREDA to continue with the provision of public housing to bridge the gap of housing deficit in the public institutions especially Ghana Health Service. The Bank for Housing and First Ghana Building Society (FGBS) should re-establish and revamp the government of Ghana to partner and make available financial and technical endorsement to GREDA for provision of public housing to reduce this huge housing deficit in our intuitions. The commitment of BHC, FGBS and GREDA for public housing construction will certainly bridge the gaps that existed and improve health delivering in the Country. Hence, it is important to look at it with all seriousness as Nation and try hard to curb down situation of the housing deficit in Country especially in our Health Institutions.

2.11.9 Ministry of housing

The reports have shown that the necessary commitment for the ministry responsible for housing in Ghana is not available to formulate and implement housing policies in the Country. There is not detailed housing policy in Ghana, that even in the past there has not been even a different plan of action to centre on housing that conform to global trends. Because of the absence of comprehensive housing policy and national plan for housing construction, political parties rely heavily on their manifesto in order to fulfil their campaign promises. These political parties mostly serve their interest since there is no comprehensive national policy to give them directions and plan to follow when they are in office. So, it is paramount now to have a dedicated ministry of housing to provide policy directions and national plan for housing construction for political parties to draw their manifesto along the line.

2.11.10 SUMMARY

The broad areas discussed in this chapter include: definition of terms in connection of housing deficit in Ghana Health Service Institutions in Western Region, overview of housing development in Ghana, housing population, supply and demand drivers for housing,

development of MHBPs in Ghana, key players in Ghana's housing sector and the framework for housing by institutional and regulatory bodies in Ghana. Also, the chapter considered the factors responsible for housing deficit in Ghana Health Services Institutions, challenges faced by the staff in accessing alternative housing and finally the strategies that can improved housing delivering in Ghana Health Service Institutions in Ghana. This chapter was basically geared at reviewing the current knowledge available on the study and develop appropriate questionnaires in the next chapter.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter three sought to explain the methods selected in order to address the research aim and objectives. It began with a brief look at the paradigms in research and the subsequent methods adopted for the study. Thereafter, the theoretical definition of terms was explained. Following the theoretical definition of terms is the research design. The research process, the questionnaire design, data collections processes, the sample size determination and a two staged primary data collected were also discussed.

3.2 THE RESEARCH PARADIGM

This section discussed the paradigms in research (positivism and constructivism approach). Subsequently the research paradigm for this study is disclosed and argued in relation to the objectives, the aim and the purpose of this thesis.

3.2.1 Positivism

It can also be called the “science research”. It rests on a philosophy expounded by Aristotle, Francis Bacon, and many more (Mertens, 2005). Positivism is useful for the assumption that social and natural world can be studied in the same manner; specifically, in a system that is value free. Also, causal nature can further be explained (Mertens, 2005). Experts in positivism tests theory by observing and measuring so as to have control of the surrounding forces (O'Leary, 2004).

3.2.2 Constructivism

The opponent of positivism is constructivism which was a philosophy of Edmund Husserl's phenomenology and Wilhelm Dilthey's and other German philosophers' study of interpretive understanding called hermeneutics (Mertens, 2005, citing Eichelberger, 1989). The approaches

are to understand “the world of human experience” (Cohen & Manion, 1994). Constructivist believes that “reality” is not objective and exterior, but is socially constructed and given meaning by people (Easterby-Smith et al, 2002). Constructivism does not normally begin with a theory as compared to positivism, rather they “generate or inductively develop a theory or pattern of meanings” (Creswell, 2003) throughout the research process. The constructivist researcher is most likely to rely on qualitative data collection methods.

3.3 THE QUANTITATIVE RESEARCH

The study adapts the quantitative approach because quantitative research in natural science and social science involved systematic empirical investigation of observable phenomena via statistical, mathematical or computational techniques Fellows et al., (2015). It also used deductive approach and thus associated with verification of theory and hypothesis testing and its data is collected by queries to a targeted population, with answers recorded in numeric codes or actual numbers Ary et al., (2018). The common data collection techniques use in quantitative research are questionnaires, test, and existing database. Quantitative research is formal, objective and deductive approach to problem solving and also uses deductive reasoning to synthesize data Thomas et al., (2018). Again, findings of the research can be generalized from the study sample to the larger target population. Also, the researcher and the research participant can remain independent and not influence one another. In addition, cause effect relationships can be tested since there is only one single reality that can be measured at a given time.

Since the goal of the use of quantitative approach is to make generalization from the target population, the study identified it as the best choice.

3.4 STUDY AREA

The survey was focused on some Health Institutions in Western Region. These institutions were Enchi Government Hospital, Dadiaso Government Hospital, Regional Health Directorate, Aowin Municipal Health Directorate and Suaman District Health Directorate. With the targeted population of three Hundred and Seventy-Eight Health Professionals.

3.5 RESEARCH DESIGN

This is the manner of investigation so as to relate variables; to help provide answers to the research questions. To choose a design for research, researcher's level of control on entities, and time available for the study are key issues to be considered. In line with the factors considered above, case study and quantitative approaches are deemed appropriate for the study. The case study approach is based on the fact that, Western Region Health Service Institutions are known as institutions whose employees come from different tribes and regions. Because of the aforementioned facts and the researcher's familiarity with the Western Region, the Region is identified to be the best area for the study.

Quantitative research strategy was adopted in this research survey because is a formal, objective and deductive approach to problem solving and also uses deductive reasoning to synthesize data. Descriptive and explanatory research was used realize the aim of the study. Explanatory exercise was used understand causes of housing deficit in Ghana Health Service Institutions and role of mortgage render in Ghana.

Quantitative research was used to bring out households and stakeholders' perception on factors responsible for housing deficit and the challenges faced by the as result of housing deficit in our health institutions in the Region; the research design is aimed to uncover relationships existing between variables.

Questionnaires will also be administered to the respondents to gather information on the subject. In some cases, interview will be based on the questionnaire.

3.6 POPULATION

Population in research is a discrete group (of people, animals or things) that exhibits the same characteristics for the purpose of research data, Richardson, et al., (2012). The selection was made of Health Professionals in GHS who were located in Enchi Government Hospital, Dadiaso Government Hospital, Aowin Municipal Health Directorate, Suaman District Health Directorate and Regional Health Directorate.

The choice of these study areas is because of the challenges faced by the staff in accessing alternative housings as a result of housing deficit in our public institutions especially in GHS. Also, for the convenient and reliable administering of questionnaire and controlled population

3.7 SAMPLE FRAMEWORK

The sampling framework for the study was obtained from the list of health Professionals of Ghana Health Service (GHS) within Western Region. GHS is the umbrella association of health service providers in Ghana duly recognized by Government of Ghana.

As primary health service providers in Ghana, Health professionals are better disposed to have detailed knowledge of the sector based on experience and should be able to come up with the factors responsible for housing deficit in GHS, challenges faced by the staff in accessing alternative housing. As major and critical stakeholders for provision of health services delivering, the perception of these Professionals would give clear understanding of the problems stated above and suggested the strategies that can improve housing delivering in GHS institutions in the country.

Out of Five (5) institutions with the total population of 249 Health Professionals, a decision was taken to limit the survey to only Seventy (75) respondents. This was due to the following reasons.

a). Although the scope of the study is the whole of Western Region, it was imperative to focus on most representative samples of the intended population to obtain responses relevant to the study.

b). Again, the above-mentioned study areas were the most affected institutions that lack housing infrastructure.

3.8 SAMPLING TECHNIQUE USED

Even though large samples give more reliable result than small size samples due to the restraints of limited resources the entire target population cannot be sampled. In view of this, respondents were chosen at random (simple) from the entire population (probability sample). Each member of the population must stand the chance of selection. Therefore, the Sampling technique adopted for this study was the simple random sampling.

3.9 SAMPLING SIZE DETERMINATION

This formula (Kish, 1965) was used to determine the sample size

Therefore, the sample is given by:

$$n = n'/1 + (n'/N)$$

where n = sample size

$$n' = s2/v2$$

With S referring to maximum standard deviation of the Population sample, calculated as $S2 = p (1 – p)$; P being the Proportion belonging to the specified category (in this case

P = 50% in applying the sample majority rule).

therefore S2 = 0.5 x (1-0.5) = 0.25

V is standard error of sampling distributions

(Here, V = 0.05 for confidence level of 95%).

This implies that n' = 0.25/0.0025

= 100

N is the total population = 249 (No. of Health professionals working the Five (5) Institutions within Western Region)

N = 100/1 + (100/249)

= 71

Assuming a return rate of 5%, the sample size was increased to 78. Using simple random sampling.

3.10 SOURCES OF DATA

Primary and secondary data was used for this research work.

3.10.1 Primary data

Primary data refers to that information that were collected from, through thesis, reports and questionnaires administered to Ghana Health Service Staff.

3.10.2 Secondary Source

The secondary source of information for the study, however consist of those will be obtain from libraries such as Text books, Magazines, Company brochures, Internet etc.

3.11 INSTRUMENT FOR DATA COLLECTION

Originally, seventy-five (75) questionnaires were self-administered by hand delivery to Health Professionals who responded adequately to the questions. Some of the questionnaires were received on the spot whiles others were retrieved after nineteen (19) days on the average after

their administration. Reminders were constantly sent and after one week in this nineteen day. The total number of responses received out of the seventy-five (75) questionnaires was forty-four (44).

3.8 THE QUESTIONNAIRE DESIGN

Open ended and closed ended questionnaires were developed for the study. In addition, the basic and occupational information of the respondents were provided. The research questionnaire was designed to include only those factors responsible for housing deficit in Ghana Health Service Institutions in Western Region that were deduced from critical review of the literature on the topic and contained outlined factors.

The survey questionnaire was divided into four (4) sections:

Section A: The demographic background of respondents, covered precisely those variables that were likely to have an influence on the rating of established factors responsible for housing deficit in Ghana Health Service Institutions in Western Region. The characteristics covered in the questionnaire were: position/rank, level of education, length of employment, department and their place of work.

Section B: participants (respondents) were requested to rank on a scale of 1 to 5, the factors responsible for housing deficit in Ghana health service according to their level of severity/impact such as "Not significant" (rated 1), "Less significant" (rated 2), "moderately significant" (rated 3), "significant" (rated 4) and "Highly significant" (rated 5). Respondents were also asked to answer one open and two closed ended questions in this section.

Section C: participants (respondents) were requested to rank on a scale of 1 to 5, the difficulties faced by the health service staff as result of housing deficit in Western Region such as "Very low" (ranked 1), "Low" (rated 2), "Average" (rated 3), "High (rated 4) and "Very high" (rated 5).

Section D: Respondent were requested to rate on a likert Scale of 1 to 5, the strategies to be used to improve housing delivering in Ghana health service according to their level importance as: "Not very important" (ranked 1), "Not important" (ranked 2), "Average", (ranked 3), "important" (ranked 4) and "Very important" (ranked 5). The respondents were also asked to answer two open and two closed ended questions in this section.

3.9 DATA ANALYSIS

Statistical Package for Social Sciences (SPSS version16.0) was utilized to dissect the collected data. Upon receipts of questionnaires, they were inspected visually to determine the level of compliance to the instructions provided for answering the questionnaire. It was observed that the respondents had done well with exception of some missing entries on the entire returned questionnaires and were confirmed usable for any further analysis.

The variables were then coded for recognition in SPSS and then data entry began. Where ever entries were missing, data editing was implemented by allowing SPSS to automatically deal with missing entries. The output of the SPSS was further confirmed and analysed descriptively using statistical tools like charts and frequency distribution.

3.10 SUMMARY

To conclude, the survey focused on Health Professionals of GHS and located in Enchi Government Hospital, Dadiaso Government Hospital, Aowin Municipal Health Directorate and Suaman District Health. A quantitative study was adopted in the design of the research of which self-administered questionnaires were sued as the research instrument. The sample population was chosen at random (simple) from the entire population of which the sample was obtained from the list of 249 Health Professionals located in the above-mentioned Health

Institutions. SPSS version 16.0 was utilized to dissect the data collected. As duly noted, this chapter discusses all the above methods adopted in carrying out the research work.

CHAPTER FOUR

DATA ANALYSIS AND RESULT DISCUSSION

4.1 INTRODUCTION

This part centres around association, organizing and qualities of the information gathered from the field just as the investigation and translations attracted from it to address the key research destinations and questions inscribed in section one. The results obtained are compared with the relevant literatures and the researcher comments are added. This section manages the investigation and discussion of the information gathered to assess the challenges facing housing delivering for health sector in Ghana.

4.2 DEMOGRAPHIC DATA OF RESPONDENTS

To be sure that respondent for the study were qualified to give accurate and reliable answers to the questions, the demographic or background information of the respondents were required. This enables the building of confidence in the results from the analysis to assist in the achievement of the purpose of the study. The background information required included; rank/position, level of education, length of employment, Department/Unit as well as the name of the institution.

4.2.1 Rank/Position of respondents in Ghana Health Service

Table 4.1 shows the rank/position of respondents in Ghana Health Service. Out of the forty-four respondents, 29 of the respondents were nurses represent 65.9% of the total making it the highest category of staff achieved during the survey. The second highest number of respondents obtained was 3 as Administrators represent 6.8% of the total. Two (2) respondents each from the following ranks were obtained Regional Director, Disease Control and Technical Officer representing 4.5% each. Again, one (1) respondent from each of the following positions was obtained; Accountant, Pharmacist, Certified Registered Anaesthetist, Registered Dental

Surgery Assistant, Midwife and Optician representing 2.3% each of the total. **Table 4.1** displayed the varying rank/position of the respondents in in GHS hence most of housing accommodations are needed by the nurses since they the one who provide the critical service by seeing the patients.

4.2.2 Level of education of respondents in GHS

Table 4.1 gives information concerning the level of education reached by the respondents. There are 95.5% (i.e. 42 respondents) having tertiary education and 4.5% of responses representing (2 respondents) having SHS education. This means that majority of the respondents are well qualified and can therefore give concrete responses of their view on factors responsible for housing deficit in GHS and also suggest strategies that can improve the situation.

4.2.3 Length of employment of respondents

Table 4.1 throws light on years of respondent's experience in GHS. Twenty-five of the respondents constituting 56.8% of the total responses have been in GHS for less than five years, 16 (i.e. 36.4%) of the respondents have been in GHS from six to ten years, 2 (i.e. 4.5%) of the respondents are also in GHS from eleven to twenty years and finally 1(i.e. 2.3%) of the respondent has been in the GHS from twenty-one to thirty years. No missing responses were recorded. Figure 4.4 confirms that most of staff have work less than five years representing 56.8% and remaining 43.2% also five years and above.

4.2.4 Department/Unit

The respondents also indicated the unit or department they belong to. The respondents had the choice of selecting any of the following options; RHD, DHD and Hospital. The table 4.1 below presents the results for the analysis of the data. From the table 4.1 below, most the respondents were from the Hospital department/ unit since 33 out of the forty-four respondent's ticked

hospital as the department they belonged to representing 75% of the total. The second highest respondents were those from the DHD where 10 of the respondents belonged. Their number represented 22.7% of the total while one (1) respondent from the RHD also answered the questionnaire. Below is the table displaying the demographic data of respondents.

Table 4.1 Respondents' demography

DEMOGRAPHIC DATA OF RESPONDENTS		
RANK/POSITION	***Frequency***	***%responsive***
Regional Director	*2*	*4.5%*
Administrator	*3*	*6.8%*
Accountant	*1*	*2.3%*
Pharmacist	*1*	*2.3%*
Nurse	*29*	*65.9%*
Disease control	*2*	*4.5%*
Technical officer	*2*	*4.5%*
Certified Registered Anesthetist	*1*	*2.3%*
Registered Dental Survey Assistant	*1*	*2.3%*
Midwife	*1*	*2.3%*
Optician	*1*	*2.3%*
Total	***44***	***100%***
LEVEL OF EDUCATION		
Tertiary	*42*	*95.5%*
SHS	*2*	4.5%
Total	***44***	***100%***
EMPLOYMENT EXPERIENCE IN GHS		
Less than 5 years	*25*	56.8%
5 – 10 years	*16*	*36.4%*
11 – 20 years	*2*	4.5%
20 – 30 years	*1*	2.3%
Total	***44***	***100%***
DEPARTMENT/UNIT		
RHD	1	2.3%
DHD	10	22.7%
Hospital	33	75.0%
Total	***44***	***100%***

Source; Field survey, 2018

4.4 CRITICAL FACTORS CAUSING HOUSING DEFICIT

From Table 4.2 below, using mean score ranking to determine the critical factors causing housing deficit in the Ghana health Service, Lack of comprehensive national policy and regulatory framework for housing provision was ranged first with a mean of 4.20 and standard deviation of 1.091. Failure of MMDAS to provide housing for health institutions had a mean of 4.18 with a standard deviation of 0.971., Lack of institutional and regulatory framework in MMDAS for housing had a mean of 4.11 with a standard deviation of 0.813 and Lack of stakeholders' support and community participation had a mean of 3.91 with a standard deviation of 1.197. These were followed by Lack of continuity due to consistent change of government, Lack of infrastructure and provision of utilities, Lack of vision and failure of management to build new structures at the facilities level to accommodate health service staff, and Political instability due to frequent change of government and lack of National policy that allow all political parties to pursue their own political ambitions with mean scores of 3.89, 3.86, 3.82 and 3.82 with standard deviations 1.205,1.193,1.105 and 1.160 respectively. The least ranked factors are; High population growth, High cost of building material and Defective land tenure system.

4.4.1 Discussion of results

The results obtained from respondents indicated that, the major critical factors causing housing deficit are; Lack of comprehensive national policy and regulatory framework for housing provision, Failure of MMDAS to provide housing for health institutions, Lack of institutional and regulatory framework in MMDAS for housing, Lack of stakeholder's support and community participation and Lack of continuity due to consistent change of government. According to literature, in Bank of Ghana (2007), Lack of Continuity Due to Consistent Change of Government was one of the main critical factors causing housing deficit in Ghana. Boahen

(2002) points out that the biggest challenge of housing financing in Ghana stems from the fact that most of these institutions are merely portfolio lender. This is because most of them prefer to run at entirely no risk and least cost level where lending in relation to other investment opportunities fits well. In other cases, the banks have a short-term lending scheme and so are unable to provide funding for medium and on a long-term basis. Appiah (2007) added to the fact that, defective Land Tenure System is one of the factors causing housing deficit in Ghana. Danso and Manu (2013) asserted that, the provision of housing infrastructure and affordable housing units for the masses is more often than not constrained by the high cost of building materials which results in the high cost of the final housing units. Lag in infrastructure provision by Metropolitan and Municipal District Assemblies and service providers in newly developing areas have affected the production of housing (UN-Habitat, 2011). From the key literature heighted above, not much conform to the current findings. The researcher does not dispute the fact that these factors are causes of housing deficit in Ghana, but still support the view that the newly identified causes are critical factors causing housing deficit in Ghana. Therefore, this problem cannot be mitigated without carefully considering the findings of this research.

Table 4.2 Critical Factors Causing Housing Deficit

CRITICAL FACTORS	Mean	Std. Deviation
Lack of comprehensive national policy and regulatory framework for housing provision	4.20	1.091
Failure of MMDAS to provide housing for health institutions	4.18	0.971
Lack of institutional and regulatory framework in MMDAS for housing	4.11	0.813
Lack of stakeholder's support and community participation	3.91	1.197
Lack of sustainability because of constant change of government	3.89	1.205
Lack of infrastructure and provision of utilities	3.86	1.193
Lack of vision and failure of management to build new structures at the facilities level to accommodate health service staff.	3.82	1.105
Political instability due to frequent change of government and lack of National policy that allow all political parties to pursue their own political ambitions.	3.82	1.187
Inadequate mortgage institutions to provide fund for financing of housing construction	3.66	1.160
Low internally generated funds (IGF) at the Health Facilities level.	3.66	1.238
High cost of land	3.45	1.130
High population growth	3.41	1.207
High cost of building material	3.36	1.259
Defective land tenure system	3.25	1.366

Source: Field Survey, 2018

4.5 CHALLENGES FACED BY THE STAFF OF GHS IN ACCESSING ALTERNATIVE HOUSING.

The results depict that High competition in rental charges had the highest rank with a mean score of 4.34 with a standard deviation of 0.861 followed by Difficulties in responding to on call duties/emergency cases with a mean of 4.11 with a standard deviation of 0.945. Payment of high utility bills due to landlords/ladies failure to pay their part had a mean of 3.95 with a standard deviation of 1.011, Unnecessary threat by the Landlords/ladies had a mean of 3.86 with a standard deviation of 1.173, High transportation cost had a mean of 3.84 with a standard deviation of 1.077, Lack of privacy as result of married couples living in single room had a mean of 3.84 with a standard deviation of 1,200, High expenditure on income had a mean of 3.80 with a standard deviation of 1.153 and Fatigue/stress had a mean of 3.77 with a standard deviation of 1.075. Insecurity as a result of crime and thieves breaking in always also had a mean of 3.64 with a standard deviation of 1.278 while Staff always get injured due to haphazard packing of things in small confined area had a mean of 3.64 with a standard deviation of 1.080.

This information also signifies the level of impact the housing deficit have on the health service staff since most the variables were rated very high such that they exceeded the average mean score 3.5 making them very significant. The least ranked challenges are; suffering infectious diseases and other diseases as result of overcrowding situation in both rented and staff bungalow apartments, change of moral behaviour due to the fact that parents are afraid of their children being influence by others.

4.5.1 Discussion of results

The results obtained from respondents indicated that, High competition in rental charges, Difficulties in responding to on call duties/emergency cases, Payment of high utility bills due to landlords/ladies failure to pay their part, Unnecessary threat by the Landlords/ladies and

High transportation cost are the major challenges faced by the staff of GHS in accessing alternative housing. According to literature, UN-Habitat (2011) supported the fact that, the housing deficit in Ghanaians Health Institutions have led many people to rent accommodations of outside their facilities. As a result, staff on call or emergency duties finds it difficult to attend to emergency duties especially those living far away from their facilities. Some staff are also afraid of walking from their homes to the facilities especially during the night. Appiah (2007) also supported that findings that, High competition in rental charges, Insecurity and high transportation cost are major challenges faced by the staff of GHS in accessing alternative housing. The challenges in this research as identified by the respondents is supported by literature, therefore the researcher truly believe that the challenges as supported by literature are critical the as has to be considered in the quest to mitigate this problem.

Table 4.3 Challenges of Health Service Staff

CHALLENGES	Mean	Std. Deviation
High competition in rental charges	4.34	0.861
Difficulties in responding to on call duties/emergency cases	4.11	0.945
Payment of high utility bills due to landlords/ladies failure to pay their part	3.95	1.011
Unnecessary threat by the Landlords/ladies	3.86	1.173
High transportation cost	3.84	1.077
Lack of privacy as result of married couples living in single room	3.84	1.200
High expenditure on income	3.80	1.153
Fatigue/stress	3.77	1.075
Insecurity as a result of crime and thieves breaking in always.	3.64	1.278
Staff always get injured due to haphazard packing of things in small confined area.	3.64	1.080
Education is drawn back because the single room that the occupants stay is being use for everything.	3.48	1.229
Loss of productive hours	3.39	1.280
Suffering infectious diseases and other diseases as result of overcrowding situation in both rented and staff bungalow apartments.	3.27	1.370
Change of moral behaviour due to the fact that parents are afraid of their children being influence by others.	3.25	1.014

Source: Field Survey, 2018

4.6 STRATEGIES THAT CAN IMPROVE HOUSING DELIVERING IN GHANA HEALTH SERVICE

From the results shown in the table below, Government should partner with NGOs to provide housing for all health facilities was considered the most important strategy to have the highest impact on improving the housing challenge since it was ranked first with a mean score of 4.36. Use public- private partnership initiative (PPP) was ranked second with a mean value of 4.25. Five percent (5%) of health facilities internally generated fund (IGF) should be set aside for housing development, Government of Ghana should re-establish financial institution for housing and construction to guarantee support for housing construction in all the health institutions, and Community-Led housing development financing succeeded with mean values of 4.23, 4.20 and 4.14. All health institutions should form associations (e.g. friends of health union) for resource mobilization to finance housing infrastructure projects was considered the least important strategy with a mean of 3.89. This has been fully detailed out in the table 4.8 below.

However, results depict that all the variables or strategies identified for improving housing delivering in Ghana Health Service are considered very significant and this because all variables exceeded the average mean score of 3.5.

Fifty percent of MP health Fund should be allocated for housing infrastructure projects, Government should establish Ghana health service trust fund (GHSTFund) to finance infrastructure projects and All health institutions should form associations (e.g. friends of health union) for resource mobilization to finance housing infrastructure projects.

4.6.1 Discussion of results

The results obtained from respondents indicated that, Government should partner with NGOs to provide housing for all health facilities, Use public- private partnership initiative (PPP)

Five percent (5%) of health facilities internally generated fund (IGF) should be set aside for housing development, Government of Ghana should re-establish financial institution for housing and construction to guarantee support for housing construction in all the health institutions are the major strategies that can Improve Housing delivering in Ghana Health Service. Teye et al. (2013) established that, financing opportunities for housing are not enough, and that, the few such opportunities are often given out on "whom you know basis", therefore, Government should partner with NGOs to provide housing for all health facilities. This assertion was supported by Nichol (2007) and (District Assembly Common Fund, 2004, 2005) that to enhance the provision of infrastructure for workers, the government must partner with the private sector housing developers in a system such as public-private partnership. Community-led housing development financing was not a major ranked strategy by the respondents but literature clearly explained this as a major strategy that can improve housing delivering in Ghana Health Service (Maclcom and Morris, 2005). From the respondents view and literature the researcher adds to it that these strategies are key to mitigating the issue of housing deficit in Ghana and needs a critical attention by all stakeholders in the housing sector especially government.

Table 4.4 Strategies to Improve Housing Delivery

STRATEGIES	Mean	Std. Deviation
Government should partner with NGOs to provide housing for all health facilities	4.36	0.917
Use public- private partnership initiative (PPP)	4.25	0.751
Five percent (5%) of health facilities internally generated fund (IGF) should be set aside for housing development	4.23	0.774
Government of Ghana should re-establish financial institution for housing and construction to guarantee support for housing construction in all the health institutions.	4.20	1.025
Community-Led housing development financing	4.14	0.852
Government should partner with real estate developers to provide housing for all health institutions on agreed terms and conditions (For example, Build Operate and Transfer – BOT)	4.11	0.945
There should be dedicated Ministry of Housing responsible for policy design, housing initiatives and its implementation	4.09	0.858
Estate unit at Regional Health Directorate should be task to report on housing conditions and gap that exist in the Region yearly.	4.05	1.238
Five percent (5%) of District Assemblies Common Fund (DACF) should be allocated for health service housing infrastructure projects	4.00	0.778
Government should introduce Housing bond scheme for Ghana Health Service housing infrastructure projects	4.00	0.964
Fifty percent of MP health Fund should be allocated for housing infrastructure projects.	3.98	0.849
Government should establish Ghana health service trust fund (GHSTFund) to finance infrastructure projects.	3.91	1.007
All health institutions should form associations (e.g. friends of health union) for resource mobilization to finance housing infrastructure projects	3.89	0.841

Source: Field Survey, 2018

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

Chapter five detail out the summary of the major findings of the research. This section also reveals the conclusions of the study, its recommendation based on the findings and recommendation for further studies.

5.2 SUMMARY OF FINDINGS

With reference to the report made from the first chapter of this research, the aim is to assess the challenges facing housing delivering for health sector in Ghana. In the quest of achieving this aim, some specific objectives were also set. The summary of the findings for the objectives are as follows;

5.2.1 Objective One: Identify the critical factors causing housing deficit in the Ghana health Service.

To achieve this objective, an extensive literature review was done which was based on to prepare questionnaire for the survey. The collected data was analysed by finding the mean score of each factor. However, the results showed that most of the factors were very critical and significant with respect to the causes of housing deficit in the Ghanaian health sectors especially factors such as Lack of comprehensive national policy and regulatory framework for housing provision, Failure of MMDAS to provide housing for health institutions, Lack of institutional and regulatory framework in MMDAS for housing, Lack of stakeholders support and community participation, Unsustainability because of constant change of political leadership, Lack of infrastructure and provision of utilities and Lack of vision and failure of management to build new structures at the facilities level to accommodate health service staff.

5.2.2 Objective Two: Assess the challenges faced by staff as result of housing deficit in Ghana Health Service

After undertaking the same process for achieving the first objective in the second objective, it was observed or identified that High competition in rental charges, Difficulties in responding to on call duties/emergency cases, Payment of high utility bills due to landlords/ladies failure to pay their part, Unnecessary threat by the Landlords/ladies, High transportation cost, Lack of privacy as result of married couples living in single room, High expenditure on income, Fatigue/stress, Insecurity as a result of crime and thieves breaking in always and Staff always get injured due to haphazard packing of things in small confined area are the key challenges faced or encountered by staff due to housing deficit in the Ghanaian health sector.

5.2.3 Objective Three: Identify strategies that can be used to improve housing delivering in Ghana Health Service

With respect to the third objective, all the strategies brought to light were considered very significant by the respondents especially Government should partner with NGOs to provide housing for all health facilities, Use public- private partnership initiative(PPP), Five percent (5%) of health facilities internally generated fund (IGF) should be set aside for housing development, Government of Ghana should re-establish financial institution for housing and construction to guarantee support for housing construction in all the health institutions, Community-Led housing development financing, Government should partner with real estate developers to provide housing for all health institutions on agreed terms and conditions (For example, Build Operate and Transfer – BOT), There should be dedicated Ministry of Housing responsible for policy design, housing initiatives and its implementation, Estate unit at Regional Health Directorate should be task to report on housing conditions and gap that exist in the Region yearly and others by finding their mean values. These strategies are considered very significant in the improvement of the housing deficit in the Ghana health service.

5.3 CONCLUSION

The issue of housing deficit in Ghana has become very problematic especially within the health sector. This is because there are a lot of key factors such as Lack of comprehensive national policy and regulatory framework for housing provision, Failure of MMDAS to provide housing for health institutions, Lack of institutional and regulatory framework in MMDAS for housing, Lack of stakeholders' support and community participation and Lack of continuity due to consistent change of government, causing this deficit in terms of accommodation or housing in the Ghanaian health sector.

However, this problem of housing deficit within the health sector has resulted in many challenges been suffered by the staffs within the health. This can go a long way to negatively affect the productivity of the employees hence, the adoption of certain key strategies is required to remedy the situation. These may include; partnership between the government and NGOs to provide housing for all health facilities, Use public-private partnership initiative (PPP), setting aside a percentage of health facilities internally generated fund (IGF) for housing development and others. The adoption and implementation of these strategies can be used to improve housing delivering in Ghana Health Service.

5.4 RECOMMENDATION

As part of the study, some recommendations are to be made based on the findings. Firstly, it is recommended there should be a critical look at the factors causing the housing deficit in the health sector such that the management, government and other stakeholders will come on board to find solution to the problem. Also, it is recommended that as much as possible, the strategies stated above should be adopted and effectively implemented to help improve the housing delivering in Ghana Health Service. This study also proposes a revisit of the housing policy in the pre-independence era.

5.5 STUDY LIMITATIONS

The main limitation for this study was the geographical scope because it only focused on the Western region and also was restricted to only four institutions in the region. This was as a result of time constraints.

5.6 RECOMMENDATION FOR FURTHER STUDY

Due to the restriction in the scope of the study, further studies on this within different settings such as different regions and institutions are recommended.

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APPENDICES 1

QUESTIONNAIRE FOR HEALTH SERVICE STAFF

TOPIC: ASSESSING THE MAJOR FACTORS CAUSING HOUSING DEFICT IN GHANA HEALTH SERVICE (A CASE STUDY OF WESTERN REGION)

Preamble

My name is Hormenoo Agbeko Harley from the Department of Building Technology. I am conducting a Postgraduate research with the title "Assessing the major factors causing housing deficit in Ghana Health Service in Western Region". Please find a questionnaire to be completed by the Regional Director, District Directors, Medical Superintendents, Administrators, Estate Managers, Accountants, Deputy Directors of Nurses and Health Service Staff. This study is being conducted in partial fulfillment of requirements for award of a Master of Science in Construction Management.

KEY OBJECTIVES OF THE STUDY

Identify the critical factors causing housing deficit in Ghana Health Service, challenges faced by the staff and also identify the best strategies that can be use to improve housing delivering in Ghana health service.

RELEVANCE OF THE STUDY

- The findings would help to identify the major factors causing housing deficit in Ghana Health Service.
- The finding would help to identify the challenges faced by the Health Service Staff as result of housing deficit and how it affects service delivering.

- The finding would also help to identify the best strategies to improve housing delivering in Ghana Health Service.

I recognize that, these questionnaires would take part of your busy schedule nonetheless I would be very glad if you could spare me a little of your precious schedule in selecting the appropriate box to each item provided below. You are assured of the strictest of confidentiality to answers given. For further enquires, recommendations and contributions to this research, please contact the researcher below.

Thank you.

Yours faithfully

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SECTION A: BASIC INFORMATION

This section contains list of questions to obtain information on the demographic (background) of respondents choosing for the study. Kindly answer the following questions by ticking the appropriate options.

1. What is your position/rank in Ghana Health Service? Regional Director [ ] Dist. Director [ ] Doctor [ ] Administrator [ ] DDNS [ ] Accountant [ ] Pharmacist [ ] Estate Managers [ ] Nurse [ ]

Others

(Specify)……

2. Educational level: None [ ] Basic or J.H.S [ ] S.H.S [ ] Tertiary [ ]

3. Length of Employment: Less than 5 years [ ] 6 to 10 years [ ] 11 to 20 years [ ]

21 to 30 years [ ] Above 30 years [ ]

4. Department/Unit: RHD [ ] DHD [ ] Hospital [ ]

5. The name your institution……...

SECTION B: HOUSING DEFICIT

Table 3.1

IDENTIFY THE CRITICAL FACTORS CAUSING HOUSING DEFICIT IN GHANA HEALTH SERVICE						
To what extend do you consider the following factors as the critical factors causing housing deficit in Ghana Health Service. Rank on the Likert scale of 1 to 5 and the important of listed factors below in your opinion.		**Ranking**				
Please tick the appropriate boxes						
1= Not caused, 2= Fairly caused, 3= Average, 4= Caused and 5= Highly caused						
No	**Factors**	**1**	**2**	**3**	**4**	**5**
1	Political instability due to frequent change of government and lack of National policy that allow all political parties to pursue their own political ambitions.					
2	Lack of continuity due to consistent change of government					
3	High population growth					
4	Inadequate mortgage institutions to provide fund for financing of housing construction					
5	High cost of building material					
6	High cost of land					
7	Defective land tenure system					
8	Failure of MMDAS to provide housing for health institutions					

9	Lack of comprehensive national policy and regulatory framework for housing provision					
10	Lack of institutional and regulatory framework in MMDAS for housing					
11	Lack of stakeholders support and community participation					
12	Lack of vision and failure of management to build new structures at the facilities level to accommodate health service staff.					
13	Low internally generated funds (IGF) at the Health Facilities level.					
14	Lack of infrastructure and provision of utilities					

Table 3.2

SECTION C **IDENTIFY THE CHALLENGES FACED BY THE HEALTH SERVICE STAFF AS RESULT OF HOUSING DEFICIT**	
Below is the list of challenges faced by the Health Service staff as a result of housing deficit in Ghana Health Services. Rank on the Likert scale of 1 to 5 and the impact of listed challenges below in your opinion .	**Impact level**
Please tick the appropriate boxes	
1= Very low challenge, 2= Less challenge, 3= Low challenge, 4= Challenge and 5= Highly challenge	

No	Challenges	1	2	3	4	5
1	High competition in rental charges					
2	Insecurity as a result of crime and thieves breaking in always.					
3	Lack of privacy as result of married couples living in single room					
4	Change of moral behavior due to the fact that parents are afraid of their children being influence by others.					
5	Difficulties in responding to on call duties/emergency cases					
6	High transportation cost					
7	Unnecessary threat by the Landlords/ladies					
8	Payment of high utility bills due to landlords/ladies failure to pay their part					
9	Fatigue/stress					
10	Loss of productive hours					
11	High expenditure on income					
12	suffering infectious diseases and other diseases as result of overcrowding situation in both rented and staff bungalow apartments.					
13	Education is drawn back because the single room that the occupants stay is being use for everything.					
14	Staff always get injured due to haphazard packing of things in small confined area.					

SECTION D **IDENTIFY STRATEGIES THAT CAN BE USE TO IMPROVE HOUSING DELIVERING IN GHANA HEALTH SERVICE**						
Below is the list of strategies that can be use to improve housing delivering in Ghana Health Service. Rank on the Likert scale of 1 to 5 and the important of listed strategies below in your opinion. **1= Not very important, 2= Not important, 3= Average, 4= important and 5= Very important**		Levels of importance				
No	Strategies	1	2	3	4	5
1	Use public- private partnership initiative(PPP)					
2	Community-Led housing development financing					
3	Five percent (5%) of health facilities internally generated fund (IGF) should be set aside for housing development					
4	All health institutions should form associations (e.g friends of health union) for resource mobilization to finance housing infrastructure projects					
5	Fifty percent of MP health Fund should be allocated for housing infrastructure projects.					
6	Five percent (5%) of District Assemblies Common Fund (DACF) should be allocated for health service housing infrastructure projects					

8	Government of Ghana should re-establish Bank for housing and construction to provide support for housing construction in all the health institutions.					
9	Government should establish Ghana health service trust fund (GHSTFund) to finance infrastructure projects.					
10	Government should partner with real estate developers to provide housing for all health institutions on agreed terms and conditions (For example, Build Operate and Transfer – BOT)					
11	Government should introduce Housing bond scheme for Ghana Health Service housing infrastructure projects					
12	Government should partner with NGOs to provide housing for all health facilities					
13	There should be dedicated Ministry of Housing responsible for policy design, housing initiatives and its implementation					
14	Estate unit at Regional Health Directorate should be task to report on housing conditions and gap that exist in the Region yearly.					