

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**KUMASI**

**COLLEGE OF ARCHITECTURE AND PLANNING**

**PROCESSES AND PROCEDURES FOR THE APPLICATION  
AND ISSUANCE OF BUILDING PERMITS IN THE  
METROPOLITAN CITIES OF GHANA: A STUDY OF ACCRA AND KUMASI  
METROPOLISES**

**BY**

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**A DISSERTATION SUBMITTED TO THE DEPARTMENT OF BUILDING  
TECHNOLOGY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
AWARD OF DEGREE OF  
MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT**

**November, 2014**

## CERTIFICATION OF ORIGINALITY

I hereby desire that this dissertation submission is my own work towards the award of Masters in Construction Management Degree and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degrees of the University, except where due knowledge has been made in the context.

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## DEDICATION

I dedicate this study to my Cousin Mr. Karim Amadou (Jr.) for his loyalty, encouragement, understanding and prayers through thick and thin.

# KNUST



## ACKNOWLEDGEMENT

Praises and thanks to God the Almighty, the most Gracious and most Merciful for his protection, guidance and good health in the successful completion of this study.

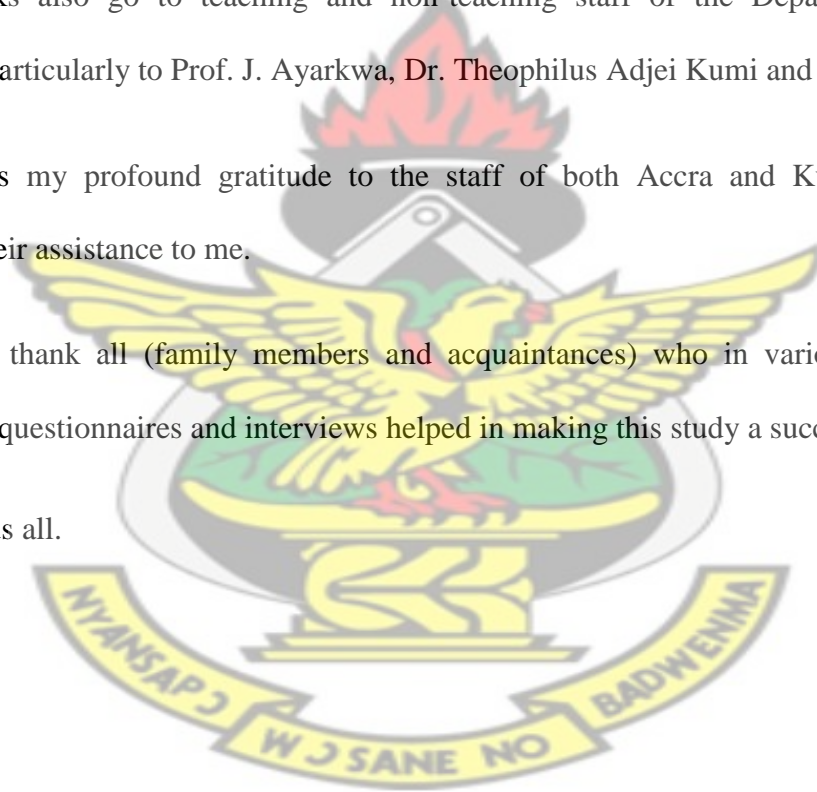
My immense gratitude to Prof Edward Badu (lead Supervisor) and Dr. Emmanuel Adinyira (Co-Supervisor) both of the Department of Building Technology, Kwame Nkrumah University of Science and Technology (KNUST) for their critical contributions, suggestions throughout the study.

My special thanks also go to teaching and non-teaching staff of the Department of Building Technology and particularly to Prof. J. Ayarkwa, Dr. Theophilus Adjei Kumi and Mr. Osei Asibey.

I wish to express my profound gratitude to the staff of both Accra and Kumasi Metropolitan Assemblies for their assistance to me.

I finally wish to thank all (family members and acquaintances) who in various ways including responding to the questionnaires and interviews helped in making this study a success.

May Allah bless us all.



## ABSTRACT

Shelter like the other basic needs of man are diverse in cultural settings and geographic locations. Nonetheless it has undergone many changes and in some instances, remarkable transformation in fields like Medicine, ICT, Engineering e.t.c. The increasing world population has made the need for shelter all the more important. Ghana is no different, as over the last 20-30 years, it has seen an unprecedented rise in construction activities in the provision of shelter. Unfortunately, this has brought in its wake enormous problem of haphazard developments in all of the urban centers of the country. Many reasons have been attributed to the problem. Thus, the main purpose of this research was to identify the main stumbling blocks in the processing and issuance of building permits by the city authorities of Accra and Kumasi. These two cities were chosen because they are the most urbanized settlements in Ghana and for that matter the ones faced with highest number of building permit requests. The process followed to complete the study included field survey, interviews, and observations and the administering of questionnaires. The Simple random technique was used to select 109 and 83 respondents in Accra and Kumasi respectively. Tables and charts were generated from the Scientific Package for Social Sciences (SPSS) in the analysis of the data collected. The study revealed that there is ineffectiveness in the process and procedure for application and issuance of building permits. This stems from the fact that, instead of the stipulated three (3) months period for the issuance of permit, it took up to six (6) months or more, to get any feedbacks on applications. It was found out that the process did not differ significantly from that of other jurisdictions. The study therefore recommended that there should be regular meetings of the statutory planning committee; there should be an easier system by means of ICT for applicants to verify status of their applications and also logistically strengthening of the institutions involved in the process. These, among others will go a long way to enhance the processes and procedures of obtaining building a permit.

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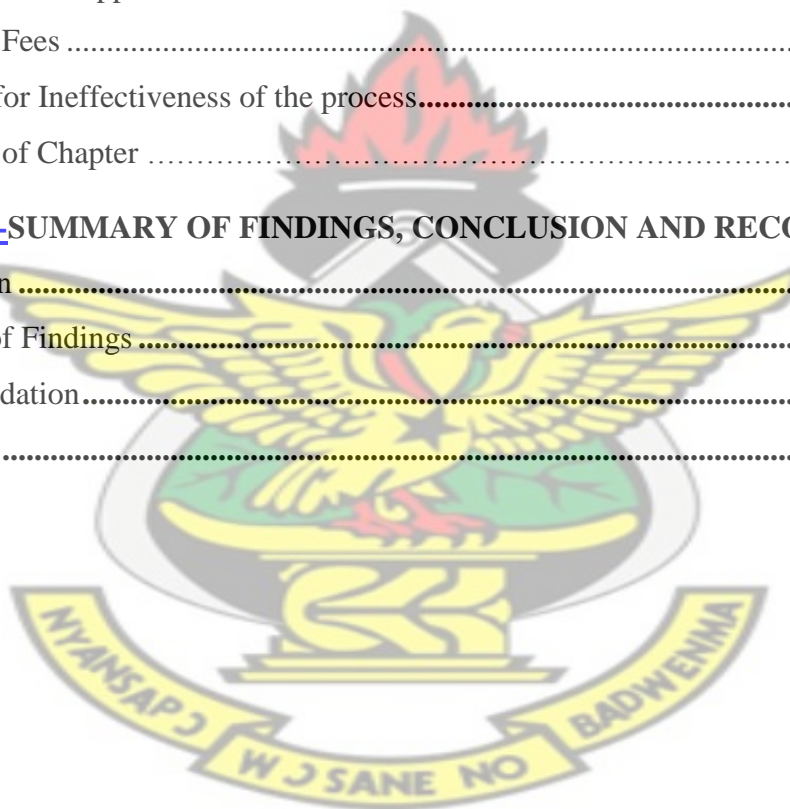
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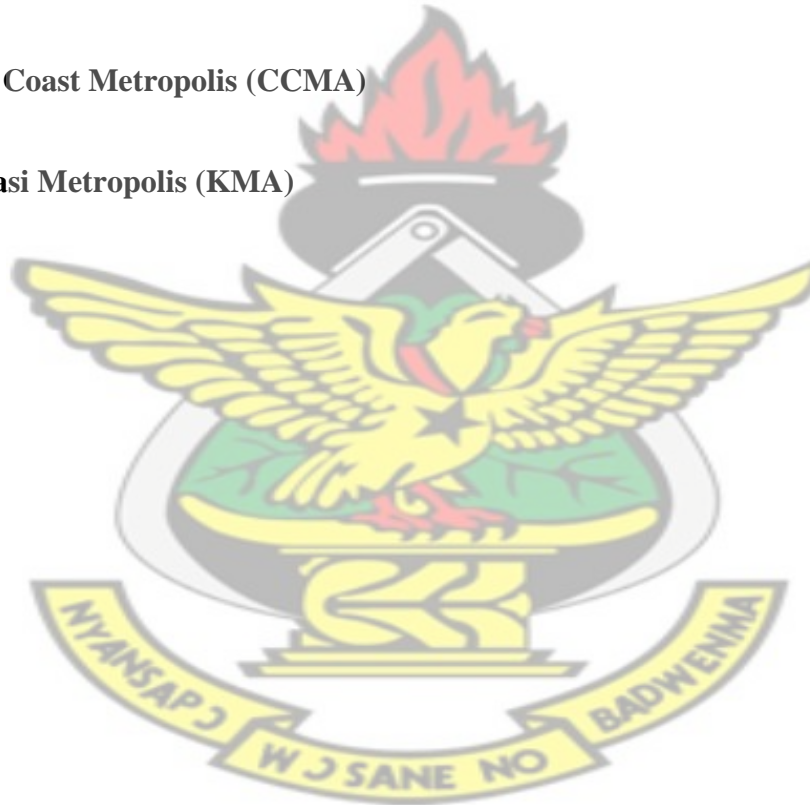
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## CHAPTER ONE

### GENERAL INTRODUCTION

#### 1.1 BACKGROUND OF THE STUDY

Ghana as a nation has undergone gradual and systematic changes in many facets. Most conspicuous of these changes has been that of spatial development. Ghana's population has increased from about 6 million in 1957 to 18 million in the year 2000 census and to 24 million in the year 2010 population and housing Census (Ghana Statistical Service, 2012). Indeed, with a 3.2% per annum rate of increase, Ghana is experiencing one of the most rapid population increases in history. One obvious impact of this population increase is a remarkable spatial development in the urban centers. The 2007 UN Report on population states that about 50 per cent of the world's population will be located in cities and urban centers. Ghana is of no exception as the six main metropolitan cities of Accra, Kumasi, Tema, Secondi-Takoradi, Cape Coast and Tamale account for nearly 50 per cent of the nation's population (Ghana Statistical Service, 2012).

Consequent to this population increase is the rise in demand for social infrastructure which ranges from residential/office accommodation, commercial / industrial structures to parks / amusement centers, and many others. The combined effect of all these have no doubt posed serious challenges to the district, municipal and metropolitan assemblies who have been charged by law (Act 462) to regulate these developments.

Coupled with a steady economic growth, the rise in demand for these infrastructure has no doubt caused some staggering demand for land and an up surge in construction activities in the country which are posing serious challenges to planners, designers, building related experts and city authorities. Thus, instead of decent, safe and acceptable urban developments in these cities and urban

centers, one constantly reads and hears stories such as the collapse of buildings under construction, flooding of homes with the slightest downpour, fire outbreaks at homes with no access for fire tenders, undefined land use characterized by heavy industrial establishments mixed up with residential, commercial and religious buildings.

However, it is interesting to note, all these problems are occurring in spite of the promulgation of the Legislative Instrument (LI) 1630 (also known as Building Regulations) which comprehensively spells out rules and regulation for all physical developments in the various metropolitan, municipal and district assemblies. The natural question that comes to mind is whether the assemblies are in control of these developments in their cities and urban centers. Many accusations have been leveled against these district assemblies but the main ones have been their inability to promptly assess and issue building permits to applicants and also their inability to monitor and ensure adherence to the regulations of successful applicants. The result of all these is the erection of illegal, haphazard and dangerous structures in these towns and cities.

## **1.2 STATEMENT OF THE PROBLEM**

Many communities (old and emerging) have no settlement planning schemes. Some communities have multiple planning schemes, making settlement plan implementation difficult. Lengthy processing durations and high cost deter developers from applying for permits. This is the sorry state of building development in metropolitan cities.

The public's knowledge about building permit acquisition, especially among the ordinary and uneducated is very little coupled with the fact that many cannot afford the charges makes the situation very worrying. Building permits are generally seen by the public as a document difficult to obtain from the appointed agencies. Complaints about poor public relations, undue delays, bribery and

corruption and the general lack of effective means of correspondence constitute additional problems associated with permit administration. It is believed many developers, the public and housing agencies alike lack sufficient knowledge about the essence of a permit and ignore this basic requirement before proceeding to develop properties.

Some developers obviously aware of this situation blatantly ignore these property development procedures and requirements citing delays or difficulties in securing the permits to justify their contravention of the law. Individuals and corporate developers have chronicles to narrate about the level of frustration and the concomitant high cost involved due to the numerous follow ups and associated delays experienced whilst waiting for building permits to be issued. Local authorities on the other hand have also provided various justifications for such delays.

The L.I (1630) was clearly set out to get the authorities to perform their mandate to the people with diligence; however this law seems ineffective since much has not changed after its promulgation. Thus considering the current state of affairs, there is the need to generally assess the current procedures for issuing building permits and control measures in place to ascertain if the system needs a general overhauling and this has necessitated this research.

### **1.3 PURPOSE OF RESEARCH**

Often, the cause of these problems is not the lack of laws, rules, and guide lines but rather the inability to implement them. As noted earlier there has been in existence the LI 1630 as a guide for District Assemblies to streamline physical developments in the country, however its implementation seem to be the main problem. Thus the purpose of this research was to find how efficient the district assemblies are in assessing and issuing building permits promptly and why they have been unable to effectively ensure adherence of the regulations.



## 1.4 RESEARCH QUESTIONS

Amidst all the issues pertaining to assessment of procedures for the issuance of building permit, the obvious questions that the research sought to answer were:

1. What are the step by step procedures for the issuance of building permits?
2. What are the roles of the various organs or institution mandated in the processing of permits?
3. What are the main causes for the slow response to requests for building permits?
4. How can the system be improved upon?

## 1.5 AIM OF RESEARCH

The aim of the research was to look at the current procedure for the issuance of building permits in an attempt to identify the main causes for the ineffectiveness and to recommend ways of improving it.

## 1.6 OBJECTIVES OF RESEARCH

Consequent to achieving this aim, the following set objectives were advanced. These included:

1. To examine the roles and responsibilities of the institutions/departments involved in the process and issuance of building permit;
2. To identify the main causes for the slow pace in the acquisition of building permits and
3. To propose alternative ways to the existing procedures in a bid to attain a better system.

## **1.7 SCOPE OF THE STUDY**

The scope of this study was restricted to the following

1. The processes and procedures for application and obtaining of building permits (both commercial and residential). Geographically, the research is limited to the metropolitan cities of Accra and Kumasi
2. The Metropolitan cities of Accra and Kumasi

## **1.8 METHODOLOGY**

The approach to the research involved an extensive literature review which included a look at practices in the procedures for application and issuance of building permits elsewhere. This was followed by data gathering by means of administering questionnaires and conducting interviews to obtain and assess what happens on the ground. Also included in the questionnaire is the identification of the human and logistic capacity of departments/sections of the two assemblies. Field investigations/observations were also carried out.

## **1.9 SIGNIFICANCE OF THE STUDY**

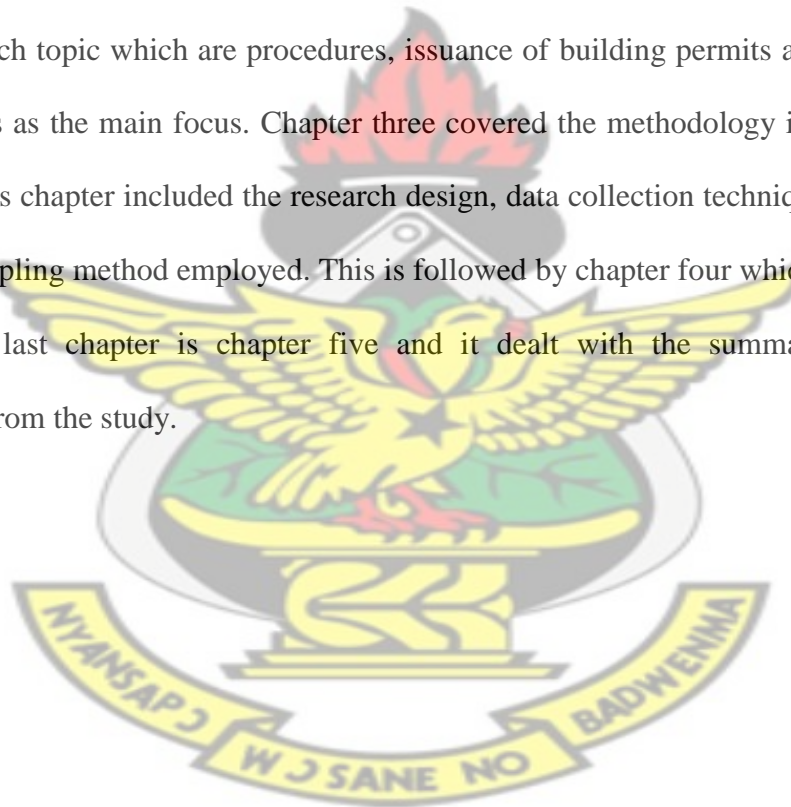
. The work seeks to provide an intellectual study of building permit issuance and controls with the metropolitan cities of Ghana as the cases for study. This research affords the reader a comprehension and appreciation of the extensive literature work on the key areas of consideration outlined (procedures, building permit issuance and building controls).

It serves as reference source as an alternative to books and materials useful for intellectual considerations and references. The study also seeks to provide a comprehensive analysis of findings and draw objective conclusions so that further studies could be conducted based on the results and

findings from this research. It is also hoped that the research will assist city authorities take the necessary steps in removing the bottle necks to an easy and efficient building permit acquisition procedures.

## **1.10 ORGANISATION OF STUDY**

Chapter one of this research covered the background of the study, statement of the problem, research questions, objectives, significance of the study, outline of methods to be used and scope of research. Chapter two involved a review of the related literature in the format of the specific objectives and key words of the research topic which are procedures, issuance of building permits and building controls with the assemblies as the main focus. Chapter three covered the methodology i.e. how the research was conducted. This chapter included the research design, data collection techniques and tools, target population and sampling method employed. This is followed by chapter four which covers the results, the findings. The last chapter is chapter five and it dealt with the summary, conclusion and recommendations from the study.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter looks at what other authors have written on the study. It contains the definitions and explanations of relevant issues to the study. It also, discusses the procedures in issuance of building permits, building permit regulations and its importance, the various type of building permits and the institutions or bodies responsible for issuance of building permits. The literature review gives a picture of the procedures for the process and issuance of building in both Ghana and other jurisdictions. It also indicated the allied issues such as importance of building permit, when one requires a building permits, fees charge, and consequences of building without permit among others.

#### **2.2 DEFINITION OF CONCEPTS**

To arrive at a better understanding of the concept and scope of the research, it is important to grasp the contextual definition and meaning of some keywords

##### **2.2.1 Procedures**

There are many definitions to what constitute procedures. Nevertheless one essential theme in all these definitions is the recognition of a linkage of steps of actions to achieve a goal. Thus a procedure may be defined as a “fixed, step-by-step sequence of activities or course of action (with definite start and end point) that must be followed in the same order to correctly perform a task” (business dictionary 2012). The Encarta dictionary defines procedure “as an established or correct method of doing something”. For the purpose of this research it is interesting to note this definition which states that a procedure is “a set of establish forms or methods for conducting the affairs of an organized

body such a business club, Government e.t.c” (business dictionary 2012). From the above it is important to note these definitions of procedures connote systems and most systems share common characteristics. These include

- Systems have structure, defined components and their composition;
- Systems have behavior, which involves inputs, processing and outputs of materials, energy, information or data;
- Systems have interconnectivity: the various parts of a system have functional as well as structural relationships between each other.
- Systems may have some functions or groups of functions

Thus Building Permits can otherwise be defined as “a system of control on construction of building work” (building commission, 2012)

### **2.1.2 Building Permit**

Kwaku (2010) posits that building permission serves as a green light in any land development; meanwhile, land development has been the principal evidence of an economical valor of many nations in recent times due to architectural innovations and contemporary trends. As such, any nation without standardized and well legal framework will be deficient of infrastructural splendor. A building permit is a formal approval of building plans by the designated government agency as meeting the requirements of prescribed codes. It is an authorization to proceed with the construction or reconfiguration of a specific structure at a particular site, in accordance with the approved drawings; it is a formal permission to carry out construction or demolition works in many parts of the world. In Ghana, the local government act, Act 462, empowers the Assemblies to ensure that’ no



physical development shall be carried out in a district without prior approval in the form of written permit granted by the Planning Authority” (Local Gov’t Act, 1993 (Act 462)).

## 2.2 HISTORY OF BUILDING REGULATIONS

History of building regulations may have started way back in history when man turned to the more settled way of life and subsequently into urban system with time.

Thus the history of building regulation is a long one. Many cultures at various times of history have come up with one regulation or the other. Whiles some may have been unwritten conventions others have been explicit. For instance whiles Moorish societies built to a specific architectural style to protect them from extreme weather conditions, the Roman Empire has explicit set of guide/laws/regulations on buildings, land design schemes e.t.c that were strictly adhered to. Example is the grid system of physical planning which was written guide for physical development of the city of Rome.

Generally, the earliest accepted written form of building regulation was in the code of Hammurabi which is believed to have been written in 1790BC. Regulations pertaining to buildings in the code range from codes 229 – 232.

Subsequently many cultures since the dawn of civilizations coupled with increasing population developed various forms of rules/regulations/laws to guide settlements, hence the basis of urbanization. Cultures such as the Greek empire, the Roman Empire, The Incas, Chinese dynasties e.t.c gradually developed one type of building regulations or the other which also reflected the challenges of their time.



## 2.3 BUILDING REGULATION IN MODERN TIMES

Modern era building regulations had their roots in historical events dating back to 1212 in the case of Britain. During this era, one of the main roofing systems was the thatched roof which constantly posed fire danger to communities. Thus after a major fire in 1212, the first mayor of London Henry Fitzailwin banned the use of thatched roofs. Subsequently other British cities came up with various regulations of their own e.g the 'Worcester's Ordinance of 1467' showed concern for dangers of fire (Wikipedia, 2009).

However an event of immense importance in the history of building was the Great Fire of London in 1666 which wiped out nearly 80% of the city. That eventually led to the enactment of the London Building Act of 1667. This act was the first to lay down and enforce such regulations as houses be built in brick and stones and also specified the number of storey's a building could have as well as the width of walls among others.

Many events in the nineteenth century including changes in European societies such as industrial revolution, immigration to the Americas, advances in medicine, end of slavery and a host of others saw the birth of many building control legislations. In 1859 Baltimore passed its first building code but after the Great Baltimore Fire of 1904 changes were made which eventually led to the Handbook of Baltimore City Building Laws being published. Rapid urbanization and its attendant health problem led to the enactment of the Public Health Act of 1875 and subsequently the London Building Act of 1894. Many European countries particularly France, Germany, The Netherlands, Austria etc eventually came up with various Building Acts which were virtually the same but with little variations to suit local conditions.

## 2.4 THE CONCEPT OF BUILDING PERMIT

This looks at the building permits from various perspectives with a view of exposing its importance and impact on society in general and why planning authorities cannot do without them.

### 2.4.1 Importance of Building Permits

Building permits are believed to regulate the type and standard of construction allowed in the community. The building permit process protects the interest of the whole community – building and home owners, and all those who may use the building. Building permits and the associated inspections ensure the construction and maintenance of safe and healthy buildings and structures (Hume, 2009).

The importance of obtaining permit is two-fold. For the government, it is a way to maintain regulations on public and private structures located in an area. For the builder, it is used to learn, understand and follow country, city or state building codes. A building permit outlines the rules and regulations that are expected to be followed by contractors, plumbers and electricians, all in an effort to build a structure that is safe to occupy (ehow, 2009).

Building permit records are necessary for Title Companies, Real Estate agents, Law Firms, Construction Companies, and Developers for variety of reasons. Building permits can verify square footage, confirm a legal addition, verify number of units, confirm zoning requirements or increase selling value by showing all work that has been completed on a property (Permitplace, 2009).

### 2.4.2 When is Permit Required?

Griswold (2009) is of the proposition that although some work is exempt from a building permit, additional permits or review may be required. Before a building or structure is erected, constructed, enlarged, altered, repaired, moved, removed, converted or demolished, it is important to make enquiries to determine if any other permit or technical review is required.

In most localities building permits are required for the construction and extension of structures. Others types that may be required from one locality to the other includes permit for the following

- Plumbing;
- Private sewage disposal;
- Change of use;
- Heating, Ventilation and Air conditioning;
- Prefabricated ; and
- Mobile homes.

Hedderman (2004) advocates that if planning a renovation project, either on your own as an individual apartment owner or as a member of a building's board and one knows there is a lot to think about and arrange for long before the actual work begins. The particular project could range from minor plumbing work to an overhaul of a building's entire face, but before any work on the property begins, one will have to determine whether they need a work permit. He continues that most projects other than general maintenance replacement and cosmetic work do require at least this basic permit.

In Victoria, Australia it means that the municipal building surveyor who is registered with the building practitioner's board has approved plans for new buildings, additions or renovations. Approved plans must comply with the building regulations, the building code; recode sitting rules, the

Hume planning scheme and other applicable laws and regulations. It is unlawful to start construction or demolition before one is issued a building permit (Hume, 2009).

### 2.4.3 Types of Building Permits

Building permits have been categorized into three groups, namely national building permits, municipal and historic building permits.(ehow, 2009).

1. National building permits are enforced in countries that operate as a federation, which is controlled by a central government. National building codes are enforced by a department within the national government and are in effect in countries such as Canada (ehow, 2009).
2. Municipal building permits are common in the United States. They allow building codes and ordinances to be regulated by the city or county officials (ehow, 2009).
3. Historic building permits are needed when you are attempting to restore a home that is registered with the National Historic Registry. Such permits for historic structures restrict certain painting or construction activity that was not common for the time frame of the original construction of the home (ehow, 2009).

### 2.4.4 Expiry of Building Permits

In South Carolina, a builder's permit expires if work authorized is not commenced within six months of the date of issue or if work is abandoned or suspended for a period of 6 months. If an extension is required for a building permit, one may submit a request in writing indicating the reason for the delay in completion of project. Nevertheless a structure cannot be occupied until a certificate of occupancy is issued or a final inspection is approved (Hiltonheadislandsc, 2009).

#### **2.4.5 Building without Permits – Causes**

Manhattan Borough President Scott Stringer in a report about unlawful constructions in the Borough chastises the Department of Building (DOB) for inconsistent enforcement of permit laws and recommended the establishment of a separate division for inspecting buildings and enforcement by leaving the issuing of permits with the building department. “The Department of Building (DOB) is simply responsible for more than it has proven able to handle”, Mr. Stinger wrote (Karmin 2010).

A workshop to review processes and procedures for granting building and development permits by the Town and Country planning Department (TCPD) held in Accra on July 28, 2008 made recommendations to address the prolonged permits issuance time. Recommendations included reducing the number of signatories needed for permits, the review of the law that makes title clearance a requisite for building permits, development of a single system for granting permit in the country, and frequent holding of meetings to approve permits. Participants also agreed that planning officers and works engineers must embark on public awareness creation to educate the public about procedures and processes for obtaining development and building permits (GNA).

#### **2.4.6 Consequences of Building without Permit**

Building permit is a necessary requirement for entirely new building works or part of it around the globe and is responsible for the beauty or otherwise of many cities around the world and contravention of this rule attracts punitive measures. For instance in the USA if construction work is performed without a permit, the owner of the building, as well as the individual(s) who performed the illegal work may be subject to violations, summonses, court appearances and fines (NYC, 2009).

Writewell (2009) admonishes that when building a new garage or adding on a garage, it is important to begin by consulting one’s local planning department for information about building permits,



zoning regulations and set back requirements. Set back requirements regulate how close one can build to the road as well as bordering property. If one does not comply with these building regulations and obtain proper building permits where necessary, one may have to tear down the new building or relocate the garage. It sure costs less to do the work right the first time. To build a garage one will need building plans or construction plans and a plot plan, which indicates the garage building location is on your land.

In the same vain, McDaniel (2010) agrees with Writewell (2009) and states that when considering any building work to one's property it is always important to consider whether building permits are required for that particular work. Without the applicable building permits it is quite possible that the new extension, the new garage or the new roof are not legal. The builder may be required by country or state law to remove the building work or pay a fairly hefty fine.

Illegal issuing of building permits to private estate developers for construction at unauthorized places may lead to environmental degradation. According to environmental specialist, rampant floods, poor drainage system and destruction of the eco-system could be attributed to flouting of building permit issuance laws by both the assembly officials and developers (GNA, 2009). Kweku (2010) corroborate this assertion and surmises that, the complicated legal framework (misconstrued clauses gives applicants/developers the ultimatums to commence construction without waiting for their permit). In these intricacies, some developers build on waterways, reserve areas, parks and sometime encroach into private or government land. In short their illegal construction consequently negatively affects the eco system, planning and zoning schemes. Eventually, it leads to serious flooding and collapse of building which hamper health and sanitation in major cities in Ghana. The situation also attracts demolishing of illegal structure or seizure of properties.



#### 2.4.7 Socio – Economically

A home can turn into a costly nightmare without the proper permit acquired or if renovations were done by a previous owner without a permit in the USA. Consequences for developing a property or part of it without a permit in the US may include:

- The municipality may force homeowners to remove walls, ceilings, cabinets and other finishes so that an inspector can determine if the work complies with the Building code.
- Renovations in progress can be delayed or stopped completely.
- If work does not comply with the building code, the municipality can order the homeowner to bring the home up to Code or to remove the work and if the homeowner fails to do so, the municipality can bring legal action against them.
- Trying to obtain a permit and confirmation of compliance after the work has been completed can be problematic for inspections but more importantly for the standards applied; as inspectors will evaluate the work based on current requirements which may have changed and become more stringent over the years (Investingthesis, 2009).

#### 2.4.8 Consequences of Difficult Permit Acquisition

A study by Saleh (1999) on housing market dynamics in a metropolitan area of the informal housing markets in the metropolitan used Jabotabek, Indonesia as a case study. This study investigated the workings of the informal housing market and the ways house building was facilitated and financing obtained among lower-income households in a metropolitan area experiencing exploding population growth and decentralization. In capturing the dynamics of informal housing development, the study examines market operations in relation to the practice of location-permitting intended to facilitate access to land for formal housing development and informal settlements. Using a multi-clustered

stratified sampling technique, data for this study were randomly collected through an in-depth interview with households residing in selected informal settlements in the Botabek area on the fringe of Jakarta.

The study findings indicated that: (1) the increasing amount of scattered informal land development in Botabek is at least partially a consequence of location-permit regulation which has forced a correspondingly large proportion of households to construct homes illegally, (2) the majority of households who participate in the informal market did so in order to avoid cumbersome and costly land titling registration and building permit processes, (3) mortgage loans were inaccessible to the majority of informal-sector households due to rigid requirements towards loan collateral and employment status of informal-sector households. The findings also indicated that: dwelling units in the informal market built using either staged construction or conventional construction, whether in areas under location-permit or not under location-permit, were generally of acceptable quality. However, the informal market will never provide total housing packages because informal settlements were generally built without adequate public services, such as drinking water, and sanitation and sewage facilities. Lack of tenure security for the majority of dwelling units in informal settlements made it difficult for these settlements to obtain public services. The study concludes that to provide affordable houses for the majority of informal-sector households, the land titling procedure and regulatory permits governing formal housing markets should be reformed and informal-sector households' constraints to access formal housing finance must be lifted (Saleh, 1999)

#### **2.4.9 Improvement Initiatives in Permit Issuance**

Previously in Qatar, people had to visit offices personally at various locations, for obtaining permits. An exclusive department, was set up to deal with small projects in the Urban Planning and Development Authority, and this has helped the authorities in easing work, and saving time in a bid to improve the system. With this development, the new department takes only two to three days to issue permits, which otherwise, used to take about two weeks. With the introduction of the new department, the work is done at a Building Permits Complex. To further render better services however, the department plans to issue permits for small projects on the day of receipt of application itself (Onlineqatar, 2009).

In efforts to improve permit issuance services Dubai Municipality has announced mega e-services project, Building Permits and Control Application, to automate the procedure of applying and obtaining building permits and the process of building controls in the emirate of Dubai. The new online services, which are aimed at contractors and consultants of Building and Constructions projects in Dubai, will reduce the time taken to issue building permits by over 80 per cent. The initiative is in line with Dubai Municipality's vision to take forward Dubai's 'e-government' initiative, by offering several services online, through its portal (Ameinfo 2012).

#### **2.5 Procedure for application**

A number of steps have been identified a permit is finally issued. These steps vary from one authority to the other and do not necessarily follow the same sequence.

i. **Application Forms**

In most jurisdictions the entire process begins with obtaining, filling and signing of a standard application forms. These forms are obtained from net in Ontario as in many advanced societies or from designated offices. It must be noted that whereas in some jurisdictions this application form is what other requirements are attached to on submission of application, in others as in Ghana an initial application form (called Form 'A') is filled as a prelude to the main application form (called Form 'B') comprising the Development application and the Building Permit Jacket. The Form 'A' which is supplied free to applicant must be filled and signed by the applicant or his architect. The name and address of applicant and what he is applying for are checked against that stated on the Development Application Jacket, Application Jacket, and the architectural drawings. The form is obtained at a fix fees irrespective of the type of development from the assembly offices. Completed forms (A & B) are all submitted at the Department of Town and Country Planning.

ii. **Building Permit Fees**

All building activities that require permit require payment of fees of some sorts. These fees are either one-time payment at the beginning or after the process. Fees depend on various factors such as the type of construction, square footage, use of the building and complexity. Fees may be preliminary, as verification of building areas but the proposed scope of work may determine fee adjustment, payable prior to permit issuance.

Determination of the fees does not vary immensely. In Oshawa and Ottawa, Canada, other fees or levies are paid in addition to the permit such as municipal and education levies, road restoration deposits, cash-in-lieu of parkland dedication, sewer connection costs and any other as a result of bye-laws. Nonetheless in majority of places, fees are based on value of structure for which application is



being sought for. In West Hartford all building department permit fees are \$32.26 for the first \$1,000 of estimated market value cost and \$17.26 for each additional \$1,000. However this does not include electrical, plumbing, heating, air conditioning or sprinkler costs, since each of these require a separate permit and permit fee. “According to the updated fee schedule of the city Council of Nairobi, as well as in Johannesburg as published by the world Bank, charges are dependent on floor areas, type of facility in question (commercial, residential recreational e.t.c) (Doingbusiness, 2009)

In Ghana statutory fees for building permit is 5/8% of the value of the property. Value of the property is determined by a valuer of the Assembly. But where this is contested by applicant the National Evaluation Board is called upon to independently verify.

Certain Building fees may be waived for eligible Green or Energy Efficient construction as in Anaheim in the USA. However an article by Kopczynski (2010) insinuates that, a building permit issued by a public agency is neither a guarantee of the quality of the contractor’s work, nor is it a representation of the adequacy of the work that was performed on the property. Building codes, the issuance of building permits, and building inspections are merely devices used by municipalities to collect the revenues that help fund the municipality. When viewed from this perspective, the building permits issued by public agencies are not meant to serve as insurance policies by which the municipality guarantees that each building is built in compliance with the building and zoning codes.

Kopczynski further states that the fees a city collects for issuing building permits merely acts to offset expenses incurred by the city in promoting the public interest in general, and in no way functions as insurance premiums which make the city liable for each item of defective construction on the improved premises. A building permit simply represents to the property owner that the work that was

inspected is complete and that all of the required administrative details have been performed by the contractor to the building inspector's satisfaction.

The Local Government act, Act 462, section 50 sub-sections 2, states that 'development charges shall be utilized for the provision of infrastructure and services. This seems to affirm Kopczynski's views.

### iii. **Information and Design Documentation**

Designs must be certified by approved registered professionals and / or firms. For the majority of housing projects the following drawings are required from applicants and these must be submitted with the application from. (see LI 1630 Section 5 sub-section 1-4 of National Building Regulation 1996 of Ghana):

- Site Plan;
- Floor Plans;
- Roof Framing Plan (including trusses, if applicable);
- Elevations;
- Sections;
- Structural Drawings;
- Details;
- Septic System Design or Assessment Report ;
- Plumbing Design Documentation;
- Heating Ventilation and Air Conditioning Design Documentation;
- Environmental Impact Assessment Report; and
- Road access permit.



## ▪ Site Plan

Site plan identifies buildings and other features in relation to property boundaries and also identifies existing conditions as well as proposed changes. The following information should be on a site plan (haltonhills 2009)

- i. Title and Scale;
- ii. Legal Description;
- iii. Street Name and Civic Number;
- iv. North Arrow;
- v. Property Lines with Dimensions; and
- vi. Over all Building Dimensions .

## ▪ Floor Plans

A floor plan is an aerial view of a structure seen as if it had been truncated horizontally. A floor plan is required for every floor of the proposed structure and each plan must show the layout of the storey and the structural framing. Each plan must also include the following (haltonhills 2009)

- a. Title Plan;
- b. Scale;
- c. Overall dimension;
- d. Use of rooms and space;
- e. Size, type and location of interior and exterior walls and partitions;
- f. Dimensions of lintel sizes of all openings (windows, Doors e.t.c);
- g. Location, dimensions and direction of stairs;
- h. Size, type, spacing and location of structural members;

- i. Sectional arrow indicating where sections views are taken;
- j. Reference to detailed drawings (e.g connection to existing structure;
- k. Materials specifications or notes and
- l. Location of plumbing fixtures.

- **Elevations**

Elevations are mostly the exterior looks of the structure. These are usually the front, back, left and sides of the building. Elevations should have the following: (haltonhills 2009)

- Title of Elevation;
- Scale;
- Extent of new and existing construction;
- Dimension of walls windows and doors;
- Grade level;
- Exterior wall cladding, finishes and flashing;
- Overhang dimensions; and
- Roof shape, slope and finish.

- **Sections**

It is a view of the house based on an imaginary line cutting through one particular location usually on the east-west or north-south directions. Its main importance is to indicate the relationship between various building components which are hidden wall, floors and ceilings. It should indicate the following: (haltonhills 2009)

- Title of location;
- Scale;

- Size and type of footings and foundation walls;
- Exterior and interior wall construction;
- Floor construction;
- Exterior floor finished grade;
- Distance from grade to floor and underside of footing;
- Attic and crawl space ventilation; and
- Extent of existing structure and proposed additions.

i. **Application Law and other Approvals**

Prior to issuance of permit the proposed building must comply with many other laws. Some of these include Zoning Bye-Laws Compliance, Water Supply/Sanitary Sewerage Removal, Entrance Permit and Site Alteration Permits in Ontario building code (haltonhills, 2009)

ii. **Land Title**

Proof of ownership of land is one of the most important in processing of building permits. While this is not much of an issue in developed countries due to easy access to legal documents, in developing countries like Ghana; it is one of the most contentious. The National Building Regulations, 1996, LI 1630 states in section 3 sub-section 2, that “no approval shall be granted to any applicant who does not have a good title to the land, and for purposes of this regulation, good title shall be in accordance with a certificate issued by the Chief Registrar of Land Titles or any other agency so authorized”

Before the Land Title Registration was introduced in Ghana by the promulgation of the Land Title Registration Law 1986 (PNDCL. 152) and the Land Title Regulation, 1986 L.I 1241, land administration was by Deed Registration under the Registration Ordinance of 1883, Land Registry Ordinance of 1895 and Land Registry Act 1962, Act 122. The land title Administration law sought to

give certainty of proof of title, render dealings in land safe, simple and cheap as well as prevent fraud on purchasers and mortgagees. However these are far from being achieved as the system is still bedeviled with inadequate institutional capacity to protect the wide range of interest. The effectiveness of the institutions (namely Lands Commission, land Valuation Board, Survey Department, Land Title Registry, Office of the Administrator of Stool Lands and the Town and Country Planning Department) has been limited by a variety of factors which can be categorized as institutional, logistical, human resource constraints, lack of funding and unclear definition of scope of functions among others.

Subsequently in 1999 the Ministry of Lands and Forestry developed the Ghana Land Policy to identify and address the persistent problems of land administration. In this regard the Land Administration Project was launched in 2003. It will span a period of 15-20 years; implementable in 5 years phases starting with the land Administration Project.

i. **Processing of the Building Permit**

Submission of application package is done at designated places which vary from jurisdiction to the other. The Division of Inspection and Permits in Calvert County receives the application package while in Ghana, the Department of Town and Country Planning is mandated to receive all applications

Actual assessment of permit is carried out in a systematic manner where each of the relevant organizations involved take turns to assess. In Calvert County, Maryland, the permit package is routed to the Department of Planning and Zoning, Engineering Bureau and Soil Conservation Services and then to the Division of Inspections and Permits.

However in Ghana a technical sub-committee of the Metropolitan Planning Committee does the assessment at a scheduled sitting. The subcommittee is made up of representatives of the Assembly, Department of Fire Service, Department of Town and Country Planning and Ministry of Health. If a permit does not comply with regulations and is not eligible for approval, the applicant is immediately informed. After correction and or additional information supplied the application is reassessed.

The technical sub-committee's recommendations are deliberated at a sitting of the Assembly's Planning Committee which is called by the Department of Town and Country Planning chaired by the District Chief Executive. Other members of the committee include representatives of the Traditional Council, Roads Department, Lands Commission, Health Service, Environmental Protection Agency, Works Department of the Assembly and heads of committees of Environment and Works of the Assemblies. After the permits have received all necessary approvals, applicants are informed in writing and can now pay the necessary fees. Permits are usually in the form of certification with unique codes or numbers or embossment.

i. **Field / Site Inspection**

Pre or post issuance of building permit site inspection is a professional exercise of visiting the site of a proposed or on-going development to ascertain or collect onsite information.

▪ **Pre-Issuance Site Inspection**

All development applications are ideally subjected to site inspections before recommendations are made to the Planning Committee for consideration. There are three main reasons why applications are subjected to site inspections. These are:

- a) Where the application is a departure from the normal straight forward one as in the following.



- i. A change of use from residential to hotel or rest house;
- ii. Extensions to existing structures – vertical or lateral;
- iii. Sub-divisions of an existing plot;
- iv. Annexing part of a lane to existing plot; and
- v. A proposed 3-storey house in an area where only 2-storeys are allowed.

It is essential to visit the site to see if the applicant has not already started doing what he is applying for.

b. Where it is suspected the applicant's drawing is doubtful and that he has something else in mind to build on site. Site inspection and discussion with applicant may reveal real intentions.

c. Where information given is not enough, especially on block plan.

#### ▪ **Post Issuance Site Inspection**

When the application process is completed and appropriate permit issued, the construction process begins. While work is in process, the permit must be posted in a conspicuous location of the site. The plans and or specifications must also be kept on site and made available for inspection by Building Inspector. All work must be carried out in accordance with the building permit documentation and any proposed changes to plans must be submitted for review and approved prior to actual construction.

All mandatory inspections required for the proposed building / work will be listed on the building permit card which is given to the applicant who must schedule each inspection allowing 48 hours advance notice, excluding weekends and statutory holidays. The applicant is notified through a written inspection report of any works on site which does not conform to approved design.

## 2.6 AUTHORISED PROFESSIONALS

L.I 1630 states among others a “building with floor area in excess of 120mm<sup>2</sup> and of two storeys and above in height shall be designed by an architect or any of the following a) Civil Engineer b) Structural Engineer or c) a Professional Builder”. It further stresses that a building within a metropolitan or urban area shall be designed by an architect in consultation with other professionals mentioned above.

Nyanteh (2010) beliefs, architects are very influential in building projects and they are ones first port of call before construction. Architects are involved in the planning, design and oversight of buildings construction. The Architects would act in one's interest to provide cost effective options in the planning process based on one's requirements. However, according to him, there is a growing trend in the country whereby home owners only seek the services of architects to put together drawings to enable them secure building permits.

Although property owners ultimately bear the legal responsibility for obtaining the correct permits for their job, most arrange for their contractors to procure the necessary documentation on their behalf before a job begins. The contract between the owner, contractor and any design professionals should clearly state who will obtain the permits (Hedderman, 2004).

### 2.6.1 Permit Issuance Period

Permit issuance periods need to be considerably low to help developers undertake projects smoothly and swiftly. For example in the USA simple projects, can opt for a fast-track service offered by the New York City Department of Building (DOB), called the Professional Certification Program. The program, introduced in 1996, enables registered architects and professional engineers to certify, through an affidavit signed by the owner, contractor, and all responsible professionals (architects,

engineers, plumbers, and the like) that the plans they file with the department are in compliance with all applicable laws. This reduces the amount of time a builder normally would wait for a DOB permit by eliminating the process of DOB examination and approval of the plans (Doingbusiness, 2009).

### **2.6.2 Building Controls**

The main function of Building Control is to ensure that the requirements of the Building Regulations are met in all types of non-exempt development. Generally they examine plans, specifications and other documents submitted for approval and survey work as it proceeds. Most building Control Surveyors are now actively involved at design stage for many schemes and are acknowledged to provide valuable input at all stages of development. In the USA a permit is required for any person and or company performing any construction, maintenance, engineering survey and all other work on, adjacent to, above, below or near any city and county street or highway, which is under the jurisdiction of the Department of Transportation Services (DTS), which may temporally obstruct any portion of a roadway or sidewalk.

All building and construction in Holland must comply with the Housing Act, and thus with the Building Decree. However, some minor construction work is exempted from assessment and does not require a permit. The “exempt from assessment” category is often misunderstood. When planning to build in Holland, it is suggested to consult with the local building control authority. Under the Housing Act, municipalities issue building permits, supervise construction work and check permit applications for new developments against the Building Decree. Municipalities are also required to check permit applications against zoning regulations. In Johannesburg, any new building and any alteration that adds on to or changes the structure of an existing building must go to the City’s (Planning) Development Management Department for approval. If home owners redecorate their

kitchen, or re-plaster their house, they don't need permission, because they haven't moved any walls around or altered the drainage system. But if one makes a change to the structure, for example, add on a carport, or even just move the front door, permission is needed (Joburg, 2009).

### **2.6.3 Building Inspectors/Building Control Officers/Surveyors**

LI 1630 states “a District Planning Authority may for the purposes of giving effect to these regulations appoint a qualified building inspector within the meaning of building regulation to oversee and inspect daily work of buildings erections and installations”. Building Inspectors are persons with the authority to control building work that is subject to the Building Regulations. They inspect the structural stability or quality and general safety of buildings. In addition, one primary concern of building inspectors is fire safety. In USA building inspectors tend to specialize in to such fields as Fire Safety, Electrical Installations, Elevators, Planning Installations, Home, Public works, Mechanical, Eco friendly construction e.t.c. To monitor compliance with regulations, inspectors make an initial inspection during the first phase of construction and follow up with further inspection throughout the construction project. When inspectors discover a violation of a code/regulations/ordinance or something that does not comply with contract specification or approved plan, they notify the construction contractor, superintendent or supervisor. Where the anomaly is not corrected within a reasonable time or a specified period, inspectors have the right to issue a ‘stop work order’ (BLS, 2009)

### **2.6.4 Education**

In UK Building inspectors typically are expected to have at least a high school diploma or equivalent degree; college-level coursework in subjects such as engineering, architecture, home inspection, blueprint reading, drafting and math is preferred. Many community colleges offer programs in



building inspection technology. In 2006, 12 percent of building inspectors had an associate's degree and 26 percent had a bachelor's degree, according to the Bureau of Labor Statistics (ehow, 2009).

### **2.6.5 Training**

The level of training requirements varies by type of inspector and state. In general, construction and building inspectors receive much of their training on the job, although they must learn building codes and standards on their own. Working with an experienced inspector, they learn about inspection techniques, codes, ordinances, and regulations; contract specifications; and record keeping and report duties.

### **2.6.6 Licensure and Certification**

Many, though not all, jurisdictions require their building inspectors to have some sort of license or certification. Some jurisdictions have their own licensing programs for building inspectors; others require to be certified through an independent organization such as the International Code Council (ICC). Construction and building inspectors must be in good physical condition in order to walk and climb about construction and building sites. They also must have a driver's license so that they can get to scheduled appointments.

## **2.7 INSTITUTIONS IN CHARGE**

In most jurisdictions, local authorities are mandated by law for the issuance of building permits. However this mandate is exercised through a collaboration of the local authority and a number of agencies or departments. These include the Health, Fire, Environment, Planning and Zoning and Lands agencies.

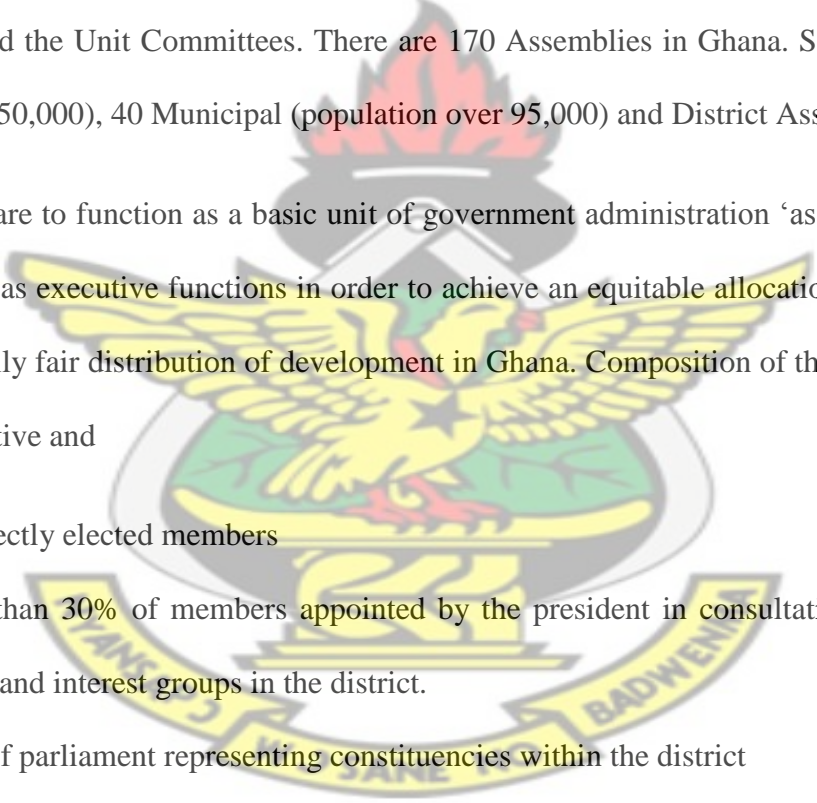


The major players in the issuance of building permits in Ghana includes; the District Assemblies, Department of Town and Country Planning, Fire Service Department, Lands Commission, Environmental Protection Agency and Ghana Health Service.

### **2.7.1 District Assemblies**

The establishment, duties and functions of the district assemblies started after the Local Government Act 1993, Act 462 came into being. They are part of the local government structure which has the Regional Coordinating Council at the top followed by the District Assemblies, Urban, Town, Area, Zonal Councils and the Unit Committees. There are 170 Assemblies in Ghana. Six are Metropolitan (population over 250,000), 40 Municipal (population over 95,000) and District Assemblies (75,000).

These assemblies are to function as a basic unit of government administration 'assigned deliberative, legislative as well as executive functions in order to achieve an equitable allocation of power, wealth and a geographically fair distribution of development in Ghana. Composition of the assembly is made up of Chief Executive and

- 
- a. 70% of directly elected members
  - b. Not more than 30% of members appointed by the president in consultation with traditional authorities and interest groups in the district.
  - c. Members of parliament representing constituencies within the district

### **2.7.1 Metropolis**

#### **▪ Sekondi – Takoradi**

Takoradi started as a fishing community of migrant Fanti fishermen. However from the 15<sup>th</sup> Century, Sekondi-Takoradi has had a long association with Europeans. The slave trade era saw an increase in

economic activities with Ashanti and Europeans who traded in slaves, gold, ammunitions e.t.c. the Dutch as a result were the first to establish as they built Fort Orange around 1640-1644. This and other possessions of the Dutch were later sold to the British who established a foothold by investing further in trade. The effect of these was the attraction of more people to the area thereby increasing further the economic strength.

During the turn of the 19<sup>th</sup> century Sekondi saw a drastic leap in both commercial and industrial front. It saw the construction of railway lines connecting it to mining areas as Tarkwa and Obuasi and further afield as Kumasi. This was complimented by construction of wharf in the beginning of 20<sup>th</sup> century. Takoradi started overshadowing Sekondi with the construction of the first deep water harbour. With it came bigger economic activities with a magnetic pull of both locals and Europeans leading to an urbanized settlement. This necessitated the building of new and modern houses based on well-developed grid iron patterns.



**Plate: 2.1-Map of Sekondi-Takoradi Metropolis (SAEMA)**

The twin city of Sekondi-Takoradi started as a town council in 1956 with the seat of authority being in Sekondi. The town council became a city in 1962. It is currently called the Shama Ahanta East Metropolitan Assembly (SAEMA). It is the administrative capital of the Western Region. It is located

in the south western part of Ghana with a land area of about 334.43km<sup>2</sup> and a population of 400,000 and 80,000 floating. There are five (5) sub-metro's namely Takoradi, Effia, Sekondi, Essikadu-Ketan, and Shama.

- **Accra Metropolitan Assembly**

Accra was founded by the Gas in the 1400s and was the centre of trade with the Europeans who built forts including the James and Ussher forts. Present day Accra developed around the original Ga town and then around Jamestown near the British fort, Osu near the Danish Christianborg castle and Usshertown near the Dutch Ussher Fort.

Accra was captured in 1874 by the British and in 1877 was made the capital of the gold Coast. After the completion of the railways to the mining and agricultural centre Accra became the economic and commercial centre of Ghana.



**Plate 2.2-Map of Accra Metropolis (AMA)**

Since becoming the capital of Gold Coast and subsequently Republic of Ghana, Accra has seen a remarkable transformation. Apart from being the seat of government and administrative capital, Accra is also a leader in commercial and industrial activities and centre of education. Accra is bounded to the south by Gulf of Guinea and stretches as far north as Legon, and then to the east at the

Nungua police station barrier and to the west as far as Accra-Winneba road. It has a land area of about 200km<sup>2</sup>; over 90% of this is coastal plain. Current population of the metropolis is about 3 million inhabitants and population density of 8,967/km<sup>2</sup>.

- **Tema Metropolitan Assembly**

Tema like Accra was a small fishing community inhabited by indigenous Gas. The land is part of the extensive coastal plains of Ghana and uniquely located on the Greenwich Meridian.



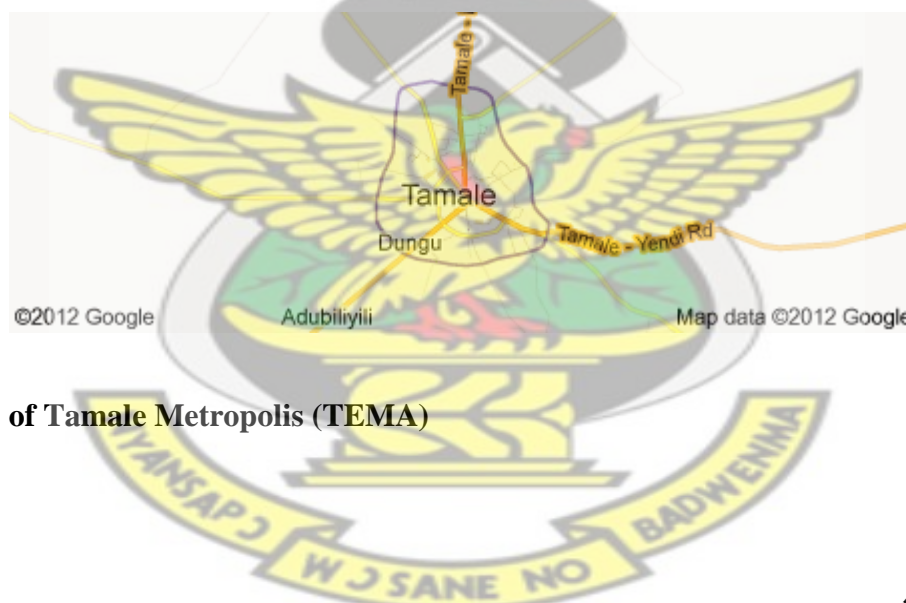
**Plate 2.3-Map of Tema Metropolis (TMA)**

The decision to develop a second deep sea port and also make it an industrial hub, saw Tema become one of the most planned industrial cities in Ghana. In 1952 the government acquired a 166km<sup>2</sup> of land north of the harbour and entrusted it to Tema Development Corporation (TDC) to develop it into an industrial hub. Subsequently the harbour was commissioned in 1962 and Tema became the most planned city in West Africa having carefully-constructed road layouts featuring landscaping and street lights. It boasted modern recreational centers and other social amenities rare among African cities at the time. This resulted in the influx of migrants from all over Ghana and beyond owing to employment opportunities. However this influx could not be contained by the TDC and city started facing serious urbanization problems.

Tema is home to a large number of industries and is connected by a first class motor way, other good roads and rail way. It has a land area of about 166km<sup>2</sup> with a population of about 300,000. Tema attained autonomous status in 1974 and became a metropolitan in 1990.

- **Tamale Metropolitan Assembly**

Tamale is the only metropolis located in the northern Ghana. It is one of the traditional homes of the Dagombas and was sometime in history part of the Trans Sahara caravan trade route. The city initially started as a conglomeration of villages with a unique architecture. The houses were mostly circular shaped, constructed of mud with thatch roof. Tamale has a population of 360,579 and is the capital of the Northern Region Ghana.



**Plate 2.4-Map of Tamale Metropolis (TEMA)**

- **Cape Coast**

Until 1877 Cape Coast used to be the capital of the Gold Coast. Founded in the 15<sup>th</sup> century by the Portuguese, Cape Coast was the main slave port for onward transportation to the Americas during the slave trade. The forts and castle found are reminders of that era.





**Plate 2.5-Map of Cape Coast Metropolis (CCMA)**

Having grown from its initial base around the cape coast castle, it presently spreads well over 100km<sup>2</sup>. Today, cape coast is known more for its educational institutions and tourist attractions. It currently has a population of over 100,000 and the last to have attained metropolitan status.

- **Kumasi Metropolitan Assembly**

Kumasi is located about 250km North West of Accra. With a population of about 1,500,000.00, it is the second most important city after Accra. Kumasi was founded in the 1680s by the king Osei Tutu I as the capital of the Asante state (Fynn 1971) and has remained the capital even after it came under British rule it was partly destroyed during the fourth Anglo-Ashanti war in 1874 (Adu Boahen,1965).



**Plate 2.6-Map of Kumasi Metropolis (KMA)**

Due to its prominence in the history of the Asante state and its geographical location, Kumasi has grown into major commercial center with all major trade routes converging on it (Dickson, 1969). Kumasi has grown out from a concentric form with major developments along arterial roads due to accessibility they offered. The city is a rapidly growing one with an annual growth rate of 5.47 per cent (Regional Statistical Office, Kumasi). It encompasses about 90 suburbs, many of which were absorbed into it as a result of the process of growth and physical expansion.

### **2.7.3 Town and Country Planning Department (TCPD)**

The Town and Country Planning Department was formed in 1948 with the sole prerogative of planning and Zoning of the Gold Coast. The department is a service establishment of the Central Government, Regional Coordinating Councils and Metropolitan/Municipal/District Assemblies and is charged with functional and spatial integration of development in the country. The main functions at the district assembly levels include the following

- i. Preparation of land use plans-structure plans (sector plans) of parts of settlements, towns, cities and management systems that provides zoning framework to direct and guide the growth of settlements.
- ii. Assist Assemblies to formulate and implement policies on human settlements
- iii. Processing development and building permit application documents for consideration by the statutory planning committee
- iv. Coordinating of diverse physical development promoted by departments, agencies of government and private developers
- v. Providing spatial framework and strategies for the integration of socio-economic and physical development of urban and rural areas

- vi. Providing advisory services to public private organizations / individuals on matters relating to planning and management of physical development

#### 2.7.4 Fire Service

The Ghana National Fire Service was established by Act 537, (GNFS Act of 1997) to perform the following functions

- Organize public fire education programmes;
- Create and sustain awareness of the hazards of fire;
- Heighten the role of the individual in the prevention of fires;
- Provide technical advice for building plans in respect of machinery and structural layouts to facilitate escape from fire, rescue operations and fire management;
- Inspect and offer technical advice on fire extinguisher;
- Co-ordinate and advice on the training of personnel in firefighting departments institutions in the country;
- Train and organize fire volunteer squads at community level;
- Offer rescue and evacuation services to those trapped by fire or in other emergency situation; and
- Undertake any other function incidental to the objective of the service;

Since these functions of the fire service are crucial they have representations on both the technical sub-committee and the statutory planning committee. It is mandatory for applications for permit for commercial buildings to be accompanied with report from Fire Service.

### **2.7.5 Lands Commission**

The lands commission was set up by the lands commission (Act 483). The following are its main functions

- Manage public (state/government) lands and any land vested in the president in trust for respective stools and families;
- Advise the government, local authorities and traditional authorities on the policy framework for development of particular areas;
- Ghana to ensure that the development of individual pieces of land is coordinated with the relevant development plan of the area concerned;
- Formulate and submit to government recommendations on national policy with respect to land use and capacity;
- Advice on, and assist in the executive of a comprehensive programme for the registration of title to land throughout Ghana in consultation with the title Registration Advisory Board;
- Provide information on land transaction to guide operation of the land; and
- Compulsory acquisition of land for government (LI 230 1962).

### **2.7.6 Environmental Protection Agency**

The Environmental Protection Agency is the main body established to protect the environment for the sustainable usage of many generations to come. Important among its functions include the following

- To advise government on the formulation of policies on all aspects of the environment and in particular make recommendation on the protection of the environment;

- To promote effective planning in the management of the environment; and
- To issue environmental permits and pollution abatement notices for controlling the type, volume, constituents and effect of waste discharges, emissions, deposits or other sources of pollutant hazardous or potentially dangerous to the quality of environment.

### 2.7.7 Health Service

The Ghana health service is an autonomous Executive Agency responsible for implementation of national health policies. Its functions include

- Develop appropriate strategies and set technical guidelines to achieve national policy goals / objectives;
- Undertake management and administration of the overall health resources within the service;
- Promote healthy mode of living and good health habits by people;
- Establish effective mechanism for disease surveillance, prevention and control;
- Determine charges for health services with the approval of the Minister of Health;
- Provide in-service training and continuing education; and
- Perform any other functions relevant to the promotion, protection and restoration of health.

### 2.8 Summary of Chapter

The concept Building Permit is diverse, thus, for the purposes of this study some salient one were reviewed. A consideration of what constitutes a system was followed by how the concept of building permit evolved and how it has shaped up in modern times. Subsequently other aspects such as the types and importance of Building permits, consequence of building without permit, procedure for obtaining permits, institutions and organisations involved permit issuance among others were all reviewed



## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

Methodology is a body of knowledge that enables researchers to explain and analyze methods – indicating their limitations and resources, identifying their presuppositions and consequences, and relating their potentialities to research advances. Moreover, it underpins the types of questions that can be addressed and the nature of the evidence that is generated (Saunders *et al.*, 2007). Therefore, the issue of research methodology is important to any study.

This chapter presents the scientific and analytical framework for the study. The chapter involves the approaches and methods adopted and used for the study. The research design adopted and the processes involved in conducting the research are presented and discussed in this chapter. Issues on sample size and sampling technique, data collection instruments, research procedures and data analysis are captured under the chapter. This chapter is relevant to the study because it shows how the research was conducted to obtain empirical evidence on the field.

#### 3.2 Research Design

One of the important components of methodology is the research design as it provides an overall guidance for the collection and analysis of data of a study (Churchill, 1998). The research approach adopted for this study was deductive in nature and its purpose is descriptive. Deductive approach is adopted to help explain the causal relationships between variables (Saunders et al, 2007). For instance the connection between application fees and how it affects level of applications received. This could probably be better understood deductively.

The purpose is descriptive because, the study sought to produce an accurate representation of the process and procedures for issuance of building permit. The choice of this research strategy was intended to gain a rich understanding of the context of the research which is to identify the main hindrance to quick processing of building permits in the two metropolitan cities.

### **3.3 The Scope and Population of the Study**

The population in the study was mainly building permit applicants in the two cities of Accra and Kumasi Metropolis. The research targeted precisely these set of respondents because they have had hands on experience of the process. Data obtained from the two Assemblies indicated a hundred and fifty (150) applicants applied for permits in the Kumasi Metropolis while a hundred and five (105) applied in the Accra Metropolis.

### **3.4 Sample Size and Technique**

The study used two (2) main units of enquiries namely; building permit applicants and officers in charge of building permit from the two assemblies. Two (2) sampling techniques were used to select the sample for data collection. These include Purposive sampling technique, and the Simple Random Sampling technique (probabilistic). Purposive Sampling was used to select officers from the Town and Country Planning Department, Land commission, Traditional Council, Department of Urban Roads, Environmental Protection Agency, and the Land Survey Department. The total number of applicants who have applied for building permit as at the time of the study were one hundred and fifty (150) and One hundred and five (105) from Kumasi Metropolis and Accra Metropolis respectively. This served as the population frame for the study. A simple random sampling technique was used to select the respondents (applicants) from the sample frame for the study. It thus gave each individual equal opportunity of making the sample population. The simple random sampling technique gave

equal chance to all likely respondents (Quenn and Knussen, 2002). In arriving at the sample size, the mathematical formula(Yamane, 1967) was used, this is shown below;

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

Where  $n$  is the sample size,  $N$  is the sampling frame and  $e$  is the margin of error.

From this formula, a sample size of One hundred and Nine (109) applicants were selected for interviews in the Kumasi Metropolis whiles eighty three (83) applicants were also targeted for interview in the Accra Metropolis (See Appendix II for the calculations).

### **3.5 Methods of Data Collection**

#### **3.5.1 Approach to the Research**

In trying to assess the procedures for the application and issuance of building permits in the Kumasi and Accra Metropolis demands a mixed method approach to combine both qualitative and quantitative methods of research was used. Leedy and Ormrod (2001) alleged that quantitative research is specific in its surveying and experimentation, as it builds upon existing theories. The research itself is independent of the researcher and as a result, data is used to objectively measure reality. Quantitative research creates meaning through objectivity uncovered in the collected data. What constitutes qualitative research involves purposeful use for describing, explaining, and interpreting collected data. Leedy and Ormrod (2001) alleged that qualitative research is less structured in description because it formulates and builds new theories. Qualitative research is also described as an effective model that occurs in a natural setting that enables the researcher to develop a level of detail from being highly involved in the actual experiences (Creswell, 2003), hence my adoption of both approaches in data collection.

### 3.5.2 Data Collection Instruments

The main instruments to be used for this research study include interviews, guide and questionnaires.

#### Questionnaire

The questionnaires designed and used in collecting data were qualitative and quantitative in nature. The questionnaires were used to collect data from applicants of building permits in the two metropolises. Open-ended questionnaires and close-ended questionnaires were used to interview respondents. The questionnaires were administered by the researcher personally. This was deemed appropriate in order to get closer to the interviewee and be able to solicit information which may not be divulged on the questionnaire.

#### Interview

The researcher used interview as a guide in collecting information relevant to the study. Structured interviews and semi-structured interviews were used. The researcher interviewed officers of the various departments within in the Kumasi and Accra Metropolis. The researcher used interview as a data collection instrument with the main objective of giving the interviewee the opportunity to freely express their opinions and to afford interviewer the choice to ask other relevant questions pertinent to the study.

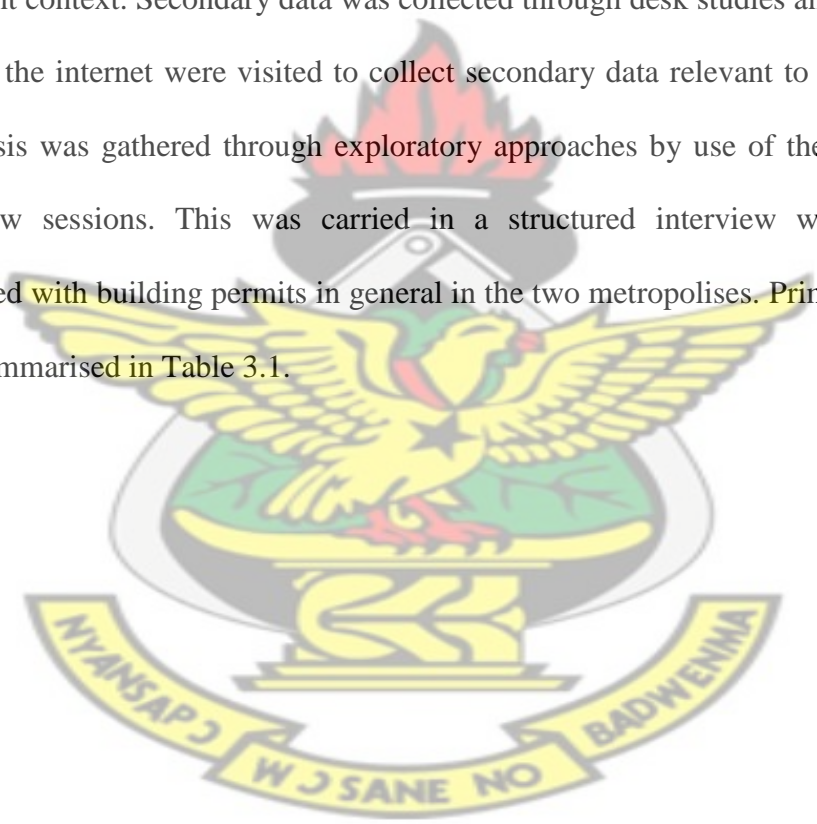
#### Ethical Issues

Finally, during the data collection, the researcher ensured that ethical issues were taken into consideration so as to avoid any crucial ethical problems. The researcher sought the consent of informants before interviews begun. Again, the researcher informed participants about the purpose of

the study and assured them of the confidentiality of their responses. The researcher anonymised responses to protect the interest of respondents. The researcher duly informed the respondents of the intentions and fully revealed the researcher's to them.

### 3.5.3 Source of Data

Data collected was both primary and secondary. While the secondary data provided solid theoretical foundation, the primary data contributed to the researcher's ability to address the most important issues in the present context. Secondary data was collected through desk studies and electronic media. Here libraries and the internet were visited to collect secondary data relevant to this study. Primary data for the analysis was gathered through exploratory approaches by use of the questionnaire and involving interview sessions. This was carried in a structured interview with individual and institutions involved with building permits in general in the two metropolises. Primary data employed for this study is summarised in Table 3.1.





**Table 3.1: Data needs and Sources**

Unit of Enquiry (Data Sources)	Category of Data	Survey instruments	Number of sample respondents	
			AMA	KMA
Officers from the: 1.Town and Country Planning Department, 2.Land commission, Traditional Council, 4.Department of Urban Roads, 5.Environmental Protection Agency, and the 6.Land Survey Department	<ul style="list-style-type: none"> <li>• Role of the organization</li> <li>• Process involved in the issuance of building permit</li> <li>• Factors that affect the process of issuance of building permit</li> <li>• Challenges faced in the issuance of building permit</li> <li>• Recommendations to improve the system</li> </ul>	Interview	12	12
Applicants of Building Permit	<ul style="list-style-type: none"> <li>• Process involved in applying for building permit</li> <li>• Effectiveness of the process in the issuance of building permit</li> <li>• Challenges face in applying for building permit</li> <li>• Recommendations to improve the system</li> </ul>	Questionnaire	83	109
<b>Total GRAND TOTAL</b>			95	121
			<b>216</b>	

Source: Author's Construct, 2012.

### 3.6 Validity and Reliability of Data

To ensure that the data gathered are well-founded and dependable for the study, the questionnaires were pre-tested with a sample of five (5) respondents within the randomly picked clusters. This was expected to identify the deficiencies in the questions asked so that they can be addressed before the actual collection. Pre-testing measured the extent to which the research instruments would yield consistent results.

### 3.7 Data Analysis Procedure

Data analysis is a practice in which raw data are ordered and organized so that useful information can be extracted from it. Analysis of data for this study was done using the quantitative analysis method. Under this method, data collected were edited, sorted and coded. Microsoft Excel software was then used to present and analyse the data. Frequency tables, percentages, bar charts and other descriptive statistical methods like mean were used to analyse data. This result from the analysis provided the basis for finding out patterns and common trends existed in the data collected.

### 3.8 Summary of Chapter

This chapter as noted earlier presents the scientific and analytical framework for the study. Firstly, it defined the scope of the population of the study from which the random sample size was arrived at based on a formula. Data collection was carried out by both secondary and primary sources. With the primary data, two sets of questionnaires were designed and administered. Interviews were further carried out to get a better understanding of some of the issues. Quantitative analysis method was used in the analysis of the collected data after it had been edited sorted and coded. Microsoft Excel software was used to present result of analysis in charts, percentages and other descriptive methods.

## CHAPTER FOUR

### DISCUSSION OF RESULTS

#### 4.1 INTRODUCTION

This chapter reveals the discussion of the outcome of the results obtained from the study. It also involves the analyses and discussion of the various processes and procedures in acquisition of building permit, the effectiveness of the processes and procedures and the various reasons that hinders the progress of issuance of building permit.

#### 4.2 PROCESSES AND PROCEDURES OF ACQUISITION OF BUILDING PERMIT

Based on the interview conducted with the various departments involved in the issuance of building permit in both Kumasi and Accra Metropolitan Assemblies the following processes and procedures were identified.

The process has been categorized into role of the organization, application, design requirements, processing application, issuance, and enforcement.

##### 4.2.1 Role of the Organization

The specific roles of the organizations in the processing and issuance of building permit are shown in Table 4.1 below:

**Table 4.1: roles of organizations in the processing and issuance of building permits**

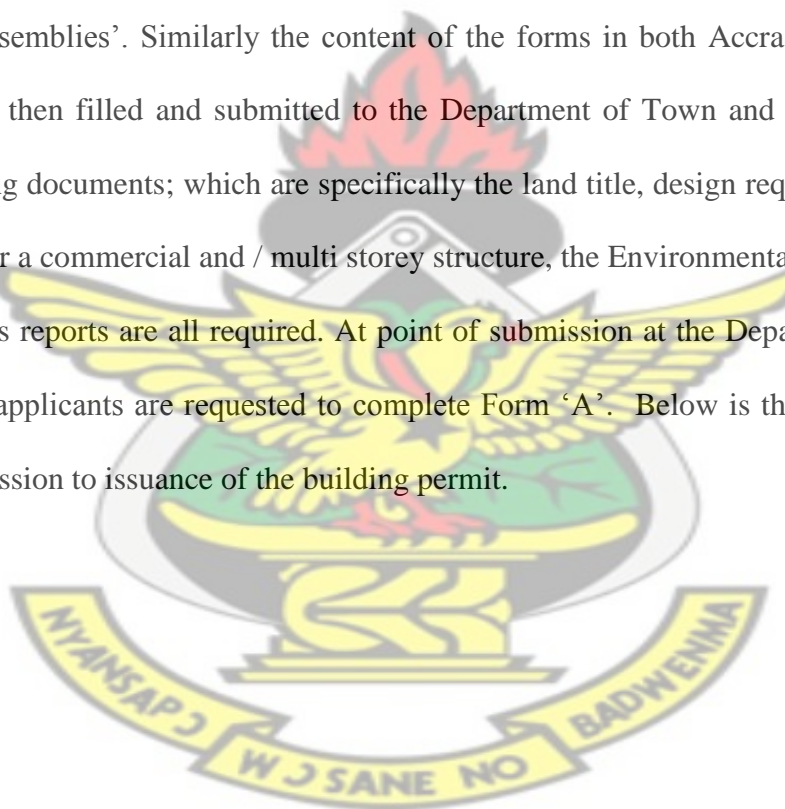
<b>ORGANIZATION</b>	<b>APPLICATION</b>	<b>PROCESSING</b>	<b>ISSUANCE</b>	<b>ENFORCEMENT</b>
<b>Metropolitan Assemblies (AMA &amp;KMA)</b>	Acquisition of form 'B'	Members of Technical sub-committee Chair Statutory planning Committee	Recipients of Statutory Fees Issue Final permit Signatory to Final permit	Enforcement of Building Regulations
<b>Department of Town &amp; Country Planning</b>	Acquisition of Form 'A' Secretariat for Statutory Planning Points of submission of applications	Members of Technical sub-committee Member of Statutory planning Committee	Issue Development permit Signatory to Final permit	Assist Metropolitan Assemblies with enforcement of building regulation
<b>Environmental protection agency (EPA)</b>	Applicants need to obtain Environmental Assessment Report. Mostly required of Commercial building permit Applicants	Members of Technical sub-committee Member of Statutory planning Committee		
<b>Ghana Health Service</b>		Members of Technical sub-committee Member of Statutory planning Committee	Signatory to Final permit	
<b>Ghana Fire Service</b>	Commercial Building Applicants need to obtain Fire Assessment Report	Members of Technical sub-committee Member of Statutory planning Committee		
<b>Lands Survey Department</b>		Members of Technical sub-committee Member of Statutory planning Committee		
<b>Department of Urban Roads</b>		Members of Technical sub-committee		

		Member of Statutory planning Committee		
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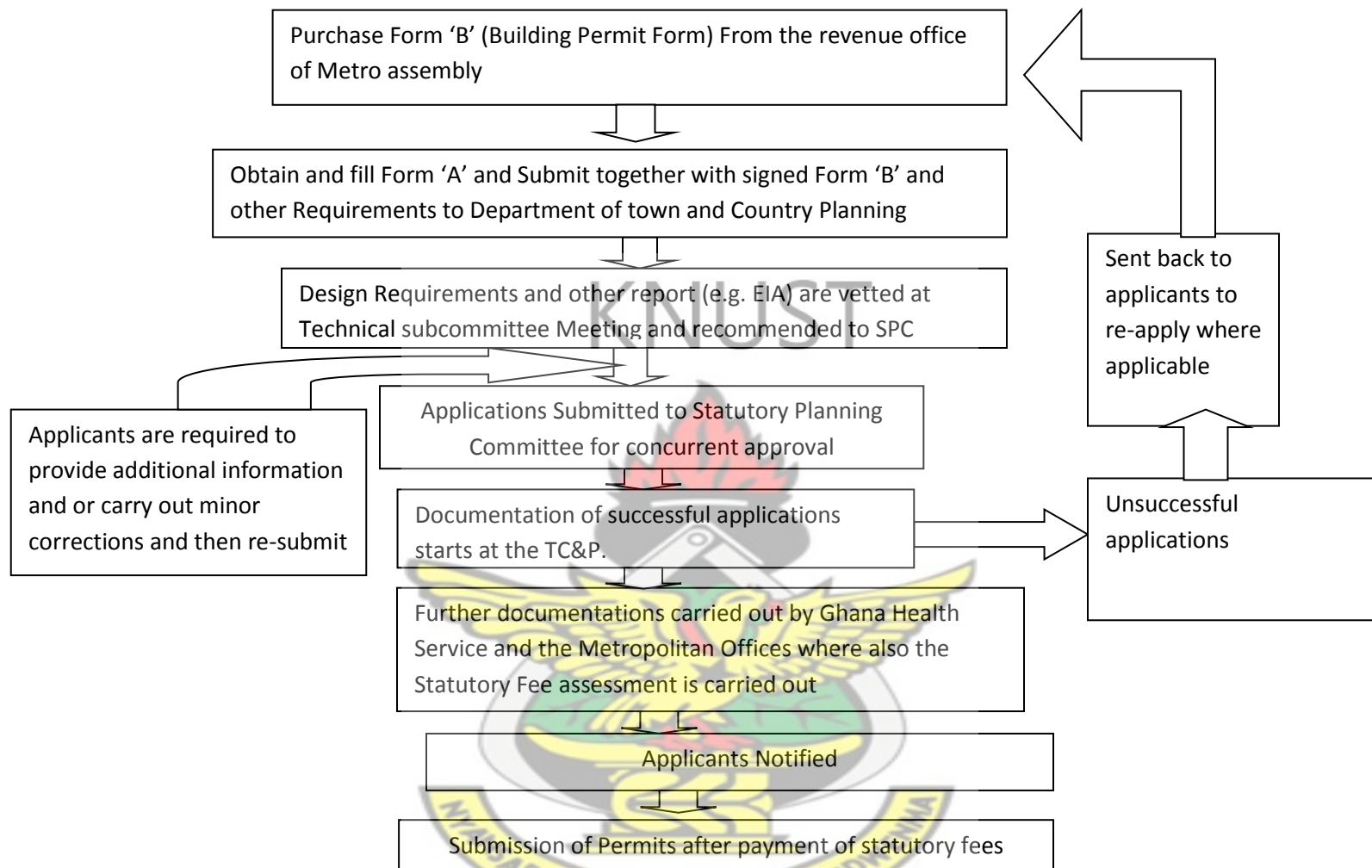
**Source: Author's Construct, 2012**

#### **4.2.2 Application**

In both Accra and Kumasi the procedure for the application of the permit is the same. In both instances the process begins with the purchase of the Building Permit Jacket at the revenue offices of the metropolitan assemblies'. Similarly the content of the forms in both Accra and Kumasi are the same. This form is then filled and submitted to the Department of Town and Country Planning in addition to following documents; which are specifically the land title, design requirements and where the application is for a commercial and / multi storey structure, the Environmental Impact Assessment Report, soil analysis reports are all required. At point of submission at the Department of Town and Country Planning, applicants are requested to complete Form 'A'. Below is the flowchart of entire process from submission to issuance of the building permit.







Source: Author's Construct, 2012

**Figure 4.1: Flow Chart of the Process of Application and Issuance of Building Permit**

### 4.2.3 Design Requirements

Three sets of the following design requirements are to be submitted

- Site Plan;
- Floor Plans;
- Roof Framing Plan (including trusses, if applicable);
- Elevations;
- Sections;
- Structural Drawings;
- Details;
- Septic System Design or Assessment Report;
- Plumbing Design Documentation;
- Electrical Detailing (required of commercial properties); and
- Environmental Impact Assessment Report (required of commercial properties).

These must be signed by the appropriate professionals as stipulated by the building regulations. Importantly, these design requirements are about the same in most countries (developed or developing). However some differences exist, for instance in the temperate countries, extra design requirements pertaining to heating and cooling are required of applicants.

### 4.2.4 Stages in the processing of application

Processing of application goes through basically six (6) main stages;

#### **i. Preliminary Assessment**

Preliminary assessment to ascertain all requirements submitted are up to date. This involves checks to ascertain evidence of land title, design requirements and that forms are correctly filled.

#### **ii. Technical Assessment**

The second stage is an assessment by a technical sub-committee of the Statutory Planning Committee (SPC). The committee mostly comprises architects, structural engineers, health officials, fire service officials etc. Applications found to have met acceptable standards are then recommended to the statutory committee for concurrent approval. However, applicants whose applications could not pass the assessment are contacted and informed of the hitch. Applicants are either asked to provide additional information (where it is lacking) and or make some corrections and or re-apply entirely (where there is the need to make substantial changes to certain design requirements).

#### **iii. Assessment and Approval by Statutory Planning Committee**

The third stage of the process is where the application is approved by the statutory Planning Committees of the Assemblies. The composition of this committee includes all members of the technical sub-committee and nearly all stake holders in the administration of the cities.

#### **iv. Fees Assessment**

Applications are then assessed on statutory fees to be paid. The statute states that 5% of the assessed value of the proposed building is charged as the statutory fee. Enquiries at the two assemblies showed that they both have qualified valuers who conduct the assessment. Payment of the statutory fee by the applicant paves the way for the issuance of the permit.

#### **v. Issuance of Permit**

At this stage documentation is finalized by the appending of signatures of the relevant officials. These officials are mostly the representative of the Assemblies, Town and Country Planning Department and the Health Service. It must be noted that by this stage applicants must have been informed of the success of their applications and must have paid the statutory fee. The applicant is finally issued one set of the document and a certificate indicating a unique permit number.

#### **vi. Enforcement**

This section is barely practiced by the two assemblies. By the Building Regulations issuance of permit should not be the finality of the process. It is expected that regular inspection and supervision of the construction period is done and then after completion of construction a final certificate of occupancy issued. Clearly there was no evidence of this at the two assemblies.

### **4.3 Effectiveness of the various Processes Identified**

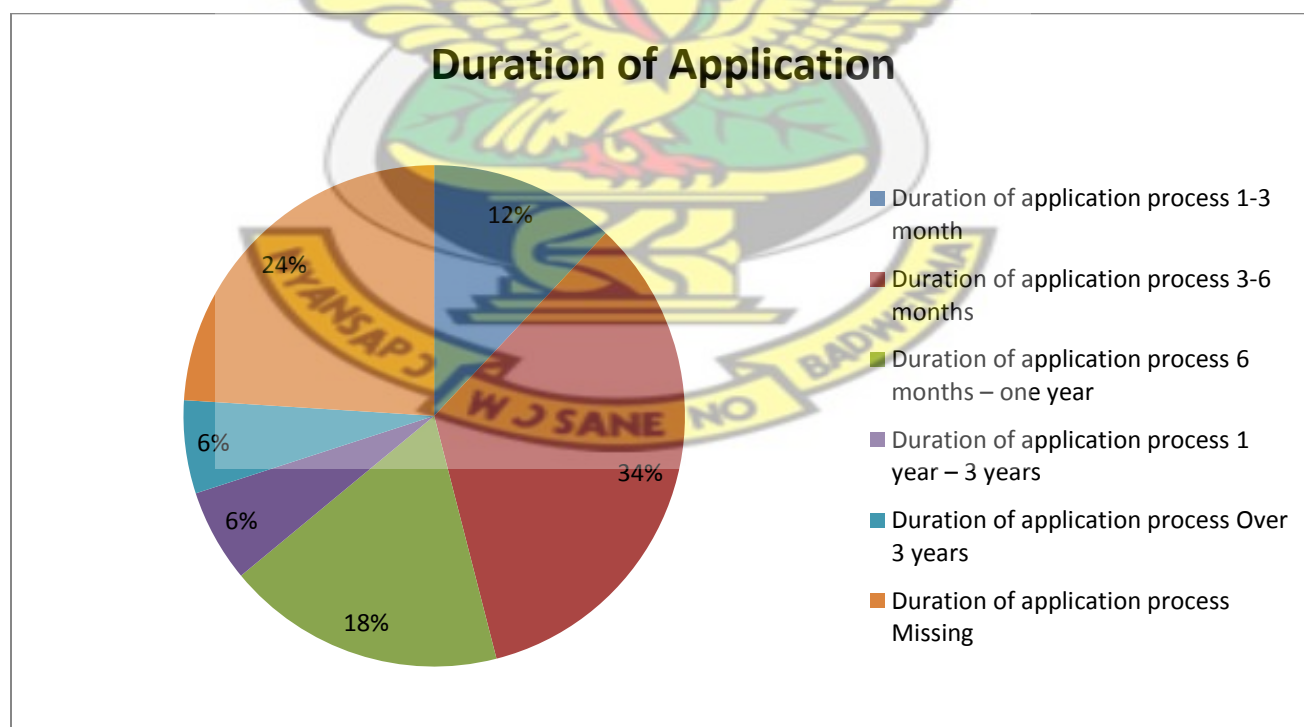
This section focuses on the effectiveness of the processes and procedures outlined by management of both KMA and AMA departments involved in the issuance of building permit.

**Table 4.2: Effectiveness of Application Processes**

Variable	Category	Frequency	Percentage%
Duration of application process	1-3 month	12.0	12.0
	3-6 months	34.0	34.0
	6 months – one year	18.0	18.0
	1 year – 3 years	6.0	6.0
	Over 3 years	6.0	6.0
	Missing	24.0	24.0
An idea about the basis of the fees charged	Yes	58.0	58.0
	No	42.0	42.0
Feedback of your application	By mail	8.0	8.0
	e-mail	4.0	4.0
	phone	18.0	18.0
	others	40.0	40.0
	by mail	8.0	8.0
	missing	22.0	22.0

Source: Survey Data, 2011

#### 4.3.1 Duration



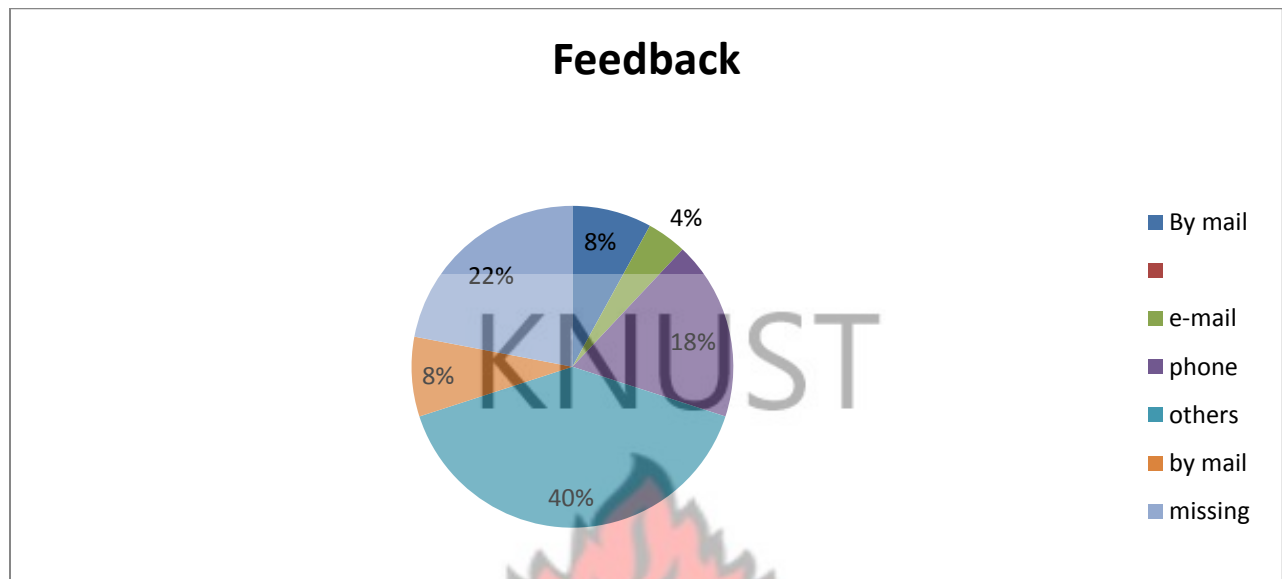
**Fig 4.2**



From Table 4.2 it was discovered that, 34 % of the respondents were of the view that, their applications were processed and got the feedback within 3-6 months. This therefore goes a little bit in line with the stipulated time of three months before any applicant gets his or her feedback of their application. However it is difficult to tell whether all the 34% of total respondents got their processed forms in exactly three months, since their responses fell within an estimated interval. Also from Table 4.2, 12%, 18% and 6% got their building permit within 1-3 months, 6 months – one year, and 1-3 years respectively. A cluster of the respondents said that, their building permits were obtained within 1-3months. This low preference rate attributes to the fact, it is almost difficult for an applicant to get his/her processed forms in less than three months or exactly three months. This could be due to the non-compliance with the convention that the Statutory Committee should meet at least once every quarter.

From the responses obtained, it was realized that majority (64) of the respondents sampled received their processed forms within an average of one to six months; making the process and procedures of permit issuance a little bit ineffective. This implies that, majority of the applicants and citizens who apply for the permit do not receive their building within the stipulated three months as established by the management (the Assemblies) involved in the process.

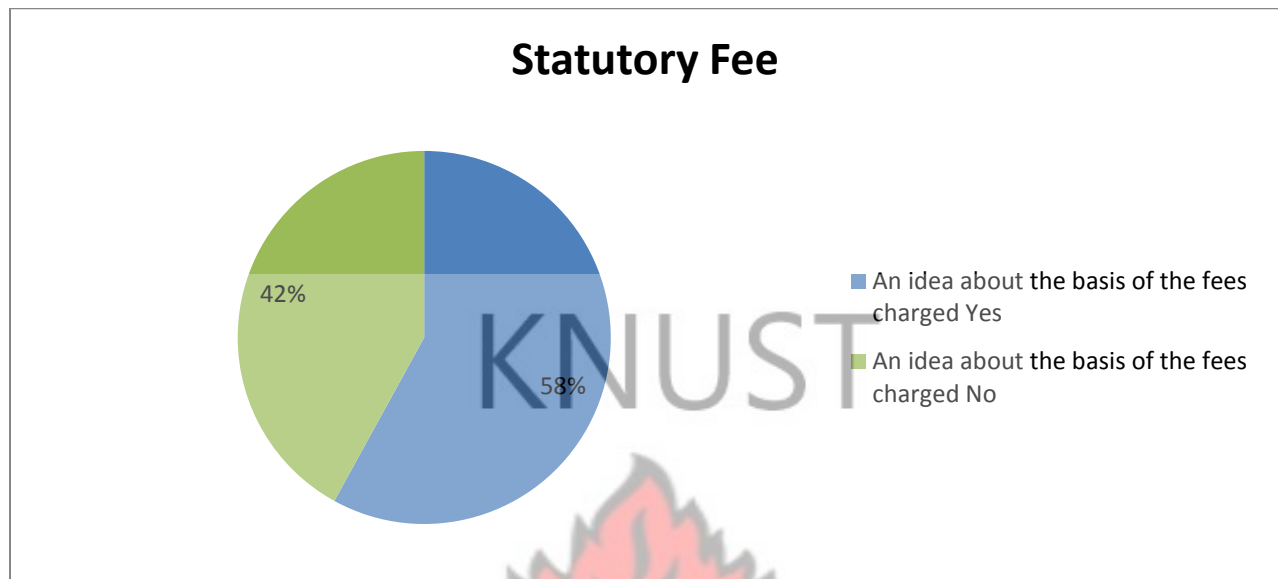
### 4.3.2 Notification of Applicants



**Fig 4.3**

Applicants claimed that they received their notifications by mail (8%), e-mail (4%) and phone (26%). Clearly this does not form the majority. However, 62% of respondents indicated they did a follow-up on their applications. From the analysis, it could be said that the two metropolises do not have a recognized way of notifying applicants, since majority of respondents (applicant) do a follow-up.

### 4.3.3 Statutory Fees



**Fig 4.4**

One of the means of assessing the effectiveness of the process was to know whether applicants had a fair idea about the basis of the fees charged by management. It was discovered from Table 4.2 below that, 42% of applicants did not know the basis of the fees they pay. On the other hand, 58% of the respondents had an idea about the basis of the fees charge. In consultation with management, it was revealed that, the basis of the fees charged is the value of the property and whether it is residential or commercial. In spite of the fact that majority of the respondents claimed they had an idea, 42% who claimed that they did not had an idea is not favorable and there should be given much attention.

#### 4.3.4 Reasons for Ineffectiveness of the process

This section looks at the reasons for ineffectiveness of the process involved in applying and issuance of building permits and to find out, among the various reasons which of them adversely affect the operations of management in the two Metropolis'. To arrive at this, a Perception Index was used for the analysis. The indices for each of the statements are as follows; very serious = -1, serious=-0.5, fairly serious=0.5 and not sure=0. A negative mean score value indicates that, the statement should be of great concern to management.

From Table 4.2, it can be clearly seen that the statement *cumbersome process* was identified as the major reason that adversely affect the progress of issuance of building permit with 70.4% out of the total respondents agreeing in the view that, the above statement is *very serious*. However the negative mean value recorded indicates that, generally respondents agrees to the statement that the process and procedures are extremely difficult. However no reason was given to that effect.

Another major reason identified from Table 4.3 was lack of logistics for proper investigation.63% of respondents indicated that this is very serious and greatly affected the process. Generally the -0.54 mean score for the above statement means that, the respondents all share in the same view that, lack of logistic for proper investigation is a very serious reason that hinders the progress of issuance of building permit.

High statutory application fee was another major reason that seriously affects the process of building permit. In Table 4.2 below, this particular reason was not the most reason since it recorded the following preference rates; 33.3% as very serious, 14.8% as serious, 40.7 as fairly serious and 3.7% as not sure. Generally the high statutory application fees statement was found to be generally very serious with a recorded mean score of -0.40.

Furthermore the following reasons from Table 4.3 were identified to be generally serious since each recorded a negative mean score value and they as follows; Irregular meeting periods of the statutory planning committee; Inappropriateness of information required, High professional fees, Headship of the planning committee, and Inadequate information supplied.

It was therefore discovered that, composition of the planning committee was identified as not a serious reason that hinders the progress of issuance of building permits at both KMA and AMA since it recorded a positive mean score value as 0.02.





**Table 4.3: Reasons that affect the process of assessment and issuance of building permit**

Statement	Percentage				
	Very serious (-1)	Serious (-0.5)	Fairly serious (0.5)	Not sure (0)	
Cumbersome process	70.4	7.4	18.5	0.00	
Composition of the planning committee	14.8	22.2	55.6	7.4	
Irregular meeting period of the statutory planning committee	29.6	22.2	40.7	7.4	
Lack of logistics for proper investigation	63.0	3.7	22.2	11.1	
High statutory application fee	33.3	14.8	40.7	3.7	
High professional fees	25.9	22.2	44.4	3.7	
Headship of planning committee	7.4	37.0	51.9	3.7	
Inappropriateness of information required	18.5	22.2	44.4	11.1	
Inadequate information	25.9	18.5	48.1	7.4	

**Source: Survey Data, 2011**

#### 4.3.5 REASONS FOR INEFFECTIVENESS OF PROCESS

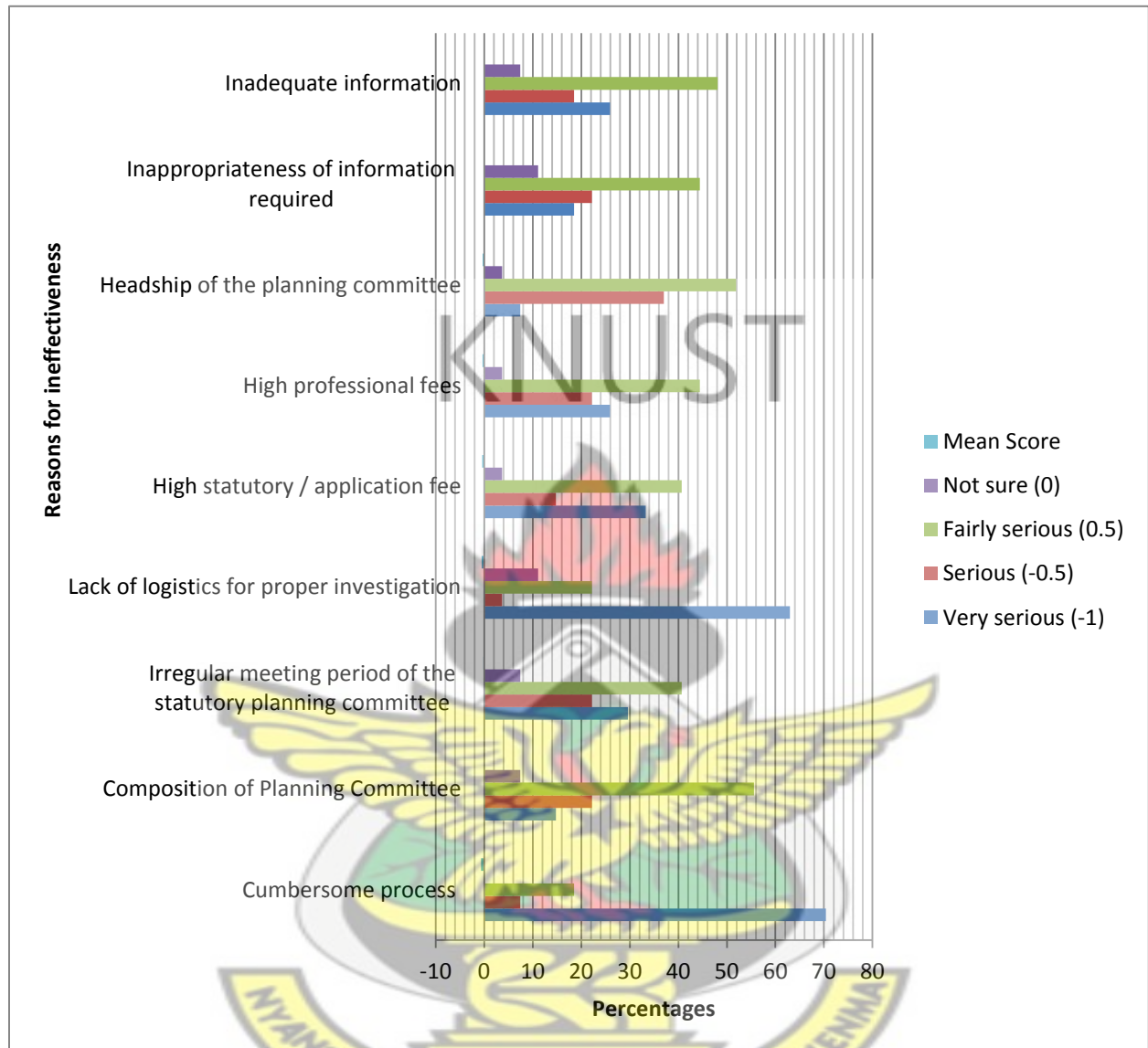


Fig 4.5

#### 4.4 Summary of Chapter

The presentation of results of the analysis of data collected revealed a number of findings. Using a flow chart, the procedure for application and issuance was shown and the roles and responsibilities of the various organisations involved in the process were also revealed. The analysis also showed that the procedure is ineffective, as most respondents had issues with the processing time.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

#### 5.1 INTRODUCTION

This chapter presents the summary of findings and discussions, the conclusions drawn from the study and some possible ways forward on how to reduce or eliminate the problems hindering the process of assessment and issuance of building permit.

#### 5.2 SUMMARY OF FINDINGS

The study aimed at looking at the current procedure for the issuance of Building Permits in an attempt to identify the main causes of the ineffectiveness of the process and identifying ways to improve it. Three objectives were set in order to achieve the above stated aim. These are i) to examine the roles and responsibilities of institutions/departments involved in the processes and issuance of building permits ii) to identify the main causes for the slow pace in the acquisition of building permits and iii) to propose alternative ways to the existing procedures in a bid to attain a better system. From the study, it was revealed that, the procedures and processes of issuance of building permit from the selected metropolises were not effective.

Firstly, it was discovered that, though the maximum stipulated time for the processing and issuance of permit is three (3) months (Clause 8 Sub-section 1-2, National Building Regulation), most of the applicants obtained their building permit after six (6). This implied that a good number of the applicants had to wait a much longer before obtaining their building permit.

In addition, most of the applicants did use other means of getting feedback of their processed forms. However, it was not clear as to how they got information concerning their application. The

medium through which management sent the information to applicants about their processed forms was basically through phone and Email. But this medium did not yield any significant results since applicants used different medium as stated above.

Finally, the reasons that hinder the progress of processing and issuing of building permits were analysed. Most of the applicants stated that, the process and procedures involved are cumbersome. Another major reason is lack of logistics for proper investigation was also identified to be very serious. It was therefore realized that, composition of the planning committee was not a reason hindering the progress of issuance of building permit.

### **5.3 RECOMMENDATIONS**

Thus from the analyses and discussions the following are the recommendation from the study;

- Creation of one stop secretariat. Making the planning authority an autonomous body to take charge of the whole process of obtaining building permit is highly recommended.
- Private participation. It is being suggested that some level of privatization could be introduced into the process. For instance building consultancy firms could be empowered by legislation to undertake technical assessment and subsequently approve building permits on behalf of the planning authority. A similar system called the Professional Certification Program is being practiced by the New York City Department of Building. Under this program, registered architects and professional engineers certify, through an affidavit signed by the owner, contractor, and all responsible professionals (architects, engineers, plumbers, and the like) that the plans they file with the department are in compliance with all applicable laws. This also helps to fast track the whole process.

- De-centralizations of some aspects of the process. The Metropolitan Assemblies' of Accra and Kumasi are made of 10 to 11 sub-metropolitan assemblies respectively. Offices of these sub-metros can be turned to as sales points for the purchase of the application forms and even picking up permits should be decentralized to the sub-metros
- Introduction of ICT. The increase use of ICT in the process would greatly enhance the entire process. Though both assemblies' websites much is not being done to incorporate the use of ICT in the processing of building permit. Its introduction can be helpful in the process in many ways including the following ways:
  - i. Acquisition of application forms. Application forms can be downloaded from the net instead of physically approaching the metropolitan offices to purchase them.
  - ii. Tracking of the process to know the status of the application.
  - iii. Contacting applicants through e-mail/txt/phone calls to inform them of (a) hitches in their application (b) requisition of extra information (c) success or otherwise of their applications
  - iv. To effect payment of statutory fees
  - v. To make enquiries of the entire process
- Regular meetings of the statutory planning committee: The number of meetings per year of the statutory Planning Committee should be increased. This should be carried out on a bi-monthly basis. Currently both assemblies' are not meeting on the four quarterly bases required of them.
- Strengthening of Building Control/Inspectorate Sections: The assemblies should be strengthening these sections to face challenges on the ground. It is believed that good number of developers without building permits do so because city authorities are seemingly unmindful of them. In 2008, AMA had just Nineteen (19) Building inspectors (pg Daily Graphic) this is wholly inadequate. It is



time to a recognise system is adopted to comprehensively identify what qualifies one to be a building inspector as this seems a grey area. It is also important that they be provided with the necessary logistic to enhance their operations.

- Enforcement of Insurance Act of 2006 Act 724: The enforcement of this act in the entire building industry could go a long way to enhance the general process of obtaining permits. Sub-section 183 and 184 of the act require that commercial buildings under construction and commercial buildings in use are to be insured. In the car industry, it is imperative to obtain a vehicle license before one can obtain an insurance cover. By the same measure, enforcement of this act will compel building owners to insure their buildings and by necessity compel them to acquire a building permit.

## **5.4 CONCLUSION**

The study aimed at assessing the processes and procedures for issuance of building permit in some selected metropolitan assemblies. Three objectives were set. based on the objectives, it was realized that, some of the processes and procedures such as the stipulated time for the applications to be processed, the medium through which applicants gets information about the applications, knowledge about the basis of their fees paid were all not much effective in fast tracking the process and ensuring efficiency at the various departments in the metropolises in question.

Finally it was realized that, the process and procedures of the issuance was very cumbersome, since it was identified very serious and the second major problem identified to be very serious was lack of logistics for proper investigation.

## **5.5 LIMITATION OF STUDY**

The study was limited to two metropolitan cities (Accra and Kumasi), although there are four others metropolises. Besides, there are over 214 other Municipal and District Assemblies. Similar

studies on the remaining Assemblies will help in the formulation of a national policy pertaining to building permits

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## References

Adu B. (1965), Topics in West African History, 2nd Edition Longman

Ameinfo, (2010) Dubai Municipality to automate building permits procedure through Building Permits and Control Application services Available at: <http://www.amenigo.com/news/detailed/54981.html> [Accessed: 15/08/2010]

BLS, (2000) Construction and Building Inspectors Available at [http://www.bls.gov/soc/2000/soc\\_s4b1.htm](http://www.bls.gov/soc/2000/soc_s4b1.htm) [Accessed: 12/01/2010]

Building Permits Application (2010), : <http://www.hiltonheadislandsc.gov/departments/commdev/bldgpermits.cfm> [Accessed: 04/07/2010]

Businessdictionary (2009) Doing Business in Kenya, Available at: <http://www.businessdictionary.com/definitions/procedure.html> [Accessed: 03/10/2012]

Crewell J. (2003), Research Design, John Creswell

Definition of Procedures (2010), Available at <http://www.businessdictionary.com/definition/procedure.html> [Accessed: 14/07/2010]

Ehow (2009), Building Permits, Available at: [http://www.ehow.com/about\\_6103601\\_building-code-information.html](http://www.ehow.com/about_6103601_building-code-information.html) [Accessed: 12/12/2009]

Fynn J.K. (1971), Asante and Akyem Relation 1700-1831  
J.K. Fynn

Ghana Statistical Service (2012), 2010 Population and Housing Census, Summary of Final Result: [http://www.statsghana.gov.gh/docfiles/2010phc/2010\\_population\\_and\\_housing\\_census%28view\\_summary\\_of\\_final\\_results%29.pdf](http://www.statsghana.gov.gh/docfiles/2010phc/2010_population_and_housing_census%28view_summary_of_final_results%29.pdf) [Accessed: 20/7/2012]

GNA (2009) Town and country Department issue building permit in the months  
Available at: <http://www.ghanabusiness.com/2009/06/27/town-country-dept-to-issue-building-permit> [Accessed: 10/11/2011]

Griswold K. (2009) When is a Building Permit Is Not Required, Available at: <http://www.tumbleweedhouses.com/build-it-yourself/when-is-a-building-permit-not-required> [Accessed: 23/07/2010]

Hedderman, D. (2004) Work Permits, Available at: <http://www.cooperator.com/articles/1002/1/Work-Permits/Page1.html> [Accessed: 23/10/2010]

Haltonhills, (2009), Guide to Building Permit, Available at: <http://www.haltonhills.ca/building/building-permits.php> [Accessed: 27/08/2010]

Hiltonheadislandsc, 2009, [http://www.hiltonheadislandsc.gov/search/search.cfm?zoom\\_query=expectations+build+permit&zoom\\_page=2&zoom\\_per\\_page=10&zoom\\_and=0&zoom\\_sort=0&zoom\\_xml=0](http://www.hiltonheadislandsc.gov/search/search.cfm?zoom_query=expectations+build+permit&zoom_page=2&zoom_per_page=10&zoom_and=0&zoom_sort=0&zoom_xml=0) [Accessed: 10/12/2009]

Hume (2010), Building Permits, : [http://www.hume.vic.gov.au/Building\\_Planning/Building\\_Renovations\\_Extensions/Building\\_Permits](http://www.hume.vic.gov.au/Building_Planning/Building_Renovations_Extensions/Building_Permits) [Accessed: 20/07/2010]

Saleh I. (1999), “Housing market dynamics in the metropolitan area: A case study of the informal housing markets in the metropolitan Jabotabek, Indonesia” (January 1, 1999).  
[www.repository.upenn.edu/dissertations](http://www.repository.upenn.edu/dissertations) [Accessed 15/08/2010]

Investingatingthesis,(2009) What you need To Know About Building Permits When Renovating A Home : <http://www.investigatingthesis.com/personal-finance/what-you-need-to-know-about-building-permits-when-renovating-a-home/> [Accessed: 10/11/2011]

Joburg, (2010) Development Planning – Building Control, Available at [http://www.joburg.org.za/building\\_plans](http://www.joburg.org.za/building_plans) [Accessed: 17/08/2010]

Karmin C. (2010), Permitting Too Much With Buildings? Illegal construction work created water leaks, mold & other problems: <http://www.online.wsj.com> [Accessed: 22/10/2010]

Kopczynski J. (2010), The myth of Public Agency Protection in the Building Permit Process : <http://www.berding-weil.net/articles/public-agency-protection-in-building-permit-process-myth.php> [Accessed: 27/08/2010]

Kweku H.N (2010) Re-echoing building permit articles journals to revamp public consciousness, : <http://www.articlebase.com/college-and-university-articles/re-echoing-building-permit-articles-journals-to-revamp-public-consciousness-2625527.html> [Accessed: 01/10/2010]

Leedy & Ormond, (2005), Practical Planning and Design  
Paul D. Leedy, Jeanne Ellis Ormrod

Macdaniel D. (2010) What You Need To Know About Roofing Permits:  
[www.articlesbase.com/home-and-family-articles/what-you-need-to-know-about-roofing-permits-2380111.html](http://www.articlesbase.com/home-and-family-articles/what-you-need-to-know-about-roofing-permits-2380111.html)

Misago, A. (2008) Residential building permit activity by U.S metropolitan area: Key agents of change: <http://gradworks.umi.com/33/07/3307199.html>[Accessed: 05/10/2010]

National Building Regulation 1996 LI 1630, Clause 8(1&2)

Nyanteh, K. (2010) ; High Cost of Building Construction in Ghana :  
<http://ghanaadvantage.com/content/view/14/35/> [Accessed: 30/10/2010]

Onlineqatar, (2010) Expediting Building Permit Available at: <http://www.onlineqatar.com/property/152-New-department-facilities-quicker-issuance-of-building-permits.htm> [Accessed: 15/08/2010]



Permitplace (2009), what is Building Permit, Available at: <http://www.permitplace.com/>  
[Accessed: 20/12/2009]

Qenn & Knussen, (2002), Research Methods for Social Science: A practical introduction  
Roland A. Mac, Christein Kunussen

Rebecca S. (2006), Land Title Registration. The Ghanaian Experience (13-18<sup>th</sup> Oct 2006) by  
Rebecca Sittie, Ghana

Saunders M. (2007), Research methods for Business students, 4<sup>th</sup> edition, London. Prentice Hall.  
Syme, S. (2010) Support Building Code – GIA: Tuesday, October 12, 2010 edition of the Daily  
Graphic

Wikipedia (2011), Codes of Hammurabi, <http://search.tb.ask.com/search/GGmain.jhtml?searchfor=hammurabi+codes+229232&tpr=hpsb&p2=^HJ^xdm073^YYA^gh&n=77fd520a&st=tab&ptb=3E8ED1CA-21A9-4DAB-B967-E53BCB3B34A3&qs=&si=pconverter>  
[Accessed: 07/07/2010]

Writewell B. (2009); Plan your new garage design and garage building size,  
<http://www.articlebase.com/home-improvement-articles/plan-your-new-garage-design-and-garage-building-size-878469.html> [Accessed: 30/10/2010]

Yamane T. (1967) Statistics: An Introductory Analysis, 2<sup>nd</sup> Edition NY; Harper & Row

## APPENDIX 1

### KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### DEPARTMENT OF BUILDING TECHNOLOGY

#### **PROJECT TOPIC: PROCESSES AND PROCEDURES FOR THE APPLICATION AND ISSUANCE OF BUILDING PERMITS IN THE METROPOLITAN CITIES OF GHANA: A STUDY OF ACCRA AND KUMASI METROPOLISES**

This is a questionnaire for a thesis in fulfillment of the requirement for attainment of Masters in Kwame Nkrumah University of Science and Technology (KNUST). Your answers / suggestions and comments are welcome and will be used for only academic purpose and be assured that all response shall be treated confidentiality.

#### **Metropolitan offices**

General data

Metropolis.....

Organization .....

Qualification ..... year of

Experience .....

Position .....

#### **Role of organization**

1. List your specific role(s) in the processing and issuance of building permits?

- Processing building permit documents for consideration by statutory planning committee [ ]
- First point of call in the application process [ ]
- Assessment of statutory fees to be paid [ ]
- Point of payment of statutory fees [ ]
- Point of final collection of permit [ ]
- Main record keepers of all applications [ ]
- Responsible for inspection of physical development [ ]
- Act as secretary to the statutory planning committee [ ]
- Others .....
- .....

2. Are these roles statutory? Yes [ ] No [ ]

3. If no how they did they come about?

.....

.....

.....

.....

4. In your opinion are these roles adequate in assessing application for permit? Yes [ ] No [ ]

5. If no, why?

.....

.....

.....

.....

6. Lists other role(s) you wish to play in the process.

.....

.....

.....

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Application

7. How is the application form for building permit obtained?

- 1. The Department of Town and Country Planning [ ]
- 2. The Metropolitan Assembly offices [ ]
- 3. Down Load from Website [ ]
- 4. Others .....

8. Where is the application submitted?

- 5. The Department of Town and Country Planning [ ]
- 6. The Metropolitan Assembly offices [ ]
- 7. Down Load from Website [ ]
- 8. Filling application on-line [ ]

Requirements

9. Which of the following are the design requirements from applicants for the processing of the permit?

- a. Floor Plans [ ]

- b. Elevations [ ]
- c. Sections [ ]
- d. Details [ ]
- e. Septic Tank Details [ ]
- f. Environmental Impact Assessment [ ]
- g. Plumbing Design [ ]
- h. Electrical Layout [ ]
- i. Heating System Design [ ]
- j. Road Access Permit [ ]

The National Building Regulations, 1996, L.I 1630 states in section 3 subsection 2 that “no approval shall be granted to any applicant who does not have a good title to the land, and for purpose of this regulation, good title shall be in accordance with a certificate issued by the Chief Registrar of Land Titles or any other agency so authorized”

10. Which of the following land title(s) is/are acceptable for the processing of building permits from applicants.

- i. Registered land title [ ]
- ii. Allocation from land custodians [ ]
- iii. Indentures [ ]
- iv. Assignments [ ]
- v. Others .....

11. Are all these requirements adequate for proper processing of building permits?    Yes [ ] No [ ]

12. If no, what other requirement(s) do you wish to see include?



.....

.....

.....

### Processing

13. What organs or institutions make up membership of the statutory planning committee?

The Department for Town & Country Planning ☐

The Metropolitan Assembly ☐

Ghana Fire Service ☐

Lands Commission ☐

Representatives of Traditional Authorities ☐

Department of Urban Roads ☐

Environmental Protection Agency ☐

Ghana Health Service ☐

Others .....

14. How often is the planning committee supposed to meet?

Monthly ☐

Bi – monthly ☐

Quarterly ☐

Bi – quarterly ☐

Yearly ☐

Others .....

15. How often does it meet?

Monthly ☐

Bi – monthly ☐

Quarterly ☐

Bi – quarterly ☐

Yearly ☐

Others .....

16. Is it a statutory requirement (question 14)? Yes ☐ No ☐

17. If yes please state the relevant clause(s)

.....

.....

18. What is the official duration for the processing of applications?

a. One month ☐

b. Two months ☐

c. Three Two months ☐

d. Four Two months ☐

e. Five Two months ☐

f. Six Two months ☐

g. Others .....

19. What is the duration in practice

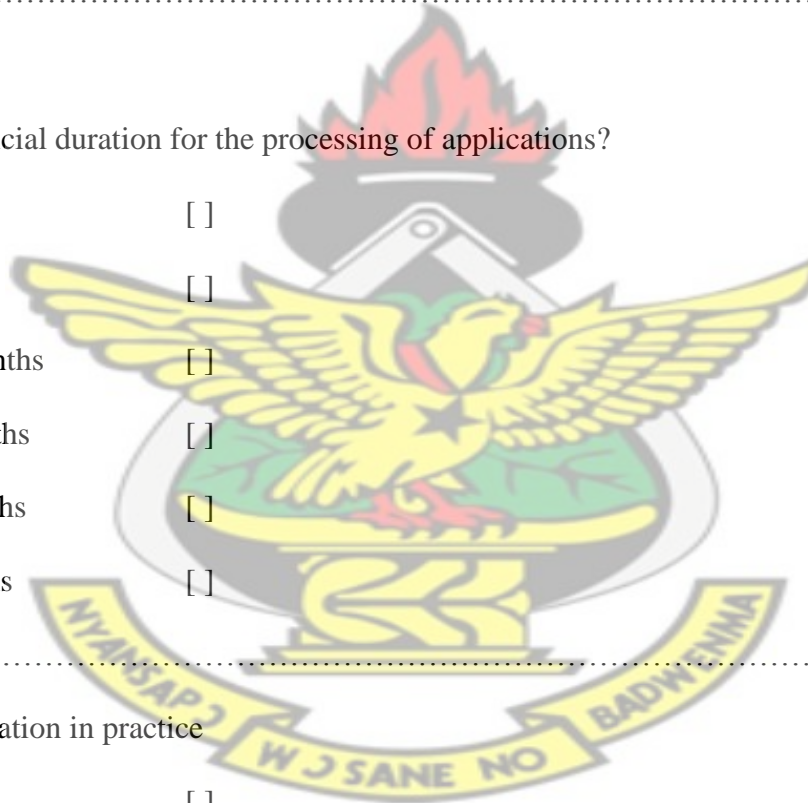
a. One month ☐

b. Two months ☐

c. Three Two months ☐

d. Four Two months ☐

e. Five Two months ☐



f. Six Two months ☐

g. Others .....

20. Is it statutory requirement (question 19)? Yes ☐ No ☐

21. If yes please state the relevant clause

.....

22. Many reasons have been assigned for the apparent lack of progress in assessing and issuing of building permits, Tick in the order of ranking which in your opinion most adversely affect the process

	Very serious	Fairly serious	Serious
Cumbersome Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irregular meeting periods of the	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning statutory committee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Composition of the planning committee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of logistics for proper investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High statutory fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Headship of the planning committee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriateness of information required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land title difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Would you suggest any changes in the current procedure for assessing applications and issuance of building permits? Yes ☐ No ☐

24. If yes indicate which step(s) and why.

.....

.....

.....

.....

.....

### Application fees

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25. At what stage in the process are application fees charged

- i. On submission of application ☐
- ii. after successful processing of application ☐
- iii. At point of issuance of permit ☐
- iv. Others .....

26. What are the bases of the charges

- a. Residential ☐
- b. Commercial ☐
- c. Others .....

Issuance

27. How is an applicant informed of successful application

- i. By mail ☐
- ii. E-mail ☐
- iii. Phone ☐
- iv. others .....

28. Where does the applicant receive the permit?

- a. Department of Town and Country ☐
- b. Assembly offices ☐
- c. Through Registered Mail ☐
- d. Others .....

Enforcement

29. Do you have a separate unit or section in charge of field inspections? Yes ☐ No ☐

30. If no, how do you monitor that building works are carried out to specification of permits

- a. Through private licensed building inspectors ☐
- b. Assembly task force ☐
- c. Others .....

31. If yes, please name the unit/section.....

32. What is the staff capacity (building inspectors) of the unit/section?

.....

33. What is the highest academic qualification of the building inspectors?

- a. Degree and above ☐
- b. HND Diploma ☐
- c. SHS/Sixth Form and Below ☐
- d. Others .....

34. What is the minimum qualification?

- a. Degree and above ☐
- b. HND Diploma ☐
- c. SHS/Sixth Form and Below ☐



d. Others .....

35. Are there privately licensed or registered building inspectors with the assembly. Yes [ ] No [ ]

36. If yes what are the requirements before a license is obtained?

.....

.....

.....

37. How many people have you prosecuted for building without permit last year?

.....

38. How many demolitions have been carried out last year

.....

.....

### Logistics

39. How do you consider the following in relation to your roles in processing and issuance of building permit?

i. Staff strength Adequate[ ] Inadequate [ ] Undecided[ ]

ii. Office Accommodation Adequate[ ] Inadequate[ ] Undecided[ ]

iii. Office Equipments Adequate[ ] Inadequate[ ] Undecided[ ]

iv. Vehicles Adequate[ ] Inadequate[ ] Undecided[ ]

v. Field Equipments Adequate[ ] Inadequate[ ] Undecided[ ]

40. What is the monthly rate of applications (if applicable)

.....

41. What is the monthly rate of issuance of permit (if applicable)

.....

42. Do you have a website? Yes [ ] No [ ]

### APPENDIX III

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

Where  $n$  is the sample size,  $N$  is the sampling frame and  $e$  is the margin of error.

#### SAMPLE SIZE FOR KUMASI METROPOLIS

**N= 150 Applicants**

**e= 5% margin of error (95% confidence interval)**

$$n = \frac{N}{1 + (150) * (0.05^2)}$$

n= 109.0909 (which is approximately, 109 applicants)

#### SAMPLE SIZE FOR ACCRA METROPOLIS

**N= 105**

**e= 5% margin of error (95% confidence interval)**

$$n = \frac{105}{1 + (105) * (0.05^2)}$$

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