

**ASSESSING THE PROCEDURE FOR ACQUISITION OF BUILDING
PERMIT FOR INFRASTRUCTURE DEVELOPMENT IN GHANA: A CASE
STUDY OF THE ASHANTI REGION**

KNUST

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DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial and extent has been accepted for the award of any other degree or diploma at Kwame Nkrumah University of Science and Technology, Kumasi or any other educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

The Local Governance Act, 2016, Act 936 section 91(I) mandates every citizen of Ghana who intends to build to obtain building permit from the Metropolitan, Municipal and District Assemblies. Besides, the National Building Regulations, 1996, L.I.1630 regulation 2 also makes it clear how building permit could be obtained from a district planning authority. Thus, these laws make it compulsory for every private developer to seek for building permit before he/she starts to build. However, there is a paucity of studies on the procedure and challenges faced for acquisition of building permit for infrastructure development in Ghana especially in the Metropolitan, Municipal and Districts Assemblies (MMDAs) in the Ashanti Region of Ghana. The aim of the study was to assess the process of building permit acquisition towards recommendation for improvement in the application process. This study employed a cross sectional design with quantitative strands of research. Simple random sampling technique was used to select 131 staffs from eleven (11) MMDAs in the Ashanti Region of Ghana. Structured questionnaires in a close ended format was used as the main research instrument. Data were analyzed using mean, percentages and frequencies as analytical frameworks. The study found that the current process of building permit acquisition include land acquisition, land registration, and confirmation of title, preparation of building design, purchase, submission of application forms among others. Delay, high cost of fees, bureaucratic were the main challenges associated with the acquisition of building permits for infrastrural development. The study also found that educating the public about the important associated with the permit system, reduction of the bureaucratic nature of the process, reduction in the duration for acquiring building permits among others as the measures that can be put in place to solve the current challenges associated with the building permit acquisition. In order to promote the effectiveness of the building permit system and to ensure sustainable development of the cities especially, the current system should be redesigned by integrating all the agencies involved in the building permit acquisition process to a central database management system.

Keywords: Building Permit Acquisition; Infrastructure Development; MMDAs; Ashanti Region; Ghana

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LIST OF ABBREVIATIONS

KNUST-Kwame Nkrumah University of Science and Technology

LAP-Land Administration Project

MMDAs- Metropolitan, Municipal and District Assemblies

SPC- Spatial Planning Committee

UN-United Nations



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DEDICATION

I dedicate this work to my wife, Patricia Osei and children; Sandra, Solace, Sina and Suomi for their moral support.

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CHAPTER ONE

1.0 General Introduction

The importance of affordable and quality place of abode for human beings is a critical housing policy issue. Aside from improving the socio-economic welfare, housing helps to better the psychological wellbeing of people (Stephen & Abusah, 2004). It has been said that adequate housing provides leisure, good health while at the same time enhancing worker's productivity.

In developing countries especially Ghana, most urban areas are having problems with housing. Evidence has indicated that there are shortages of housing in urban areas of developing countries of which those in Ghana are no exception. For instance, the total housing stock in Ghana is 3,392,745 while the overall dwelling units are 5,817,607 (Ghana Statistical Service, 2012). For instance, the Kwame Nkrumah University of Science and Technology-KNUST estimated the housing deficit for Accra at 10,856 housing units. To be able to address the housing deficit, it was projected that city authorities are expected to build 27,460 dwelling units per year. The total housing stock in the country is Ghana's housing deficit which currently stands at 1.6 million houses, is expected to double in the next ten years. Taking into consideration the population growth rate of 2.9% coupled with high growth rate, it is assumed that 1.6 million houses are needed (Awuwafofe, 2013).

1.1 Background to the Study

The process of acquiring building permits begins with the client buying and filling a building permit application form at the local authority office with the site plan of the parcel to be developed. This site plan is usually copied from current master plans that contain the parcel in question. Filled application form is at that juncture completed by

draughtsman in accordance of the laws and regulations governing it. This aspect of the process is mostly done by a Licensed Quantity Surveyor. Then, the client submits the filled and corrected application forms with the building drawings for it to be processed. The papers are inspected by a committee before any field inspection are done by building inspectors. Besides, ownership documentation of parcel of interest is done at the lands commission. After the application has successfully passed, it is sent to the Spatial Planning Committee (SPC) to grant the building permit. It must be stated that the SPC however organizes meetings every three months. The meetings are also held based on the number of applications received in two months. In situation where the application is not approved, the whole process for the acquisition of the building permit has to start again however the clients are not given any notice.

The process of acquiring permit especially in developing countries like Ghana appears to be very simple. However, there are a lot of undocumented challenges in acquiring building permits by both private and individual developers in developing countries like Ghana. Since the private developers remain the major provider of housing in developing countries (Ayotamuno & Obinna, 2017) and there is limited literature on building permit acquisition procedure for infrastructure development in Ghana. This study has been conducted to comprehensively assess the procedure for acquisition of building permit for infrastructure development in Ghana to inform policy decisions.

1.2 Statement of the Problem

The Local Governance Act, 2016, Act 936 section 91(I) mandates every citizen of Ghana who intends to build to obtain building permit from the Metropolitan, Municipal and District Assemblies. Besides, the National Building Regulations, 1996, L.I.1630 regulation 2 also makes it clear how building permit could be obtained from a district

planning authority. Thus, these laws make it compulsory for every private developer to seek for building permit before he/she starts to build.

Considering number of development applications that are submitted within a month to the Asokwa Municipal Assembly, and the processes that developers have to go through, coupled with signatories involved sometimes frustrate developers to illegally start their development, though should not have been the case.

It is within these gaps that this study seeks to assess the procedure for acquisition of building permit for infrastructure development in Ghana to inform policy decisions.

1.3 Aim of the study

The study's aim was to assess the process of building permit acquisition towards recommendation for improvement in the application process.

1.3.1 Objectives of the Study

The objectives of the study were:

1. To examine the current process of acquisition of building permits by developers in the Ashanti Region
2. To assess the challenges in acquisition of building permits by developers in the Ashanti Region and
3. To outline effective strategies to facilitate the acquisition process of building permits in the Ashanti Region.

1.3 Research Questions

In light of the problem stated, the researcher was interested in the following study questions:

1. What are the current process of acquisition of building permits by developers in the Ashanti Region?
2. What are the challenges in building permits acquisition by developers in the Ashanti Region?
3. What effective strategies can facilitate the acquisition process of building permits in the Ashanti Region?

1. 4 Significance of the Study

The challenges in the acquisition of permit process currently serves as a driver for involvement of unapproved middlemen as well as the growth of unauthorized structures (Agyeman et al., 2016). To this end, there is the need for a study that research into the perspective of private developers regarding building permit acquisition procedure for infrastructure development in Ghana. This study will help to identify factors that inhibit the acquisition of building permits which will therefore assist policy makers including city planners to ensure proper spatial organization and development of human societies. This would be crucial towards the realisation of the Sustainable Development Goal 11 which seeks to make cities and human settlements inclusive, safe, resilient and sustainable. Thus, part of contributing to the goal 11 of Sustainable Development Goals is through a better understanding of challenges associated with the acquisition of building permits by private developers in the Ashanti Region of Ghana.

Besides, the study would contribute to existing body of knowledge and methods of building permit acquisition procedure for infrastructure development in Ghana. The methodological contribution arises from the fact that most studies on building permits acquisition have concentrated on quantitative appropriate and as such the essence of using qualitative research approach in exploring challenges in the acquisition of

building permits has gone unnoticed. By exploring qualitative research approach in this study, the researcher would be able to contribute to existing methods on building permits acquisition in Ghana which could serve as a methodological framework for future works.

1.5 Scope of the study

Geographically, the study was limited to Ashanti Region of Ghana. Contextually, the study was limited to current process of building permit acquisition, challenges in acquisition of building permit and effective strategies to facilitate the acquisition process of building permit by private developers.

1.6 Organization of the study

The study is divided into five chapters. Chapter one of this research work covered the background of the study which included introduction, statement of the problem, research questions, objectives, significance of the study, scope of the study and organization of the study. Chapter two captured review of literature related to the research. Chapter three considered the profile of the study areas as well as methodology of the research. Chapter four dealt with the presentations, analysis and discussions of the study. Chapter five comprised summary of findings, recommendations and conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter of the research examines literature in relation to building permit acquisition procedure for infrastructure development. Literature review provides an important synergy between the known and the research problem under deliberation. By this the study will be situated in the midst of scholarly works which will guarantee the authority and quality of the research. Materials for the review include; articles from journals, books and reports and unpublished thesis (Babbie, 1990; Best and Kahn, 1998; Creswell, 2003). The review was done under themes such as conceptual review, empirical review, theoretical review; challenges in acquisition of building permit and effective strategies to facilitate the acquisition process of building permits.

2.2 Conceptual review

For a better appreciation of the concept and scope of this research, it is paramount to comprehend the circumstantial meaning and definition of some keywords used in the work. The essence of conceptual review is that, it provides detailed information on the conceptualizations of the keywords. This section provides a brief definition of such concepts like permit and procedures.

2.2.1 Building Permit

Building permits are recognized authorizations which offer the indispensable warranties that an anticipated structure or associated building is to a great extent appropriate for construction (Kwaku, 2010). Building permits offer permission to project proprietors to continue with the building or reconfiguration of a precise edifice at a specific site, in agreement with the permitted codes and stipulations that ensures

eminence in the building procedure (Botchway et al., 2014). The building permit is a lawful certificate covering every structure for which the plans are seen to be apposite for execution and ultimate human occupation or custom. Building permits are generally approved to cover enduring structures, which comprise industrial, commercial buildings, and residential structures and other temporary structures (Botchway et al., 2014). The implication being that the planned land to house the structure is ideal, the measurable provisions for the edifice are acceptable, the overall engineering, planning and architectural standards have been met and in conducive ways for human usage irrespective of the use of the structure.

2.2.2 Procedures

There is no universality when it comes to defining what constitute procedure. Various persons and institutions classify procedures in relation to what they intend to communicate or represent. Consequently procedures can be conceived as a permanent, step-by-step order of undertakings or sequence of actions (with fixed starting and ending points) which need to be followed in the similar direction to fittingly accomplish a task (Ulbig, 2002). Other conceptions of procedures are that it comprises a conventional method of performing a task. In this research the adopted definition of procedures is the one provided by Business Dictionary (2012) as “a set of establish forms or methods for conducting the affairs of an organized body such a business club, Government among others.” The discussion depicts that there is no single acceptable definition of procedures. But a unique factor that is common to all these conceptions are that procedures suggest systems of coordinated actions and activities undertaken towards the realization of certain goals.

2.2.3 Empirical review

Kpamma and Adjei-Kumi (2013) studied the procedures involved in accessing construction permits and how that influences course of activities at the pre-construction phase in the Sunyani Municipality of Ghana. The study was necessitated by the fact that despite the essence of building permits in promoting sustainable infrastructure development, the process is often bedeviled by cost overruns and delay among others. The study adopted the model of Zucker et al. (2008) which provides a thorough appraisal of development-a model primarily developed to evaluate permit awarding procedures in the City of Troy in Michigan State. The findings shows that permit acquisition is one of the hindrances to the incessant workflow in the edifice construction process, chiefly due to nonexistence of incorporation of procedures and interruptions in handling and issuance of the permits. Also, Botchway et al. (2014) studied building permit acquisition in Ghana using the case of Kumasi. The study recognized that the systems for gaining building permit were excessively elaborate and due to land insecurity, landlords are compelled to start a project to guarantee the land which they may have obtained at a cost.

Agyeman et al. (2016) also examined the characteristic hindrances that confront building permit procurement in Ghana and how this results into disproportionately increasing number of illegal edifices in the country. The Ashanti Region in Ghana served as the study areas for this research. The study adopted the purposive sampling technique in identifying the respondents whereas questionnaires were administered to the sampled respondents. Lack of coordination and integration of central database for permitting agencies and equivalent institutions, bureaucratic processes and delays in handling of permit documents amounts to the hindrances that besets the building permit acquisition process in the Region. Similar to the findings of Kpamma and Adjei-Kumi

(2013), the findings of Agyeman et al. (2016) identified delays and lack of integration in the permitting systems as a bottleneck to the process. A major difference is that the findings of Kpamma and Adjei-Kumi (2013) comprised permitting processes in the Fire Service Department and the Environmental Protection Agency.

Tasantab (2016) investigated the role of building permit in controlling physical development in the Sekondi-Takoradi Municipality since haphazard physical development has engulf the town. Using both primary and secondary data, the study examined the building permit acquisition procedure in the Municipality. The findings suggest that a significant proportion of the buildings are without permits a revelation which supports the assertion made by Somiah (2014). Although in theory, the building permit should be finalized within three months, evidence from their study showed that the process takes much longer. This delay thus served as disincentive for landowners and building contractors to request for permits. They recommended the streamlining of procedures to ensure timely delivery of permits to avoid delays.

The findings from the empirical review show that varied studies have been undertaken on the issue of building permit issuance and how it can control the development of unauthorized structures. One stand out point identified in these literatures is that, the processes do not always meet the three months deadline provided by World Bank for land management institutions to comply with. This delays thus have created a situation where developers often resort embarking on building projects without permits.

2.2.3.1 Current process of building permit acquisition

Building permit represents the certificate authorizing the construction of a particular structure at a specific site. The building permit acquisition in Ghana comprise of a series of processes in a linear fashion. As stipulated in the National Building Regulations of

1996 (L.I. 1630), the construction, modification and extension of an edifice requires a building permit from the Metropolitan, Municipal or District Planning Authority that oversees that jurisdiction (Kpamma and Adjei-Kumi, 2013). The process of acquiring building permit starts with the purchase, filling and submission of the purchased permit application form also known as Jacket in conjunction with site plan and the plots to be developed. The site plans are usually derived from the current master plan within which the parcel of land in question is contained (Agyeman et al., 2016). This duplication of the site plan is undertaken with consideration to the errors contained in the master plan. For all intents and purposes, the application form is supposed to be filled by a Licensed Building Surveyor. The submitted application form is expected to be accompanied with the drawings of the proposed building.

According to Kpamma and Adjei-Kumi (2013), when the Town and Country Planning Department within the Metropolitan, Municipality or District receives the permit application form and other related documents from clients, they commence the handling and processing of the application. This they do by notifying the Lands Commission to ascertain the title or ownership of the land in question. Following the passing of the land ownership certification or verification, the building documents that are submitted by the client are also vetted by the Engineers in the Assembly. This process is succeeded by forwarding of the application to the Spatial Planning Committee (SPC) for ultimate granting of the building permit to the client. A Development Permit is then issued by the Town and Country Planning Department and the ultimate building permit is given by the Metropolitan, Municipal or District Assembly (Kpamma and Adjei-Kumi, 2013).

All things being equal, the building permits are expected to be issued within a period of three months after submission of applications. Thus, the submission of the form and other documents, verification of land title from the Lands Commission and the

inspection of the site and reporting are expected to be completed within two weeks. In the instance of a denied permit, the client is notified and the process is repeated from the scratch. According to Asiedu and Agyeman (2009), the delays in the certification and validation of land titles from the Lands Commission is a major factor that accounts for the delays in issuing building permits to clients within the mandatory three months. In the end, this delay usually compels some clients to develop their lands without permits.

2.2.3.2 Challenges in acquisition of building permit

The issuance of building permits in Ghana has become a major problem within the construction space. Evidence from various studies and reports suggest that many developers undertake projects without recourse to approvals from Metropolitan, Municipal and District Authorities with regards to acquisition of permits (Freiku, 2003). Building permit acquisition falls under physical development control; an action undertaken with the ultimate goal of promoting effective and efficient land-use planning. In Ghana however, the process is bedeviled with some constraints that have undermined the effectiveness of the process. In this direction, there is an increasing physical development of structures and edifices without building permits. This section discusses some of these challenges that confront building permit acquisition.

The primary factor which causes the delay in the issuance of building permits is delays or difficulties in acquiring land titles. As a requirement for acquiring building permits, clients are expected to present land title for verification however, most landed properties in Ghana are improperly registered and poorly documented (Bank of Ghana, 2007) thus making it cumbersome to transfer titles. According to Asiedu and Agyeman (2009), the delays in the certification and validation of land titles from the Lands

Commission is a major factor that accounts for the delays in issuing building permits to clients within the mandatory three months. In the end, this delay usually compels some clients to develop their lands without permits. Though a data bank exist for land management agencies to access client information, these systems have not been properly integrated and there also exist interagency dispute as to which agency has the supervisory responsibility due to issues relating to jurisdiction (Asiedu and Agyeman, 2009; Forkuo and Asiedu, 2009).

Another factor is the bureaucratic nature of process. The building permit acquisition process is cumbersome and long. In fact, Eyiah (2004) indicated that developers find themselves entangled between state, Regional and District level bureaucracies in building permit acquisition, an occurrence Mensah et al. (2013) reported as having deleterious effects on business establishment in Ghana. Ghana was ranked 151st globally, when it comes to the ease of getting building permit (World Bank and International Finance Corporation, 2013). This shows how badly the country has been performing in terms of issuing building permits. The resultant effect is the increasing unauthorized buildings springing up every now and then in an uncoordinated and uncontrolled manner. The cumbersome nature of the process is attributed to the duplication of institutions within the land management space. The United Nations (2007) noted that excess bureaucracy, in building permit approvals and corruption among public officials which oversee the process are precursors for delayed issuing of permits and exponential growth in unauthorized structures. The multiplicity of the agencies creates room for duplication and fragmentation which creates delays (Kassanga and Kotey, 2001).

The permit procurement process in Ghana is challenged with inadequate staffs at the agencies. Most of the agencies are under resourced when it comes to human capital.

The numbers are dolefully inadequate while the capabilities of the few are also not built. The fewer staffs and the inadequate capacity of the personnel's to get the job done in ample time has become a deterrent to many land developers as they resort to building without permits (Agyeman et al., 2016). The limited use of technology in permit application and approval processes also delays the process. In this dispensation of technological advancement, storing data or information electronically enhances quick retrieving of land records. But in Ghana, most of the agencies still rely on manual procedures for storing land records (Kpamma and Adjei-Kumi, 2013). The World Bank (2013) noted that in North Africa and the Middle East and other jurisdictions within the developing world where building permit processes focused on online services has brought flexibility into the system. Permit issuing agencies usually lack adequate financial resources to patronize modern information technology gadgets, undertake field inspections among others. With the government being the sole financier of these regulatory agencies over the years through taxes, the allocations to these agencies always falls short below their demands and needs (Agyeman et al., 2016).

In all, despite the introduction and implementation of the Land Administration Project (LAP) under which the state witnessed integration and consolidation of land management agencies in the country, the procurement of building permits still remains a challenge (Agyeman et al., 2015). Although Clause 8 of the National Building Regulations of 1996 (L.I. 1630) directs MMDAs to approve and issue building permit applications submitted to it by clients within three months, evidence largely suggest rather a different situation in practice where permits takes longer periods to get approval. For satisfactory service delivery to clients, and promotion of confidence in the building permit approval system, the authorities in charge need to hasten the process so as to

deliver the permits within the three months' time schedule without compromising on quality.

2.2.3.3 Effective strategies to facilitate the acquisition process of building permits

Viewed as the certificate authorizing developers to build structures deemed fit at specific sites, building permits are pivotal in controlling physical development. However, the process of granting these permits are not widely flexible and as such, the institutions do not always meet the three months mandatory period within which the World Bank directs permit issuing agencies to approve or refuse permits (Asiedu and Agyeman, 2009). Despite several appeals to restructure the process, little has been done even after the implementation of the Land Administration Project (Freiku, 2009). This section of the literature review discusses some strategies that will help facilitate the process of acquiring building permits in the country.

2.3.2.1 Digitization of permit process

Digitalization at the moment is one of the main thrusts in the society. Digitalization is being manifested in many procedures not excluding the urban planning and building permit issuing sector. The planning and building permit procedures are characterized by a huge number of actors involved both from industry and institutions. For these procedures to be resourceful in a digital age there is a requisite to transmit and incorporate digital data between and within actors and among processes (World Bank, 2013). In countless states, the building permit process still depends on analogical process such that during the application phase, the client sends forms, site plans and design drawings in paper layout or as pdf files (Kpamma and Adjei-Kumi, 2013; Olsson et al., 2018). Countries are therefore moving towards the digitization of building permit issuing processes and this has decreased the number of days the application is approved

significantly (World Bank, 2013). This transition has been high in developed countries relative to developing countries.

2.3.3.2 Reducing administrative bureaucracies

Certain administrative challenges militate against the effective and timely approval of permit applications submitted to them. In some countries like Ghana, the application goes through up to 18 procedures and last for an average of 220 days thus making Ghana one the countries with high level of difficulty in obtaining building permits (World Bank & IFC, 2013). Conversely, in Hong Kong, the duration for handling of building permit has reduced to 66 days, utilizing seven steps and graded number one in the world (World Bank & IFC, 2013). Similarly, in USA the building permit request passes 19 stages, but lasts for just 40 days. Creating one-stop-shop where all agencies connected to issuance of permits serve as a strategy which reduces bureaucracy and hastens the process. Countries that have implemented this system have considerably reduced the processing and approval times.

2.3.3.3 Greater safety and transparency

When construction regulations are intricate, it creates prospects for corruption (World Bank & IFC, 2013). In a study conducted by World Bank, the proportion of money firms intend to present to permit issuing officials as gifts for granting of permits are highly correlated with degree of intricacy and the high cost involved in handling construction permits (Enterprise Surveys, 2010). Transparency International also conducted a similar study in 15 countries found that construction industries were perceived as the most corrupt sector in these countries surpassing oil and gas, real estate, mining and arms and defense (Kenny, 2007). Similarly, bribes correlated with the

amount of permits firms are mandated to obtain (Steer, 2006). For easy acquisition of permits, there should be transparency in the processes.

2.4 Permit to carry out physical development (Legal Procedure)

A person shall not carry out a physical development in a district except with the prior written approval in the form of a written permit issued by the District Planning Authority.

A District Planning Authority may approve an application referred to in subsection (1), before the adoption of an approved District Development Plan for the district.

A District Planning Authority shall consult public agencies and local communities as may be prescribed by Regulations issued by the Minister in the determination of an application for a permit to develop prior to the adoption of an approved District Development Plan (Local Governance Act, 2016 Act 936 Section 91).

2.5 Enforcement in respect of unauthorized development

Where

- a. A physical development has been carried out without a permit or is being carried out without a permit, or
- b. Conditions incorporated in a permit are not complied with, a District Planning Authority shall give written notice in the form that shall be prescribed by Regulations, to the owner of the land to require that owner on or before a date specified in the notice to show cause in writing addressed to the District Planning Authority why the unauthorized physical development should not be prohibited, altered, abated, recovered or demolished.

c. If the owner of the land fails to show sufficient cause why the development should not be prohibited, altered, abated, removed or demolished, the District Planning Authority may carry out the prohibition, abatement, alteration, removal or demolition and recover any expenses incurred from the owner of the land as if it were a debt due to the District Planning Authority.

d. A District Planning Authority may issue an enforcement notice that demands the immediate stoppage of work that is being carried out contrary to this Act or the terms of an approved development plan.

e. A person who fails to comply with a notice to stop work commits an offence and is liable on summary conviction to a fine of not less than two hundred penalty units and not more than four hundred penalty units or to a term of imprisonment of not less than three months and not more than six months or to both the fine and term of imprisonment and in the case of a continuing offence to an additional fine of not more than four penalty units for each day that the contravention continues, after written notice has been served on the offender (Local Governance Act, 2016, Act, 936, Section 94).

2.6 Application of Regulation

These Regulations shall apply to the erection, alteration or extension of a building as defined in these Regulations unless otherwise provided in these Regulations (National Building Regulations 1996, LI 1630, Regulation 1).

2.7 Application for building permit and submission of plans

Any person who intends to:

a. Erect any building; or

b. Make any structural alteration to any building; or

c. Execute any works or install any fittings in connection with any building shall apply in Form A specified in Part 1 of Schedule 1 to these Regulations to the District Planning Authority of the district where the building, structure or works is or is intended to be and shall submit in duplicate the relevant plans with the form (National Building Regulations 1996, LI 1630, Regulation 2).

2.8 Title to Land

An applicant under regulation 2 shall satisfy the District Planning Authority that she/he has good title to the Land relevant to the Plans. 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 (National Building Regulations 1996, LI 1630, Regulation 3).

2.9 Failure of District Planning Authority to process application

Where a person submits an application for a building permit the District Planning Authority shall notify him within 7 days of the receipt of the application and shall within a period 3 months thereafter notify the applicant whether the application is granted or refused. An applicant not informed of the grant or refusal of the application may after the expiry of the 3 months commence development on the basis that the application is acceptable to the District Planning Authority (National Building Regulations 1996, LI 1630, Regulation 8)

2.10 Administrative Procedure

The Local Governance Act 2016, Act 936 outlines the processes involved in building permits acquisition to include the following:

a. Acquisition of Land and production of Site Plan.

- b. Registration of Land at Lands commission.
- c. Prepare Building Drawings to suit the location of the Land.
- d. Application for Permit.
- e. Request for confirmation Letter from Lands Commission.
- f. Submission and payment of development application fee at Physical Planning.
- g. vetting of application documents at physical Planning Department.
- h. Assessment of Drawing and payment of permit fee at Works Department.
- i. Vetting of Permit document by Technical Sub-Committee.
- j. Inspection of Site.
- k. Approval of Drawings by Spatial Planning Committee
- l. Preparation of development Certificate by Physical Planning Department.
- m. Signing of drawings/permit by Heads of Works Department and Physical Planning.
- n. Collection of Building permit.
- o. Notification of commencement of work for initial inspection of work at the site.
- q. Monitoring and inspection of the on-going work.
- r. Final inspection at the completion stage.
- s. Issuance of Habitation certificate (Ministry of Local Government and Rural Development, 2016).

2.11 Theoretical review

The study is underlain by the Compliance Theory. This represents a group of theories which intends to ensure institutions, firms and individuals comply or act within a specified code of conduct outlined by law or regulation as acceptable. Compliance theories are inspired by the works of Becker and Stigler (1974) in which they indicated that individual actors always resort to paths of least resistance whereby they often choose from alternatives which yields maximum benefit at a least cost. Their principal argument was that compliance with regulations by firms and individuals can be enhanced by increasing fines paid for defaulting while rewards and recognition should

be given for complying with regulations. Several empirical studies over the years however, have shown that harsh punishments and sanctions have not always proven to be effective in ensuring compliant behavior.

In general, compliance theories fall within two broad categories. The first being logic of consequence and the second being logic of appropriateness. The core of logic of consequence within compliance theories is that emphasis is placed on the sanctions that are meted out to non-complying firms and individuals (Becker and Stigler, 1974). This is highly linked to deterrent theory. Within the deterrent theory, mechanisms are designed and implemented to ensure that violators are detected and brought to justice to face the full consequence of their actions (Rechtschaffen and Markell, 2003). The second category of compliance theories is logic of appropriateness which focuses on the commitment and capacity of the firms and the individuals to meeting the requirements regulators (Malloy, 2003). In the end, the commitment of institutions and individuals towards compliance with regulations can only be cemented if information is adequately disseminated and the institutions have positive perception concerning the activities of the regulatory institution (Malloy, 2003). Similarly, bureaucratic nature of the compliance processes sometimes serves as hindrance to persons willing to conform to such rules and regulations.

In this study, the compliance theory is adopted due to the fact that building permit acquisition ensures acquiescence with building guidelines and codes within the country which is in tandem with the tenets of compliance theories. The trust and positive perceptions people have about building permit issuance process in general and the fairness as well as delays may go a long way to impact the willingness and commitment of land developers to acquire building permits before embarking on projects.

2.12 Conceptual Framework

A conceptual framework represents a structure that the researcher trusts can best explicate of the advancement of the occurrence to be investigated (Camp, 2001). It is concomitant with the models, pragmatic research and significant concepts used in supporting and systemizing the information championed by the researchers (Peshkin, 1993). It is an explanation of the researcher's problem and how it would be studied. The conceptual framework provides a combined mechanism of observing an issue under study (Liehr and Smith, 1999). A conceptual framework defines the relationship between the focal conceptions of the study. It is organized in a coherent manner to support visual exhibition of how concepts in a study relay to each other (Grant and Osanloo, 2014). Remarkably, it displays the sequences of exploit the researcher anticipates undertaking in a research (Dixon, Gulliver and Gibbon, 2001). The framework makes it less cumbersome for a researcher to simply stipulate and define the conceptions in a problem under study (Luse, Mennecke and Townsend, 2012). Miles and Huberman (1994, p.18) noted that conceptual frameworks can be 'graphical or in a narrative form showing the key variables or constructs to be studied and the presumed relationships between them.'

This study was underlined by frameworks designed by Hill and Bowen (1997) and Du Plessis (2007) which underscored on the associations between drivers, stakeholders and enablers comprises an extensive scheme for the acceptance of sustainability. The notion of sustainable development has resulted in sustainable construction which encompasses the establishment of strong management frameworks contingent on ecological philosophies and effectual exploitation of resources (Kibert, 1994). This study highlights on the environmental aspect of viable construction which underscores the base for harnessing sustainable development objectives (Ofori, 1998). Nevertheless, the

suggested research framework hypothesizes that procedures and drivers create the wish to execute policies that results into sustainability in the physical development industry.

The framework shows that, due to the essence of building permits, land management agencies (MMDAs, Town and Country Planning, Lands Commission and its agents and other auxiliary Agents) ensure land developers acquire building permits to sanction their projects. In this regard, the land developers or builders apply for the permit by filling out application forms and submitting site plans and building designs to the Physical Planning Department. The land administration agencies receive the permit application forms; meet with statutory approving bodies and granting or refusal of permits climax the process. Nonetheless, there are certain challenges that militate against the easy and smooth application and approval of permits. These challenges vary from institutional, economic, cultural and political among others. The consequence is that there is growth of unauthorized buildings and the creation of sprawl communities and overcrowding. To overcome these challenges, the agencies responsible for land management and the land developers must institute some of measures to ensure the process is fair, quick and delivers value.

2.13 Conclusion

Building permit is a lawful certificate covering every structure for which the plans are seen to be apposite for execution and ultimate human occupation or custom. The review showed that varied studies have been undertaken on the issue of building permit issuance and how it can control the development of unauthorized structures. One stand out point identified in these literatures is that, the processes do not always meet the three months deadline provided by World Bank for land management institutions to comply with. This delays thus have created a situation where developers often resort

embarking on building projects without permits. Hindrances that befalls the building permit issuing process includes the delay in the issuance of building permits, delays or difficulties in acquiring land titles; bureaucratic nature of processes and inadequate staffs at the agencies. Some strategies to improve the processes includes digitization of permit process, reducing administrative bureaucracies and ensuring greater safety and transparency.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section of the study describes the research design that was employed in conducting this research. The chapter comprises the various procedures and processes that were employed to collect and analyse the data. That is, the description of the instruments used for the study and the method of analysis employed in analysing the data.

3.2 Research Design

Burns and Grove (1997) stated that research design is a “blueprint for conducting a study with maximum control over factors that may affect the validity of the findings of a study”. Research design is thus the researcher’s overall framework for answering the research questions or claims made about the study. Ultimately, research design subsequently functions as the bonding agent that grips the research project in harmony (Vogt et al., 2013). In research, eventually, the kind of methodological approach adopted is dependent upon the fundamental research objective and questions (Denzin and Lincoln, 2000). The focus of this study is to examine building permit acquisition procedure for infrastructure development in Ghana with focus on the case study of the Ashanti region. Examining this objective together with the research questions, the study adopted the cross sectional research design to adequately explore these objectives.

According to Kumar (2005), this research design examines a snapshot of a phenomenon at a specific point in time. A cross sectional study was adopted for the study because it provided prospects for insight to be obtained by the researcher concerning the state and changing aspects of the phenomena under study (building permit acquisition procedures in Ghana). The approach provided for exhaustive examining into occurrences of the

phenomena and it also ensured an inclusive appreciation of the situation being investigated. Finally, the chosen research design allows for the examination of situation within its real life or natural context and it also combines perfectly with the mixed method. This is because; a cross-sectional research design provides a quantitative or numeric description of opinions or trends of a population by studying a sample (Creswell, 2009). On the basis of its numerical description, a cross-section design would help the researcher find statistical significant results because of its high level of representativeness.

3.3 Research Approach

This study adopted quantitative research approach to explore procedure for acquisition of building permit for infrastructure development. This helped to quantify the responses of the respondents in order to draw a meaningful conclusions from the findings.

3.4 Population

As indicated by Agyedu et al. (1999), the population of a study denotes a comprehensive set of persons (subjects), events or objects having mutual noticeable characteristics relevant to the study under consideration. They further stated that; population of a study comprises the target of a study and need to be clearly defined and recognized. The target population for the study is the staffs Strength of Works Department in some selected districts in the Ashanti Region. The population of study is made up of 195 staffs within the aforementioned departments within some eleven selected districts in the Ashanti region.

Sampling encompasses a process of choosing a sub-section of a population that exemplifies the entire population in order to acquire information concerning the

phenomenon of importance. This section of the chapter vividly described how the sample size was determined. A sample is thus a sub-section of the population that is selected to partake in a study. In this study, sampling frame (unit of analysis) comprise of 195 staffs strength of works department within eleven districts in Ashanti region.

The following sampling technique was used in determining the sample size. As the aim of the sampling is to select part of the population that is representative of the entire study group from which information was solicited to draw conclusions for the entire population, the sample size was determined using the formula by Miller and Brewer's (2003): $n = \frac{N}{1 + N(e)^2}$, where n is the sample size, N is the population and 'e' represent the margin of error. With 0.05 margin of error representing 95% confidence level and total number of staffs strength of the works department in the selected districts amount to 195, which represents "N". The sample size was determined using Miller and Brewer's formula for proportions as shown below:

$$\frac{195}{1 + 195(0.05)^2}$$
$$\frac{195}{1.4875} = 131.01 \text{ approximately } 131$$

Using the Miller and Brewer's (2003) formula, the sample size was determined to be 131. This was distributed disproportionately among the districts in relation to their contribution to the total population. By effect, the quota sampling approach was adopted.

Table 3.1: Sample allocation within the various districts

Metropolitan, Municipal and District Assemblies	Staff Strength of Works Department	Sample size Allocation
KMA	50	34
Asokwa	16	11
Tafo	6	4
Suame	11	7
Oforikrom	21	14
Kwadaso	19	13
Bosomtwe	12	8
Ejisu	16	11
Kwabre East	12	8
Asokore Mampong	20	13
Afigya Kwabre	12	8
Total	195	131

Source: Author's Construct (2019)

3.5 Sampling Technique

The study used simple random sampling technique to select the respondents. A total of 131 respondents were sampled using a sample size determination formula by Miller and Brewer's (2003). The use of simple random technique for the selecting of the respondents was premised on the need to achieve representativeness and generalizability in the study findings. Simple random sampling is a sampling technique in which every item in the population has an equal chance and prospect of being chosen in the sample. In this, the selections of objects or persons are completely dependent on chance or by likelihood and consequently this sampling technique is also occasionally known as a technique of chances (Meng, 2013).

3.6 Data collection instrument

This study employed questionnaires as instrument for data collection. The questionnaire is well structured questionnaire encompassing closed-ended and open-ended questions administered to the respondents on a face-to-face basis. In this regard, the questions were ethical and accurate, whereas the wordings were devoid of prejudice and the

questions provided multiple choice options which gave the respondents the chance to showcase their opinions by way of choosing from the alternatives provided. The questionnaires were administered on face to face basis to selected respondents. The questionnaire was designed into four parts: Section A comprises the demographic data, which sought to obtain respondents' details such as age, sex, educational status, work experience and the position the participants occupied in their department; Section B sought to understand the current process of building permit acquisition in the selected districts, Section C focused on challenges in acquisition of building permit in the Ashanti region, Section D focused on effective strategies to facilitate the acquisition process of building permits in the Ashanti region.

3.7 Data collection process

The questionnaire was administered on face to face basis to selected respondents. The process was undertaken such that it met the requirements of the simple random sampling technique. The researcher after obtaining permission from the assembly officials went to the appropriate department (Works Department). The respondents who were selected through the sampling technique were given the questionnaires to fill. In the instance where the participants were busy, the researcher read the questions to them while they provided the appropriate answers.

3.8 Data analysis

Data analysis is “the systematic organization and synthesis of the research data and the testing of research hypotheses, using those data” (Polit and Hungler, 1998). It also involves “categorizing, ordering, manipulating and summarizing the data and describing them in meaningful terms” (Brink, 1996). The completed questionnaires were cleaned, edited for consistency purposes and entered in the Statistical Package for

Service Solution version 20 (SPSS v.20) analytical software. With the aid of the descriptive statistical tools in the software (SPSS), the coded data would be analyzed both descriptively and quantitatively. The results were presented in tables and displayed in charts and graphs with the help of Microsoft Excel and Word.

3.9 Ethical consideration

Research action goes with principles therefore; all principled concerns should be satisfactorily attended to before the research begins particularly during data collection in order to protect the privilege of the respondents (Lodico et al., 2006; Bailey, 2007). Taking a lesson from this, the study tackled all the principled issues involved. Paramount, an introductory letter bearing the credentials of the researcher and a brief aim of the study were given to obtain organizational ethical approval. To guarantee participants of stern confidentiality and safety, obscurity was strictly guaranteed. Also, this study emphasized strongly on concealment of the replies offered. Prior consent was sought, from the participants who agreed to take part and they were at liberty to pull out at any time.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussion of the data collected to investigate the procedure for the acquisition of building permit for an infrastructure development in Ashanti region. For clarity in data presentation and analysis, data is organized in sub-themes in line with the study objectives but begins with respondents' background information reflecting on the questionnaires used.

4.2 Background information of respondents

Table 4.1 shows the background information of the respondents.

Table 4.1: Background information of the respondents

Variable	Category	Freq.	%
Gender	Male	108	82.4
	Female	23	17.6
Age	<=30	38	29.0
	31-40	56	42.7
	41-50	27	20.6
	51-60	10	7.6
Educational level	Up to secondary	14	10.7
	First degree	91	69.5
	Master's	26	19.8
Working Experience	<1 year	10	7.6
	1-3years	28	21.4
	4-6 years	25	19.1
	7-9 years	23	17.6
	10 years or more	45	34.4
Position in the organization	Junior staff	38	29
	Middle	71	54.2
	Top level staff	22	16.8

Source: Field survey, 2019

From Table 4.1, the overwhelming majority (82.4%) of the respondents interviewed were male with only a few (17.6%) of them being female. The highest percentage of male recorded in the study is not surprising because, in Ghanaian society, males

dominated in most of the institutions than females. This means that gender equality policies should be intensified in Ghana by giving more opportunities to females in all the aspect of the sectors.

Age of the respondents was also studied with the aged between 31-40 being the highest of (42.7%), followed by (29.0%) which were the aged of 30 and below years, (20.6%) which were also the aged between 41-50 years and aged between 51-60 is the least of (7.6%).

On the educational level, majority (69.5%) of the respondents had a first degree, (19.8%) had master's while few (10.7%) of them have had to only up to secondary level. About (34%) of the respondents have worked up to 10 years and above while others worked between 1-3 years (21.4%), 4-6 years (19.1%) and less than one year of worked experience of the respondents recorded the least of (7.6%). The results also showed that (54.2%) of the respondents were middle staff workers (29.0) were junior staff while (16.0%) were the top-level workers.

4.2 Current process of building permit acquisition in Ashanti region.

One of the key objectives of the study was to analyze the current process of building permit acquisitions for infrastructure development in the Ashanti Region. To explore this specific objective, respondents were given a series of statements to whether the developers go through a process of building permit acquisition before they are issued a building permit and required them to indicate the extent of their agreement or disagreement. Responses that were given by the respondents are summarized in Table 4.2.

On the statement of whether the developers go through land acquisition as one of the processes of building permit acquisition as stipulated by the National Building

Regulations of 1996 (L.I. 1630), the majority (61.1%) of the respondents strongly agreed to the fact that land acquisition is a process of building permit acquisition, (29.0%) agreed, (6.1%) of them were neutral to the statement and only (1.5%) and (2.3%) disagree and strongly disagree respectively. Based on the results, the study finds that approximately (90%) of the respondents agreed with the land acquisition as one of the processes of building permit which was confirmed by the mean of 1.5. This finding is inconsistent with a previous study by Tasantab (2016) that find a significant proportion of the buildings in Sekondi-Takoradi Municipality without building permits.

Land registration and confirmation of title was also posed to the respondents to see whether is form part of the process of building permit acquisition in the study area. Interestingly, the majority (51.9%) of the respondents strongly agreed with the statement that land registration and confirmation of title is one of the process of building permit acquisition in the region while about (35%) agreed with it. However, some (7.6%) of the respondents appear to have no knowledge of the statement while other representing a few proportions of the participants of (3.8%) and (1.5%) disagree and strongly disagree with the statement respectively. Based on these results, the study finds (87%) of the respondents who agreed with land registration and confirmation of title as one of the processes of building permit acquisition which is affirmed by the mean of 1.8

The study also takes into consideration whether preparation of building design is undertaken as one of the current processes of building permit acquisition in the study area from the perspectives of respondents. The study finds that preparation of building design is part of the current process of building permit acquisition as was strongly agreed and agreed by the majority of the respondents of (64.9%) and (27.5%) respectively. Though few respondents of (3.1%) each and (1.5%) were neutral to the claim, disagree and strongly disagree respectively but those who agreed to the claim

were the majority of approximately (92%). This absolutely mean that preparation of building design is one of the current processes of building permit acquisition which is supported by the mean of 1.5

In addition to the above, when the respondents were asked whether purchase and submission of application forms and other documents is one of the processes of building permit acquisition,(62.6%) of the respondents strongly agreed to the fact that purchase and submission of application form and other document is one of the process of building permit acquisition in Ashanti region, (26.0%) agreed with the statement, (6.9%) were neutral and few of (3.1%) and (1.5%) disagree and strongly disagree with the statement respectively. Similar to the previous process of building permit acquisition, the majority (59.5%) of the respondents strongly agreed to the claim that vetting of designs and others documents by the physical planning department and works departments is one of the process developers go through before given a building permit. Also, (31.3%) agreed with the same claim, (6.1%) were not having any knowledge of whether developers go through that process or not while few (1.5%) strongly disagree with the claim. None of the respondents appeared to have disagreed with the claim. Based on this information, the study finds that approximately (90%) of the respondent agreed to the fact that vetting of designs and other documents by the physical planning department and works departments is one of the processes developers go through before given a building permit which is confirmed by the mean of 1.6.

More so, on the statement of whether vetting of designs and other documents by technical sub-committee, (58.8%) representing the majority of the respondents interviewed strongly agreed with the statement as part of the process in acquiring a building permit in the region, (34.4%) of them agreed, (3.8%) were neutral to the statement and few of (2.3%) and (0.8%) disagree and strongly disagree

respectively. This absolutely means that vetting of designs and other documents by technical sub-committee is one of the process developers go through before getting building permit as was agreed by the overwhelming majority (93.2%) of the respondents interviewed which is also affirmed by the mean of 1.5. Again, the researchers also wanted to know whether inspection of site and site meetings is a process of building permit acquisition. The finding suggested that it is one of the processes as was strongly agreed (48.9%) and agreed (29.8%) by most of the respondents interviewed. Although, some of the respondents were of the view that inspection of site and site meetings is not a process of building permit acquisition in the study area as seen in table 4.2, (2.3%) each disagreed and strongly disagreed with the statement but those who agreed (78.7%) outweigh them. It was however surprising to the researcher's that, a significant proportion of (16.8%) was not aware whether inspection of site and site meetings is a process of building permit acquisition or not.

Furthermore, submission of report and approval by spatial planning committee was assessed whether is one of the current processes of building permit acquisition or not. About (48%) of the respondents strongly agreed that it one of the current process of building permit acquisition in the area, (35.9%) agreed, (11.5%) was neutral to the statement and few of the respondents of (3.1%) and (0.8%) disagreed and strongly disagreed with the claim respectively. Based on these responses, the study finds about (83%) of the respondents who agreed to the fact that submission of report and approval by spatial planning committee is one of the process of building permit acquisition which was affirmed by the mean of 1.7. Value of proposed building and payment of statutory fees of works department was also assessed.

Table 4.2: current process of building permit acquisition

Process	SA Freq.(%)	A Freq.(%)	N Freq.(%)	D Freq.(%)	SD Freq.(%)	Mean/SDV
Land Acquisition	80(61.1)	38(29.0)	8 (6.1)	2 (1.5)	3 (2.3)	1.54/.86125
Land Registration and Confirmation of Title	68(51.9)	46(35.1)	10(7.6)	5(3.8)	2 (1.5)	1.7/.88810
Preparation of building design	85(64.9)	36(27.5)	4(3.1)	4(3.1)	2(1.5)	1.5/.82617
Purchase and submission of application forms and other documents	82(62.6)	34(26.0)	9(6.9)	4(3.1)	2(1.5)	1.5/.87013
Vetting of designs and other documents by physical planning department and other documents	78(59.5)	41(31.3)	8(6.1)	-	4(3.1)	1.6/.86077
Vetting of designs and other documents by technical sub-committee	77(58.8)	45(34.4)	5(3.8)	3(2.3)	1(0.8)	1.5/.74783
Inspection of site and site meeting	64(48.9)	39(29.8)	22(16.8)	3(2.3)	3(2.3)	1.8/.95850
Submission of report and approval by spatial planning committee	64(48.9)	47(35.9)	15(11.5)	4(3.1)	1(0.8)	1.7/.84570
Value of proposed building and payment of statutory fees of works department	82(62.6)	36(27.5)	8(6.1)	3(2.3)	2(1.5)	1.5/.8350
Preparation of permit certificates by physical planning department	55(42.0)	41(31.3)	23(17.6)	7(5.3)	5(3.8)	1.9/1.07750
Signing of permit	88(67.2)	34(26.0)	4(3.1)	1(0.8)	4(3.1)	1.5/.85303
Issuance of habitation certificate	38(29.0)	31(23.7)	28(21.4)	20(15.3)	14(10.7)	2.5/1.33713

Source: Field survey, 2019

The results show that (62.6%) strongly agreed with the fact of its being one of the building permit acquisition current process, (27.5%) agreed, (2.3%) were neutral to the statement and (2.3%) and (1.5%) of the respondents disagree and strongly disagree respectively. These responses revealed that value of proposed building and payment of statutory fees of works department is one of the current processes of acquiring building permits since the majority of the respondents attested to it which is also confirmed by the mean of 1.5.

Again, the researcher asked the respondent whether preparation of permit certificates by physical planning department are part of the current process of building permit acquisition or not. In response to this question, (42.0%) of the respondents strongly agreed that is one of the current process of building permit acquisition in the region, (31.3%) of the respondent agreed, (17.6%) appeared to have no knowledge of the question and (5.3%) and (3.8%) of the respondents disagreed and strongly disagreed respectively that is not part of the current process of building permit acquisition in the study areas. Though some are inconsistent with the claim but the study suggests that preparation of permit certificates by physical planning, department is part of the current process of building permit acquisition since an approximate of (71%) representing the majority of the respondents interviewed agreed to the fact which can also be seen by the mean of 1.9.

Statements given to the respondents about the current process of the building permit acquisition were not restricted to those discussed already but also to the signing of the permit and issuance of habitation certificate. In the signing of the permit as the process of acquiring building permits, (67.2%) of the respondents strongly attested to the fact that is form part of the current process of building permit acquisition, (26.0%) of them agreed and few respondents of (3.1%), (0.8%) and (3.1%) were neutral, disagreed and

strongly disagreed respectively. These results suggested that the signing of permits is one of the processes developers go through before given a building permit since the overwhelming majority (91.2%) of the respondents agreed to the claim which also confirmed by the mean of 1.5. Also, in the issuance of habitation certificate, (29.0%) of the respondents strongly agreed that is one of the processes of building permit acquisition, (23.7%) agreed, (21.4%) were neutral and (15.3%) and (10.7%) of the respondents disagreed and strongly disagreed respectively.

Finding from the study revealed that the current process in which developers go through before issuing building permit in the Ashanti region include; land acquisition, land registration, and confirmation of Title, preparation of building design, purchase and submission of application forms and other documents, vetting of designs and other documents by the physical planning department and Works department, vetting of designs and others documents by technical sub-committee, inspection of site and site meeting, submission of report and approval by spatial planning committee, preparation of development certificates by physical planning department, signing of permit and issuance of habitation certificate. These findings are consistent with the previous literature (National Building Regulations of 1996 (L.I. 1630; Kpamma & Adjei-Kumi, 2013; Asiedu & Agyeman, 2009; Agyeman et al., 2016). These processes, however, are long which may deter developers in going for the building permit acquisition, hence resulting in building in illegal structures as similarly identified by Agyeman et al. (2016).

4.3: Challenges of acquisition of building permit in the Ashanti region

Evidence from the various literature suggested that developers go through a lot of challenges in their quest to acquire a building permit (Botchway et al., 2014; Agyeman

et al. 2016). In order to confirm or refute these findings of the literature, several statements were given to the respondents and required them to indicate the extent of their agreement or disagreement. These statements were some of the challenges identified by the various works of literature as problems confronted by the developers in their process of getting a building permit in Ghana. The results of the findings are presented in Table 4.3.

One of the statements that were posed to the respondents to whether it is a challenge confronting the process of building acquisition permit was a lease. About (49%) of the respondents strongly agreed that lease is one of the challenges faced in the current process of building permit acquisition in Ashanti Region, (25.2%) of the respondents agreed, while (12.2%), (6.9%) and (6.1%) of the respondent was having no knowledge, disagree and strongly disagreed respectively. Based on this result, the study finds approximately (74%) of the respondents who testified to the fact that lease is one of the challenges facing the current process of building permit acquisition which is confirmed by the mean of 1.9. This finding is in line with a previous work done by Agyeman et al. (2016) who find acquisition of lease document to necessitate the granting of building permit to be challenging in Kumasi. This can have negative implication as most of the developers will try building without a building permit as seen was in Kumasi between 1990-2000 (Agyeman et al. 2016).

The current study also takes into account whether there is a delay in the current process of the acquisition of building permit or not. Finding from the study revealed that there is a delay in the current process of building permit acquisition as was agreed by the majority of the respondents which also confirmed the mean of 1.8. About (46%) and (35%) of the respondents interviewed strongly agreed and agreed respectively that delay is a challenge facing the current process of building permit acquisition while

others representing the minority of the respondents of (10.7%), (3.8%) and (3.1%) were neutral, disagreed and strongly disagreed respectively. Based on this result, the study concludes that delay is one of the challenges facing the current process of building permit acquisition which is similarly found by the various pieces of literature (Agyeman et al. 2016; Asiedu & Agyeman, 2009; Botchway et al., 2014). This delay can be as a result of certification and validation of land titles from the Lands Commission. However, it might lead to illegal erection of structures and building as similarly found by Tasantab (2016) in Sekondi-Takoradi Municipality. Agyeman et al. (2016) also noted that some impatient developers will deliberately ignore or resist going through the current process of building permit acquisition while citing delay in securing a building permit to justify their illegal development.

The challenges of the current process of the acquisition of the building permit were not only limited to lease document and delay in the application of the permit but also to the cost of the fees. This is because, when the respondents were asked whether cost of the fees is part of the challenges faced in the current process of building permit acquisition, (32.1%) of the respondents strongly agreed to the fact that is a challenge, (38.1%) agreed, (20.6%) of them were neutral and few of (8.4%) and (0.8%) of the respondents were disagree and strongly disagree respectively that cost of cost is not a challenge. This finding means that the cost of fees in the acquisition of the building permit is one of the challenges of the current process of building permit acquisition since majority of about (70%) of the respondents agreed to the fact which is also affirmed by the mean of 2.1. It is important to also note that some of the respondents did not see the cost of fees as a challenge to the current process of building permit acquisition. Nevertheless, these respondents were few and might probably be rich people. The study findings, therefore, correspond to a previous study by Unebu (2005) who finding indicated that

acquisition of building permit in Kumasi is costly. The study further explained the high cost involved in the building permit acquisition to be as a result of the bureaucratic involved in the process of acquiring the permit where every step demanding money sometimes. The implication of the high cost of fees associated with the process of getting a building permit in the study area can result in erection of unauthorized structures on waterways, the massive development of slums among others.

Again, the researcher wanted to know whether fire certificate and Environmental Protection Agency certificate is a challenge to the current process of acquiring building permit for infrastructure development or not. After asking this statement to the respondents, (29.0%) of them strongly agreed to the fact that fire certificate and EPA certificate is a challenge of the current process of building permit acquisition in Ashanti region, (25.2%) agreed while (22.9%), (19.8%) and (3.1%) of the respondents were neutral, disagreed and strongly disagreed respectively. Though a significant proportion of the respondent disagreed to the claim but those who agreed were the majority of about (54%). This suggests that fire certificate and Environmental Protection Agency certificate is a challenge to the current process of building permit acquisition for infrastructure development in the study area which is supported by the mean of 2.4.

Unlike the other statement discussed above, when respondents were asked whether inadequate staff at the agencies is a challenge to the current process of the building permit acquisition, (16.0%) strongly agreed with the claim, (28.2%) agreed, (11.5%) were neutral and (36.6%) and (7.6%) of the respondents disagreed and strongly disagreed respectively. Based on this result, the study finds that inadequate staff at the agencies is not to some extent a challenge to the current process of the building permit acquisition which is confirmed by the mean of 2.9. This finding is inconsistent with a

study done by Agyeman et al., (2016) who find fewer staffs and the inadequate capacity of the personnel for the field inspection and monitoring.

Lastly, when the respondents were asked whether limited use of technology is part of the challenges facing the current process of building permit acquisition, (22.1%) of the respondents strongly agreed to the fact that limited use of technology is a challenge to the current process of building permit acquisition, (31.3%) agreed, (19.8%) of the respondents were neutral and (22.1%) and (4.6%) of the respondents disagreed and strongly disagreed respectively.

Table 4.3: Challenges of acquisition of building permit

Challenge	SA Freq.(%)	A Freq.(%)	N Freq.(%)	D Freq.(%)	SD Freq.(%)	Mean/SDV
Lease	65(49.6)	33(25.2)	16(12.2)	9(6.9)	8(6.1)	1.9/1.20456
Delays	61(46.6)	47(35.9)	14(10.7)	5(3.8)	4(3.1)	1.8/0.9853
Cost of fee	42(32.1)	50(38.2)	27(20.6)	11(8.4)	1(0.8)	2.1/0.96571
Fire certificate and EPA certificate	38(29.0)	33(25.2)	30(22.9)	26(19.8)	4(3.1)	2.4/1.18990
Inadequate staffs at the agencies	21(16.0)	37(28.2)	15(11.5)	48(36.6)	10(7.6)	2.9/1.26514
Limited use of technology	29(22.1)	41(31.3)	26(19.8)	29(22.1)	6(4.6)	2.6/1.19074

Source: Fieldwork, 2019

Based on this information, the study finds that approximately of (52%) representing the majority of the respondents interviewed agreed to the fact that limited technology is a challenge of the current process of building permit acquisition in the Ashanti region

which is supported by the mean of 2.6. This finding is in agreement with the previous pieces of literature (Agyeman et al., 2016; Kpamma & Adjei-Kumi, 2013). This limited use of technology in permit application and approval processes will absolutely delay the process of building permit acquisition. For instance, Kpamma & Adjei-Kumi, (2013) noted that the lack of modern use of technology in keeping and retrieving land a record at the land commission in Kumasi usually delayed the building permit acquisition. This absolutely means that introduction of information communication technology into the current process of building permit acquisition can help improved permit acquisition of the country as it has shown to be effective in other countries like USA, China, and Singapore (World Bank and IFC, 2012).

Finding from the study revealed that with the exception of inadequate staff the rest of the statement that were given to the respondents such as lease, delays, cost of fees, fire certificate and EPA certificate and limited use of technology are the current challenges of the process of building permit acquisition in Ashanti region which affirms the various literatures (Kpamma & Adjei-Kumi, 2013; Agyeman et al., 2016; Tasantab 2016). The extent of these challenges negatively affecting building permit acquisition was also investigated. The finding suggested that the effects were very high. The implications of all these challenges associated with the current process of building permit acquisition can lead to developers resort in putting up buildings without a permit. This can result in an inappropriate sitting of building structures, using unapproved drawings, building on waterways, floods and demolishing of an unauthorized building as similarly found by Botchway et al. (2014). This also confirms Freiku's (2003) who highlighted the poor state of building development in Kumasi Township due to the challenges of the getting building permit.

4.4 Effectives strategies to facilitate the acquisition process of building permit in Ashanti region

The study also seeks to identify some of the strategies that can be put in place in order to facilitate the acquisition process of building permit in Ashanti region as well as Ghana. This is due to the fact that the current process of building permit acquisition for infrastructure development has been riddled with a plethora of problems including delay, limited use of technology, lease document delay among others which always resulted in institutions not able to meet the three months mandatory period within which the World Bank directs permit issuing agencies to approve or refuse permits (Asiedu & Agyeman, 2009). In order to come out with theses effective strategies that can help solve the problems faced by the current process of building permit acquisition, several measures were suggested to the respondents and required them to indicate the extent of their agreement or disagreement. Response of the respondents are summary in Table 4.4 in the form of descriptive statistics.

In a statement of whether online acquisition can be an effective strategies for solving the current problems faced by the process of the building permit acquisition, (22.9%) of each of the respondents strongly agreed and agreed to the fact that online acquisition can be a solution to the current problem faced by the process of building permit acquisition, (9.2%) of the respondent was neutral to the statements and (24.4%) and (20.6%) of the respondents disagreed and strongly disagreed respectively. Based on the results, the study finds (45.8%) of the respondents who agreed to the fact that online registration can be an effective solution to the current problem of building permit acquisition. However, a significant proportion of (45.0%) also disagreed to the fact that online registration can be a solution to the problems of building permit

acquisition. These results show a controversial respond to whether online registration can be a measure of the problem facing the current process of building permit acquisition or not which is confirmed by the mean of 2.9. This finding, however, contradicts with a previous study by World Bank (2013) that find North Africa and the Middle East and other jurisdictions within the developing world to have flexibility in their building permit processes due to their focused on online services.

The current study also takes into consideration whether the reduction of the bureaucratic nature in the current process of building permit acquisition can help improve the effectiveness of the building permit acquisition or not. After asking the question to the respondents, (38.2%) of the respondents strongly agreed to the fact that reduction of the bureaucratic nature can be an effective measure of solving the problem of the current process of building permit acquisition, (32.1%) agreed, (16.8%) were neutral, (11.5%) and (1.5%) of the respondents disagreed and strongly disagreed with the statement respectively. These results suggested that reduction of the bureaucratic nature in the current process of building permit acquisition can enhance the system since majority of about (70%) of the respondents interviewed agreed to it which was also confirmed by the mean of 2.1. This finding is similar to a study by Agyeman al. (2014) who recommend that reducing the number of signatories needed for building permits will help improve the current process of building permit acquisition in Ghana. The current application of the building permit is cumbersome as it goes through up to 18 procedures and lasts for an average of 220 days and this have made it difficult in obtaining building permits in Ghana (World Bank & IFC, 2013). However, when there is a reduction in the bureaucratic nature in the acquisition, it will help improve the

system thus avoiding the delays that normally deter developers for going in for building permit.

Respondents were again asked whether the elimination of the lease in the current process of building permit acquisition will be an effective measure to solve the current problem faces with regard to the delay of the lease document or not. About (23%) of the respondents strongly agreed that elimination of the lease in the current process of building permit acquisition will enhance the system, (21.4%) agreed, (17.6%) were neutral, (23.7%) and (13.7%) of the respondents disagreed and strongly disagreed respectively. Though majority of the respondents agreed to the fact that elimination of the lease in the current process of building permit acquisition can be an effective measure of curbing the current problem faces by the building permit acquisition but a significant number of the respondent also refused to the claims which were confirmed by the mean of 2.8.

Table 4.4: Effective measures that can solve the current problem of building permit acquisition

Measures	SA Freq.(%)	A Freq.(%)	N Freq.(%)	D Freq.(%)	SD Freq.(%)	Mean/SDV
Online Acquisition	30(22.9)	30(22.9)	12(9.2)	32(24.4)	27(20.6)	2.9/1.49326
Reduction of bureaucratic nature in the process	50(38.2)	42(32.1)	22(16.8)	15(11.5)	2(1.5)	2.1/1.07242
Elimination of lease in the process	31(23.7)	28(21.4)	23(17.6)	31(23.7)	18(13.7)	2.8(1.38942
Education	85(64.9)	31(23.7)	5(3.8)	3(2.3)	7(5.3)	1.6/1.05085
Recruitment of more staff	50(38.2)	33(25.2)	20(15.3)	17(13.0)	11(8.4)	2.3/0.84438
Reduction in the duration for acquiring a building permits	58(44.3)	55(42.0)	13(9.9)	3(2.3)	2(1.5)	1.7/1.12323

Source: Field survey, 2019

Education was also assessed whether it can be an effective measure of solving the current problem faces by the building permit acquisition or not. Finding shows that education can be an effective measure of solving the problem as was agreed by the overwhelming majority (88.6%) of the respondents which is also affirmed by the mean of 1.6. Education can be in the form of educating the people especially the illiterate about the importance of having building permits among others which will go alongside to helping them acquire a building permit and to avoid building in the waterways. As noted by Botchway et al. (2014) many developers as well as the public and housing agencies lack knowledge about the importance of a permit, conditions attached to the acquisition of permit, the rights of every property owner with regards to approved development and the acceptable related procedures.

More so, recruitment of more staff as an effective measure of improving the current process of building permit acquisition was assessed from the perspectives of the respondents. About (38%) of the respondents strongly agreed that recruitment of more staff is needed to improve the current process of building permit acquisition (25.2%) agreed, (15.3%) were neutral and (13.0%) and (8.4%) of the respondents disagreed and strongly disagreed respectively. Though, the current study did not find inadequate staffs as a major problem in the study area but majority of (53.2%) respondents recommended recruitment of more staff as an effective measures of improving the current process of building permit acquisition as similarly found by (Agyeman et al., 2016) which is also confirmed by the mean of 1.7.

Lastly, when respondents were asked whether the reduction in the duration for acquiring a building permit can be an effective strategy of improving the current process of acquiring a building permit (44.3%) of the respondents strongly agreed with the

statement, (42.0%) agreed, (9.9%) were neutral, (2.3%) disagreed and (1.5%) strongly disagreed with the statement. Based on this result, the study finds that approximately (82%) who agreed by the fact that reduction in the duration for acquiring building permits can be an effective strategy of improving the current process of acquiring building permits which are corresponded by the mean of 1.7.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The previous chapter of the study undertook a detailed analysis and discussion on the various specific objectives of the study. As sequel to the previous chapter, this chapter of the study takes into consideration the summary, conclusion and recommendations in line with the findings of the study.

5.2 Summary of the study's finding

The study sought to examine the procedure for the acquisition of building permits for infrastructure development in Ashanti region Ghana. The study attempted to address three research objectives which were formulated from the research questions; the current process of building permit acquisition; challenges in acquisition of building permit and effective strategies to facilitate the acquisition process of building permit. The study sampled one hundred and thirty-one (131) workers from selected MMDAs in the Ashanti Region of Ghana.

The study found that the current process of building permit acquisition in the study, areas include; land acquisition, land registration, and confirmation of Title, preparation of building design, purchase, and submission of application forms and other documents, vetting of designs and other documents by the physical planning department and other documents, vetting of designs and others. Though these processes are good but it is too long which have resulted in a lot of challenges that normally confronted with the developers in their quest to obtain a building permit for infrastructures development. These challenges are; delay, lease document delay, cost of fees due to bureaucratic nature of the process among others. The study also found that educating the public

about the importance associated with the permit system, reduction of the bureaucratic nature of the process, reduction in the duration for acquiring building permits among others as the measures that can be put in place to solve the current challenges associated with the building permit acquisition.

5.3 Conclusion

Though, the current process of building permit acquisition in the study area is good as stipulated by the National Building Regulations of 1996 (L.I. 1630) but the process is too long, thus developers are always entangled with a lot of problems such as delay of the application process, high cost among others in their quest to acquire a building permit. As such many developers normally resist going in for building permit and resulted in erection of unauthorized structures on waterways, massive development of slums and illegal building among others. In order to promote the effectiveness of the building permit system and to ensure sustainable development of the cities especially, the current system should redesign by integrating all the agencies involved in the building permit acquisition process to a central database management system. This will help reduce the bureaucratic nature of the process, thus reducing the cost and motivating developers to go for the building permits.

5.4 Recommendation

Taking into consideration the findings of the study, the study sought to come out with the following recommendations which aim at improving the process of building permits acquisition in the study area. The current system should be redesigned by integrating all the agencies involved in the building permit acquisition process to a central database management system. Also, there should be a mass education to sensitize the populace about the importance associated with the building permits system. Land commission

and other stakeholders in charge of the acquisition of building permit should spearhead the exercise. More so, there should be a reduction in the duration of the acquiring of building permit. This will encourage more developers going in for the building permit thus solving the issues of illegal building, developments of slums among others. Lastly, lands commission should update the Local Authorities frequently with land ownership information to facilitate the building permit processing.



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APPENDIX

Research Topic: ASSESSING THE PROCEDURE FOR ACQUISITION OF BUILDING PERMIT FOR INFRASTRUCTURE DEVELOPMENT IN GHANA: A CASE STUDY OF THE ASHANTI REGION

Dear study participant,

I am a Master Student at the Kwame Nkrumah University of Science and Technology, Department of Construction Technology and Management. In partial fulfilment for the award of a Master's degree, I am assessing the procedure for acquisition of building permit for infrastructure development in Ghana. Your organization has been selected as one of the study sites. I would therefore be grateful if you could grant me few of your valuable time to respond to some interview questions. All information given will only be used for academic purposes and treated as being strictly confidential. When reporting what people have said I will take care not to include any information that would enable you to be identified as the source of that information or opinion. I won't be asking for your name – just a few details about yourself, such as age, gender and occupation.

SECTION A: BACKGROUND INFORMATION OF PARTICIPANTS

1. Gender a. Male[☐] b. Female[☐]
2. Age a. 30 years or below[☐] b. 31-40years[☐] c. 41-50 years[☐]
d. 51-60 years
3. Education level a. Up to secondary [☐] b. First Degree[☐] c. Master's degree[☐]
4. Work experience (number of years worked in the organization)
 - a. Less than one year[☐] b. 1-3 years[☐] c. 4-6 years[☐] d. 7-9 years[☐]
 - e. 10 years or more[☐]
5. Position in the organization?
 - a. Junior Staff[☐] b. Middle Staff[☐] c. Top level Management[☐]

SECTION B: CURRENT PROCESS OF BUILDING PERMIT ACQUISITION

6. Which of the following processes do developers go through before they are issued a building permit

s/n	Process	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
A	Acquisition of land					
B	Registration and confirmation of land title					
C	Preparation of building designs(drawings)					
D	Purchase and submission of application forms and other documents					
E	Vetting of designs and other documents by physical planning department and works departments					
F	Vetting of designs and other documents by technical sub-committee					
G	Inspection of site and site meeting					
H	Submission of report and approval by spatial planning committee					
I	Value of proposed building and payment of statutory fee(permit fee) of works department					
J	Preparation of permit certificates by physical planning department					
K	Signing of permit					
L	Issuance of habitation certificate					

**SECTION C: CHALLENGES IN ACQUISITION OF BUILDING PERMIT IN
THE ASHANTI REGION**

7. Which of the following challenges do you encounter in the process of building permit acquisition for infrastructural development?

s/n	Challenge	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A	Lease					
B	Delays					
C	Cost of fee					
D	Fire certificate & EPA certificate					
E	Inadequate staffs at the agencies					
F	Limited use of technology					
G	Others					

8. To what extent have these challenges negatively affected building permit acquisition?

a. Very high extent [] b. Moderate extent [] c. To a smaller extent []

**SECTION D: EFFECTIVE STRATEGIES TO FACILITATE THE
ACQUISITION PROCESS OF BUILDING PERMITS IN THE ASHANTI
REGION**

9. What do you think can be done to address the following challenges of building permit acquisition for developers?

s/n	Measures	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A	Online Acquisition					
B	Reduction of Bureaucratic nature in the process					
C	Elimination of lease in the process					
D	Education					
E	Recruitment of more staff					
F	Reduction in the duration for acquiring building permit					
F	Others					

10. How would you rate the effectiveness of the above measures?

a. Very effective[] b. Effective[] c. Not Effective[]

11. In your view, what should be the effective duration to acquire building permit?

a. Less than 2 weeks[] b. 2 weeks[] c. 3 weeks[] d. 4 weeks (one month) []