# EXPLORING THE PATHOGENS AND ANTIDOTES OF CONSTRUCTION PROJECTS AMONG SELECTED MUNICIPAL ASSEMBLIES IN GREATER ACCRA REGION

By

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# MASTER OF SCIENCE IN PROJECT MANAGEMENT

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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 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

This study sought to explore the pathogens and antidotes in relation to construction projects ongoing at the local assembly level of Ghana. The pathogens refer to the problems faced construction projects while antidotes refer to solutions to these identified problems in project construction. In order to achieve this aim the study set out some specific objectives. They include; to explore the challenges faced during the construction of social amenities in local assemblies, to ascertain the most significant challenge affecting success in project completion and to assess the most appropriate solutions needed to curb these challenges in construction projects. The quantitative approach to research was used with the help of descriptive design. The data gathering was conducted with the help of structured questionnaires with specific sections tailored to the objectives of the study. The simple random sampling technique as well as the convenience sampling techniques were used to obtain 54 respondents from specific departments of six (6) local assemblies in Greater Accra region. After about few weeks of data gathering the response rate was more than 95% which provides some level of confidence in the data obtained. After data was gathered IBM SPSS (version 23) was used to deduce the right analysis for the specific objectives outlined. The results obtained showed that there are health and safety pathogens as well as financial constraints faced during the construction of social amenities in local assemblies. The study also reveals that health or safety issue is the most significant challenge affecting success in project completion at the local assembly level. The study concludes that the most appropriate antidote is standby health units mounted at construction sites to promptly deal with health challenges during construction projects at the local level. The study recommends that mandatory check-up policy should be instituted so that staff in the project management sector are well looked after so that they are able to provide quality projects.

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# **DEDICATION**

This research is dedicated to my friends, family, all known individuals who have assisted me in one way or another; this study is dedicated to you.

#### **CHAPTER ONE**

#### **INTRODUCTION**

#### 1.1 Background of the study

The substance of the project management as well as the construction industry to the whims of improved development and progress in any country cannot be overlooked (Ahadzie & Amoa-Mensah, 2010). Largely it is evident that government programs, policies and activities as well as private projects is significantly influenced either directly or indirectly by the project management and construction sector. Scholars in Ghana and beyond have theorized that a strong, solid and functional construction industry is key to progress in economic and national development of any country and Ghana is no exception to this (Akwei, 2015).

The contribution of the construction industry to overall economic growth is tied into the idea that government and or private resources injected into construction activities to bring forth schools, roads, hospitals and recreational centers improve services and wellbeing of the citizenry (Ahmad, Hatira & Valva, 2014).

The measure of a country's contribution and investment in these infrastructure projects is translated into the economic empowerment and growth that the entire nation is identified with (Ofori, 2015). In Ghana, the shortage of construction projects seem to be one of the most critical socio-economic challenges facing the country (Ghana National Development Plan, 2008). This critical situation is reflected in current estimates that over 1.2 million uncompleted social amenities would be needed to bridge the gap by the end of this decade (Home Finance Company, 2010). Alternatively, some experts as well as the Government of Ghana's own projection have suggested

that an annual delivery project construction stock of 150,000 is what would be needed if the situation is to be addressed marginally (Amoa-Mensah, 2013).

Even though some studies may have been conducted to explore the challenges in Ghana's construction sector only few of such studies have highlighted the health/safety need of the project manager/ workers. The aim of this study is to therefore address these challenges if found through the provision of specific and pragmatic antidotes tied to the specific problem that is found.

#### **1.2 Problem Statement**

In project management a large number of problems and or challenges do occur in the discharge of constructions (Abbott, 2011). This assertion is however no different from construction of basic amenities for communities that lack them. In Ghana, many construction works are either progressing, newly completed or still at their budding stages (Ofori, 2015). These construction projects have in their outlines key objectives and success factors to be maintained or achieved. In the Ghanaian literature of project management a huge gap has been uncovered where many scholars overlook the pathogens and antidotes of social construction projects. Only but a few scholars have highlighted some challenges in their study and are yet to provide strong and pragmatic steps to deal with such problems.

For instance in a study conducted by Ahadzie and Amoa-Mensah (2010) only project management practices in the Ghanaian House building industry have been highlighted without significant contribution to the challenges faced thereof. Meanwhile Ofori (2015) highlighted some challenges of construction industries in developing countries but also failed to provide significant pragmatic steps in dealing with such challenges. All in all, these studies have lasted their time and their findings seem quite old to the relevance of today's project management scope. This current study however covers this gap by providing the current issues in social construction projects and their significance in influencing project completions successes as well as providing strong and practicable logical solutions to influence positive action among stakeholders and project managers who invest so much in social amenities.

#### 1.3 Research Aim & Objective

The aim of this study is to assess the pathogens (problems/challenges) and antidotes (solutions) of construction projects (social amenities) around selected Municipal Assemblies in Greater Accra

#### Specific Objectives

The specific objectives of the study is to find out the following;

- 1. To identify the challenges faced during the construction of social amenities in local assemblies
- 2. To identify the most significant challenge affecting success in project completion
- To recommend the most appropriate solutions needed to curb these challenges in construction projects

#### **1.4 Research Questions**

- 1. What are the challenges faced during the construction of social amenities in local assemblies?
- 2. What are the most significant challenges affecting success in project completion?
- 3. What are the most appropriate solutions needed to curb these challenges in construction projects?

#### **1.5 Research Significance**

This current research is significant in many ways as far as construction of social amenities such as roads, schools and hospitals are a concern for the local populace. The study foremost goes a long way to close a gap in research that has existed for far too long on this similar subject provided in this current study. The study helped to identify the key challenges confronting local construction projects in Ghana. The study also provides knowledge of these challenges in three key areas namely health/safety, project delays and financial constraints. The study provides information regarding the best course of acting in dealing or finding antidotes to these types of concerns. The study further identifies the most significant challenge faced by project managers in the discharge of their duties. The study also helps agent changers and project managers to have a logical grounds to deal with project construction challenges. This research serves some extant purposes where information gathered here can be solicited to improve other projects.

#### **1.6 Organization of the study**

The current study is organized in various parts and sections. From the indications the study provides five steps of completing this important study. The first step includes the introduction of the study which is further separated as background of the study, problem statements, objectives of the study, research questions that need to be addressed and other parts such as significance of the research and its organization. The study further discusses key issues under the second part of this research in reference terms of theoretical underpinnings and empirical reviews made over the years. The third step of this study includes the methods and significant tools and accessories borrowed to conduct this study. This part entails portions such as sampling technique and target population, research design and approach as well as the format required for the analysis of data. The fourth part of this study sought to analyse these data set gathered from respondents. The fifth section provides tailored recommendations and conclusions needed for the summary of findings.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

The literature review of the study is based on the theoretical and empirical underpinnings of the research topic. The theoretical perspective will provide information on patterns or theories that have been tried and tested while empirical form of literature presents evidence of some findings that have existed before.

#### **2.2 Theoretical Literature**

In spite of the fact that investment in the construction industry breeds national economic growth and development, Ghana is still challenged with its development and performance in the construction industry (Ofori-Kuragu, Baiden & Badu (2017). Some of these challenges include weak access to credits, delay payments for contractors, low profitability, poor technologies and poor cashflow (Hillebrandt, 2016).

All of these weaknesses have the potential of affecting the improvement and strength of Ghana's contractors and their ability to embark or source for huge international projects. The elevated cost of government projects and bad procurement procedures and environmental concerns are of specific interest (Constantino, Marrengula & Ubisse, 2015).

While some of these issues may be experienced by even nations with sophisticated building sectors mentioned here, there is proof of well-planned and implemented programs across industry to tackle the issues. There has never been, however, a systematic extensive industry-wide program in Ghana that addresses efficiency and bad results across the industry (Akwei, 2015).

In this research the choice of studying the pathogens and antidotes of construction projects at the local assembly level is influenced by the fact that no current and outstanding literature have investigated this scope thoroughly. The current study describes the pathogens of construction projects to cover three main areas namely health/safety issues, project delays & Financial constraints of local assembly construction projects. Therefore the scope of the challenges do not supersede these three areas aforementioned. The challenges that fraught many ongoing local assembly projects are enormous and only a few have been selected for analysis because much resources is required to cover every sector of problem.

#### Construction industry developments globally

Global examples of trends in the construction industry indicate that many well-developed nations have earlier introduced programs to enhance the efficiency of their building sectors. These include the 1999 "Building for Growth, Building and Construction Industries Actions Agenda" in Australia, the 1997-2002 "Re-engineering the Construction Process Using Information Technology" in Finland, the 1998 "Future Directions of the Construction Industry" in Japan, and the "Construction 21" in Singapore. Other examples include "Creating an Enabling Environment for Construction Industry Reconstruction, Growth and Development" from South Africa-Campaign 1997,' National Construction Goals' in the United States of America (USA) and Northern Ireland,' Building our Future Together' and' Achieving Construction Excellence' (AEC) in 1997 and 1999 (DFPNI, 2007). Sustainable innovative techniques and leadership methods are used by sectors in these nations. While many developing countries have made substantial progress in improving the performance of their rejected construction industries in some world-class infrastructure, the same cannot be said of Ghana's sector (Ofori, Teo & Tjandra, 2012). KPMG (2014) lists African countries such as Nigeria.

#### The Ghanaian Construction situation

The perception among Ghanaian contractors of bad results and underperformance is common. This perception is largely linked with the non-performance of contracts and non-payment of contractors (Kpamma & Adjei-Kumi, 2010). Many projects linked to operations to celebrate the 50th anniversary of Ghana's independence have been postponed, including the building of housing for visiting Heads of States and dignitaries. Renovation of training sites for the 2008 African Nations Confederation (CAN) tournament held in Ghana was delayed.

These are not separated cases and are a pitiful refection of the state of the Ghanaian development industry. Numerous development clients in Ghana don't completely accomplish their expected venture taken a toll, time and quality destinations (Ahadzie, 2007). As a result, contracts for most large-scale ventures are executed by remote possessed temporary workers nearby temporary or workers with outside backing (Tawiah, 1999).

In expansion to the over challenges, the quality of finished ventures within the lion's share of projects undertaken within the Ghanaian development industry may be a major issue. Numerous such ventures such as streets appear noteworthy absconds some of the (Ofori-Kuragu time inside the surrenders risk period al., 2014) et and are unfavorably influenced by a destitute upkeep culture. Temporary workers may not give satisfactory wellbeing and security measures for both their representatives and the common open.

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A high frequency of development related wounds and fatalities have prompted calls by the administration for temporary workers to imitate best practice guides to improve wellbeing on building destinations (Abbey, 2012). This is intensified by the spate of structures falling during or after development. Notwithstanding every one of these issues, the Ghanaian development industry has not kept pace with the expanding mindfulness and selection of maintainable practices. Aside from the elevated amounts of epitomized vitality utilized in development related exercises in Ghana, there is a low take-up of maintainable procedures which fuse low carbon materials in the development procedure. This implies the general carbon impression of the Ghanaian development industry stays exceptionally high and takes away from the viability of worldwide manageability endeavors. This is one of the numerous regions where pressing activity is required over the Ghanaian development industry. Lackluster showing limits open doors for indigenous contractual workers to take part in the biggest undertakings in Ghana. With the beginning of business oil investigation in Ghana, there have been calls for Ghanaian temporary workers to be engaged with the arrangement and improvement of framework for the oil and gas industry.

While this is a decent call, it is significant that Ghanaian development firms can reliably convey greatness both in their items and administrations to their customers. This will improve their abilities to rival worldwide organizations and take an interest effectively in the conveyance of huge scale infrastructural undertakings, for example, the stages related with the investigation and conveyance of oil and related items. While there is a case for neighborhood temporary worker support in the conveyance of major infrastructural ventures (Ghana News Agency, 2012), this desire should be coordinated with sufficient limit among Ghanaian contractual workers to convey to the measures of world-class venture greatness which significant worldwide members in the oil business are familiar with in their nations of origin. This is especially noteworthy given the

anticipated upsurge in infrastructural improvement identifying with aspiring government projects went for fast industrialization (MFEP, 2017) and the requirement for dynamic endeavors to raise fund for such framework advancement.

#### **Classification of Ghanaian contractors**

Ghanaian development firms are sorted into four money related classes by the Ministry of Works and Housing as indicated by the size of individual ventures they can offer for and the most extreme estimation of work permitted whenever (Dansoh, 2005). Building contractual workers for the most part have joint D and K classifications empowering them to attempt building and common works. Temporary workers are enlisted after all significant asset necessities have been completely met. There are observations anyway that the enrollment prerequisites are not carefully pursued, which permits imminent contractual workers without the imperative asset ability to be enlisted for any of the money related classes. Contractual workers without demonstrated asset limit may accordingly figure out how to win enormous tasks. This is a critical supporter of the issues which plague the Ghanaian development industry.

#### **Challenges (Pathogens) of construction projects**

The indicators for challenges of construction projects as indicated by Abbey (2012) include;

Health/Safety issues

Financial Constraints

Legal issues

Political Interference

Land Litigation issues

#### Chieftaincy/cultural issues

In numerous open segment extends, the contractual worker needs to pre-finance areas of the task or the whole venture. This is normal especially in the street segment of the Ghanaian development industry; the customer (Government of Ghana) has all the earmarks of being downsizing its duty regarding financing ventures. While it is basic practice all around for contractual workers to get standard occasional installments dependent on intermittent valuations of finished work, in the Ghanaian street area and for some, building ventures, temporary workers need to finish the task before installments are affected. Installments for finished open work in Ghana are normally liable to long delays, now and then as long as two years. This training has come about sadly in temporary workers on numerous open ventures setting out on road shows to request installments for tasks since a long time ago finished and used by the customer (Frimpong, 2013; Akoto, 2014). In another occurrence, contractual workers associated with the development of government funded school structures took steps to bolt up finished school structures attributable to non-installment for finished ventures (Akoto, 2014). Numerous contractual workers consequently totally evade offers for government ventures. Ghana needs gain from worldwide accepted procedures guides to adjust new and increasingly reasonable ways to deal with financing development and framework in Ghana.

#### **2.3 Empirical Literature**

Ahadzie and Amoa-Mensah (2010) investigated management practices in the Ghanaian house building industry. Against the foundation of the enduring administration difficulties confronting the Ghanaian House Building Industry, venture the board rehearses in the usage of Mass House Building Projects (MHBPs) is given a view to thinking about their quality and shortcomings. The job of task directors (PMs) and their presentation on these activities are surveyed including how they have aided or met venture destinations particularly as far as fruition dates and cost. The proof assembled recommends that, proficient undertaking the executives administrations, radiating from task beginning to consummation can conceivably help in limiting the impacts of a portion of the key administrative difficulties. It is proposed that, every single other thing being equivalent, a few attributes of the expert undertaking the executives administrations could be received and typified into a structure inside which current administration practices can be progressed for improving compelling conveyance of future lodging ventures. Following from the pre and post-autonomy time, the executives rehearses on lodging development tasks have been lit up. While customary administration practices keep on ruling the worldview of lodging development the executives, the survey has uncovered that expert venture the board administrations including an autonomous task administrator other than the structure group have been investigated with progress on certain undertakings.

Ofori (2015) investigated the Challenges of Construction Industries in Developing Countries: Lessons from Various Countries. The development business wherever faces issues and difficulties. There is likewise proof that the issues have turned out to be more noteworthy in degree and seriousness as of late. This paper considers a portion of the difficulties confronting the development ventures in creating nations. For each situation, the issue is broke down from the point of view of the creating nations, and the primary ramifications and present difficulties featured. Exercises are then drawn predominantly from the ongoing background of different nations at all degrees of improvement, particularly Singapore, to feature potential ways by which progress can be made in the creating nations. An examination motivation is displayed and the significant job of scientists in the drive to improve the presentation of the development businesses of the creating nations in the light of their asset requirements and managerial shortcomings, is sketched out.

Ofori-Kuragu, Baiden and Badu (2017) assessed the transformation of construction works in Ghana. According to this research conducted, the analysis was shown by descriptive statistical techniques. According to the researchers a majority of Ghana's infrastructure have been built in the 20<sup>th</sup> century and the structure and form of these buildings cannot last the test of time. The study recommends that though there are challenges such as financial issues that fraught the completion of project constructions.

Ahmad, Hatira and Valva (2014) investigated how can the construction industry in Ghana become sustainable? The Sub-Saharan African nation of Ghana is developing at a quick pace. The development business is endeavoring to stay aware of the expanding interest for lodging and business and modern space while at the same time securing the physical condition and social prosperity of the nation – a test getting to be referred to in the business as 'feasible development.' This paper proposes a key way to deal with these twin difficulties, comprising of two sections: a structure rating framework and a participatory technique called multi-partner exchange. The mix rating framework and MSD procedure was exhibited to the business to decide its potential adequacy in helping the business to move towards manageability. The business' reaction demonstrates that the proposition could be of an incentive to the business, with certain prominent

constraints. This paper portrays the rating framework MSD proposition, the industry's reaction, and suggestions for the development business in Ghana pushing ahead. As a rule the business was good to the idea of improving the G.S. Instrument, and utilizing MSD as a technique in doing as such. The business remarked on the advantages of improving the Tool, how the procedure could work, and a few restrictions to the proposition introduced in this paper. Their remarks were then joined in the structure of the proposition with the desire that the Tool, as educated by the TSPD, reviewed by the business, and actualized by a MSD procedure, could be a helpful procedure to empower the business to move towards manageability.

Akwei (2015) investigated Challenges in Processing Payment for Road Maintenance Works in Ghana. Purposive testing method was embraced and out of the 60 polls dispersed, 50 were gathered back delineating a reaction pace of 83.33%. The field review information was dissected utilizing measurable items. Relative significance file was the technique received to break down the exploration goal based inquiries. The components were positioned from not significance (1) to significant (5). Discoveries were made subsequent to breaking down the information and dialogs. The discoveries made include: Improper possibility study before beginning a venture, government absences of responsibility for street support, bulky obtainment methods; Non accessibility of assets in the spending limit by Government to affirm its dedication for street undertakings, and Government in power affecting installment are difficulties confronting installment handling in the Ghanaian development industry. It's additionally uncovers that, poor venture financing, venture cost overwhelms and Diversion of store for other government needs are not many of the impacts coming about because of these difficulties looked in preparing installment.

Hillebrandt (2016) investigated problems of larger local contractors: causes and possible remedies. The paper looks at the issues looked by temporary workers in creating nations, talks about their causes and some potential cures. It covers deficiencies of employable and the executive labor, material deficiencies, plant and account, just as certain issues of the executives of the firm. It arrives at the resolution that now is the ideal opportunity for TG29 to create some straightforward 'How To Do it' manuals on measures which would be useful and have wide materialness.

Constantino, Marrengula and Ubisse (2015) assessed the Challenges and the Way Forward for the Construction Industry in Mozambique. The end is that nearby contractual workers, makers of structure materials just as task designers are neglecting to contend with remote organizations in the development advertise. Just 5% of nearby temporary workers figure out how to offer for noteworthy development ventures (Lopes, 2006). The disappointment of nearby development firms to contend is because of: Weak validity related with the time the contractual worker has been in the market, its measurement, reputation and absence of affirmation, The worth included duty (VAT) level and the related repayment delays, Multiple and long bureaucratic techniques related to the state responsibility for which raises the expenses of access to arrive in the urban zones, expanding familiarity and hampers the advancement of the lodging market; An insufficient government acquisition code, Limited access to credit, Lack of qualified labor, Weak utilization of present day innovation, Delays and bureaucratic obstructions for import of crude materials.

#### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section of the study highlights the tools and techniques within the frame of academic research philosophies. The methodology of the study provides snap shot information on the research design, target population, sample size, technique and data instrument and analysis.

#### **3.2 Research Design**

In the general sphere of academic research there are three main approaches used. These three approaches of research include quantitative or deductive approach to research, qualitative or inductive approach to research and mixed approach (Malhorta, 2008). This study however adopts the quantitative approach or deductive approach to research where a numeric representation is made to data gathering and views expressed in the study. The numeric keys ascribed to the opinions expressed in this research are relevant to avoid any cloud of uncertainties that may surround the analysis of the gathered information. The descriptive design provides the philosophical spectrum where information gathered can be generally described to fit the specific objectives. The study used a case study design where information that was obtained was specific and generic only to a certain group of people and or institutions. The cross sectional design was also used to gather a cross section views from specific departments in the local assemblies selected across Greater Accra region.

#### **3.3 Target Population**

The target population of the study is a part of the research that provides information on the type, form, location and shape of institutions or individuals that data will be solicited. The target group represented in this study are persons from local municipal assemblies whose core mandate are directly in line with project management affairs. Therefore a group of administrators, project managers and contractors, accountants in the field of project management form the target group for this study because they are the best to provide requisite information.

#### 3.4 Sample size

The sample size of this research is the size of specific persons and or institutions or items that is statistically representative and prudent to provide an overview information on the subject understudy because such specific persons have the right mix of expertise to provide vivid information for the study. Therefore the study sampled 54 respondents from six (6) municipal assemblies in Greater Accra region. The six assemblies include Madina municipal assembly, Adentan municipal assembly, Ayawaso- West municipal assembly, Ayawaso- East municipal assembly, Ashaiman municipal assembly and Ga central municipal assembly.

#### **3.5 Sampling Technique**

This aspect of the methodology provides information on the appropriate techniques used to draw out the sample size of 54 respondents. On the field, the main technique used was the convenience sampling technique. However the simple random sampling technique provided the grounds and opportunity for using the convenience sampling technique. The convenience sampling technique was used because it allowed the researcher to sample views from respondents who were willing and ready to offer the right amount of information for the success of this research.

#### 3.6 Data Instrument

The data instrument only provides the research tool that is appropriate in the collection of information from target respondents. Specifically, closed ended questionnaires were used to solicit information that is tailored towards the research objectives. The questionnaire was divided into four parts with 27 items presented. The first part of the questionnaire draws personal information from respondents. The second part of the instrument solicits information on Challenges (Pathogens) faced during the construction of social amenities in local assemblies. The third part of the data instrument solicits information on the most significant challenges affecting success in project completion while the last part of the instrument solicits information on the most appropriate solutions (Antidotes) needed to curb construction challenges.

#### 3.7 Data Analysis

The data analysis section of the methodology highlights what type of analysis will be performed and what type of statistical tools will be used for specific research analysis. The analysis of this research adopts mainly descriptive statistical tools and techniques where the analysis of the data instrument is presented with mean, frequency, standard deviations and percentages to interpret the data gathered. These descriptive analysis was conducted and presented in tables and charts with the help of IBM SPSS (version, 23).

#### **CHAPTER FOUR**

#### PRESENTATION OF DATA ANALYSIS AND DISCUSSION OF RESULTS

#### 4.1 Introduction

This part of the general study underscores the presentation of findings obtained from a data instrument administered to project managers across local assemblies in Greater Accra. The main data analysis is preceded by the demographic profile of respondents which is followed up by subject data analysis with respect to the specific objectives of the study as shown here;

- To explore the challenges (in health/safety issues, project delays & Financial constraints) faced during the construction of social amenities in local assemblies
- 2. To ascertain the most significant challenge affecting success in project completion
- To assess the most appropriate solutions needed to curb these challenges in construction projects

After presentation of findings and interpretation is done discussion of the main findings was conducted with the help of extant or empirical literature.

# 4.2 Demographic Analysis

The demographic information of the sample group only indicates the type or personal profile of persons who provided information necessary for this research. This section however does not form part of the main objective of the research.





Figure 4.1 depicts the gender category of respondents from municipal assembly offices who are mainly in charge of project management affairs. Out of 54 staff that were sampled 70% of respondents are males while only 30% are females. Therefore this study obtained a higher masculinity view comparatively.

Source: Field Survey, 2019

Figure 4.2: Educational Background



Source: Field Survey, 2019

Figure 4.2 demonstrates information regarding the educational background of respondents. Out of the total of 54 respondents sampled 21 respondents have attained professional certification while 10 have attained masters' degree. Meanwhile a large portion of the target group attained undergraduate certifications.

Figure 4.3: Respondents' department



Source: Field Survey, 2019

Figure 4.3 provides details on respondents' department. Out of 54 respondents, 32 were from planning/ construction department while 11 respectively work in the finance and administration department. This information shows that the most dominant views come from the planning/construction department.



Figure 4.4: Period of working with your organization



Figure 4.4 indicates the amount of period respondents worked with their respective organization. Out of 54 respondents 28 of them have worked between 1-3years while 26 respondents have worked with their organization above 3years. The period of working with the organization is dominated by respondents with experience of between 1-3years.

# 4.3 Descriptive Statistics on the Challenges (Pathogens) faced during the construction of social amenities in local assemblies

The pathogens faced by municipal assemblies during the construction of social amenities have been sectioned into two parts. That is, health safety pathogens of construction projects and financial constraints aspect of project challenges.

#### 4.3.1 Health/Safety Issues

The results obtained in this aspect is obtained in Table 4.1-4.5 while a summary of results is provided in table 6.

Responses	Frequency	Percent
Neutral	10	18.5
Agree	32	59.3
Strongly Agree	12	22.2
Total	54	100.0

Table 4.1: There are often not enough protective wears available for construction field workers

Source: Field Survey, 2019

Table 1 demonstrates responses on the availability of enough protective wears available for construction field workers. Out of 54 respondents 59.3% agree that there are often not enough protective wears available for construction field workers. Also 22.2% of respondents strongly agree that there are often not enough protective wears available for construction field workers.

Response	Frequency	Percent
Neutral	16	29.6
Agree	34	63.0
Strongly Agree	4	7.4
Total	54	100.0

Table 4.2: Respiratory and nasal issues are recorded every time after on-field construction

Table 4.2 provides information on the respiratory and nasal issues during on-field construction. Out of 54 respondents 63% agree that Respiratory and nasal issues are recorded every time after on-field construction. However only 29.6% respondents are neutral.

Response	Frequency	Percent
Neutral	16	29.6
Agree	24	44.4
Strongly Agree	14	25.9
Total	54	100.0

Table 4.3: There is no availability of Health check point on construction site

Source: Field Survey, 2019

Table 4.3 provides information on whether there is no availability of health check point on construction site. Out of 50 respondents 44.4% agree there is no availability of Health check point on construction site. About 25.9% of respondents are neutral that there is no availability of Health check point on construction site.

Table 4.4. There are no offerings on safety ups before work begins			
	Response	Frequency	Percent
	Disagree	5	9.3
	Neutral	11	20.4
	Agree	32	59.3
	Strongly Agree	6	11.1
	Total	54	100.0

Table 4.4:There are no briefings on safety tips before work begins

Table 4.4 represents the presentation on whether there are no briefings on safety tips before work begins. Out of 54 respondents 59.3% agree that there are no briefings on safety tips before work begins. Also about 20.4% of respondents were neutral that there are no briefings on safety tips before work begins.

Responses	Frequency	Percent
Disagree	34	63.0
Neutral	15	27.8
Agree	5	9.3
Total	54	100.0

Table 4.5: It is not mandatory for staff to go for health checkup before a major project commence

Source: Field Survey, 2019

Table 4.5 indicates responses on whether it is mandatory for staff to go for health checkup before a major project commence. Out of the sampled responses 63% disagree that it is not mandatory for staff to go for health checkup before a major project commence. Meanwhile 9.3% of respondents agree that it is not mandatory for staff to go for health checkup before a major project commence.

Items		Mean	Std.
	R		Deviation
There are often not enough protective wears available for construction field worker	1 <sup>st</sup>	4.04	.643
There is no availability of health point on construction site	$2^{nd}$	3.96	.751
Respiratory and nasal issues are recorded every time after on-field construction	3 <sup>rd</sup>	3.78	.572
There are no briefings on safety tips before work begins	$4^{th}$	3.72	.787
It is not mandatory for staff to go for health checkup before a major project commence	5 <sup>th</sup>	2.46	.665
Valid N (listwise)	54		

 Table 4.6:
 Summarized Statistics on Health and Safety Challenges (Pathogens) faced during the construction of social amenities in local assemblies

Source: Field Survey, 2019Mean Scale: 1=Strongly disagree2= disagree3= Neutral4= agree5= Strongly agreeSD Scale: SD<0.5= Closely spread data</td>

Table 4.6 provides a summary statistics on the health and safety pathogens faced during the construction of social amenities in local assemblies. From the mean value of 4.04 it is clear that respondents generally agree that there are often not enough protective wears available for construction field workers. This is the first ranked challenge which support the view that there are health and safety challenges faced in local assemblies. The mean value of 3.96 showed the second ranked health and safety challenge where respondents generally agree that there is no availability of health point on construction site. The mean value of 3.78 and 3.72 indicates that generally respondents rank respiratory and nasal issues and no briefings on safety tips as the 3<sup>rd</sup> and 4<sup>th</sup> ranked health and safety pathogen. Lastly respondents generally disagree that it is not mandatory for staff to go for health checkup before a major project commence. This item represent the last ranked health and safety pathogen faced during the construction of social amenities in local assemblies. The standard deviation showed that responses are widely spread across the mean.

#### 4.3.2 Statistics on Financial Constraints aspect of Project Challenges

Table 4.7-4.9.2 provides information on responses gathered regarding the financial constraints of project challenges. Table 12 however provides a summarized view point about individual item responses.

Response	Frequency	Percent
Neutral	14	25.9
Agree	31	57.4
Strongly Agree	9	16.7
Total	54	100.0

Table 4.7: There are delays in honoring payment certificates

Source: Field Survey, 2019

Table 4.7 provides information on whether there are delays in honoring payment certificates. According to the responses 57.4% of respondents agree that there are delays in honoring payment certificates. Also about 16.7% of respondents strongly agree that there are delays in honoring payment certificates. Therefore delays in honoring payment certificates indicates an aspect financial constraint project challenge.

Response	Frequency	Percent
Disagree	37	68.5
Neutral	12	22.2
Agree	5	9.3
Total	54	100.0

Table 4.8: There is huge underestimation of material cost

Table 4.8 indicates the responses gathered on underestimation of material cost. The percentage score of 68.5% showed that respondents disagree there is huge underestimation of material cost. About 22.2% of respondents were neutral on the underestimation nature of material cost.

Table 4.9: The internally generated funds are often not enough to embark on huge road projects

Response	Frequency	Percent
Agree	38	70.4
Strongly Agree	16	29.6
Total	54	100.0

Source: Field Survey, 2019

Table 4.9 presents findings on the amount of internally generated funds and whether it is enough for the assembly to embark on its own project. From the responses respondents either agree or strongly agree that the internally generated funds are often not enough to embark on huge road projects.

1 auto 4.9.1.	Lack of manetal support for project supervision				
Response		Frequency	Percent		
	Neutral	6	11.1		
	Agree	36	66.7		
	Strongly Agree	12	22.2		
	Total	54	100.0		

Table 4.9.1:Lack of financial support for project supervision

Source: Field Survey, 2019

Table 4.9.1 provides information on the lack of financial support for project supervision. Out of the target sample size 66.7% of respondents agree and 22.2% strongly agree that there is a lack of financial support for project supervision.

Response	Frequency	Percent		
Neutral	14	25.9		
Agree	40	74.1		
Total	54	100.0		

Table 4.9.2: There are difficulties in accessing bank credit

Source: Field Survey, 2019

Table 4.9.2 provides information on the difficulties in accessing bank credits. Out of 54 respondents 74.1% agree that there are difficulties in accessing bank credits while only 25.9% remained neutral. This response rate showed that there are difficulties in accessing bank credits.

Items	R	Mean	Std.
			Deviation
The internally generated funds are often not enough to embark on huge road projects	1 <sup>st</sup>	4.30	.461
Lack of financial support for project supervision	$2^{nd}$	4.11	.572
There are delays in honoring payment certificates	$3^{rd}$	3.91	.652
There are difficulties in accessing bank credit	$4^{th}$	3.74	.442
There is huge underestimation of material cost	$5^{th}$	2.41	.659
Valid N (listwise)	54		

 Table 4.9.3: Summarized Statistics on Financial Constraint (Pathogens) faced during the construction of social amenities in local assemblies

Source: Field Survey, 2019Mean Scale: 1=Strongly disagree2= disagree3= Neutral4= agree5= Strongly agreeSD Scale: SD<0.5= Closely spread data</td>

Table 4.9.3 indicates a summarized statistics on financial constraint pathogens faced during the construction of social amenities in local assemblies. The mean value of 4.30 showed that respondents generally agree that the internally generated funds are often not enough to embark on huge road projects. This represent the first ranked financial constraint pathogens during construction of social amenities in local assemblies. The mean value of 4.11 showed that respondents generally agree that there is Lack of financial support for project supervision. This represent the second ranked pathogen faced during construction of social amenities. The third ranked factor is the delay in the honoring of payment certificates.

# 4.4 Descriptive Statistics on the most significant challenges affecting success in project completion

This section provides information on the most significant challenges affecting success in project completion at the local assembly level. Table 13-16 provides detailed information and breakdown on responses of the most significant challenge affecting success in project completion. Also table 17 provides a summarized version of all the responses and these factors are ranked in order of the most important to the least important.

Response	Frequency	Percent
Neutral	10	18.5
Significant	11	20.4
Most Significant	33	61.1
Total	54	100.0

Table 4.9.4: Health or safety issues

Source: Field Survey, 2019

Table 4.9.4 represents information on whether health/safety issues are the most significant challenges affecting success in projects. Out of 54 respondents 61.1% indicated that health or safety issues is the most significant pathogen affecting the successful completion of project. However only 20.4% of respondents indicated that health or safety issues are significant pathogens that affect the successful completion of projects in local assemblies.

Response	Frequency	Percent
Neutral	7	13.0
Significant	44	81.5
Most Significant	3	5.6
Total	54	100.0

Table 4.9.5: Project Financial constraints

Table 4.9.5 presents information regarding the level of significance of project financial constraints. About 81.5% of respondents indicate that project financial constraint is significant while 5.6% of the respondents indicate that project financial constraints serve as the most significant pathogen affecting successful completion of projects.

Response	Frequency	Percent
Less Significant	12	22.2
Neutral	20	37.0
Significant	13	24.1
Most Significant	9	16.7
Total	54	100.0

Table 4.9.6: Legal issues/ Contract inconsistencies

Source: Field Survey, 2019

Table 4.9.6 provides information on the level of significance of legal issues/contract inconsistencies. About 37% of respondents were neutral while 22.2% indicated that legal issue is a less significant factor in the successful completion of projects at the assembly level. However 16.7% of respondents indicated that legal issues are most significant in the completion of projects.

Table 4.9.7: Political Interference

Response	Frequency	Percent	
Less Significant	6	11.1	
Neutral	5	9.3	
Significant	31	57.4	
Most Significant	12	22.2	
Total	54	100.0	

Table 4.9.7 represents information on the level of significance of political interference as a pathogen to success of project completion at the local assembly level. Out of 54 respondents 57.4% indicate political interference as the significant pathogen that hampers the success of project completion. Meanwhile 22.2% of respondents indicated political interference as the most significant pathogen that affect successful completion of projects.

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Response	Frequency	Percent
Less Significant	7	13.0
Neutral	23	42.6
Significant	14	25.9
Most Significant	10	18.5
Total	54	100.0

Source: Field Survey, 2019

Table 4.9.8 represents the significance level of land litigation issues in project management at the local level. Out of 54 respondents 25.9% showed that land litigation issues are significant pathogens of project completions at the assembly level. Also 18.5% of respondents indicate that land litigation issue is the most significant pathogen that hampers the smooth completion of project at the assembly level.

Response	Frequency	Percent
Less Significant	23	42.6
Neutral	13	24.1
Significant	15	27.8
Most Significant	3	5.6
Total	54	100.0

Table 4.9.9: Chieftaincy/ Cultural issues

Table 4.9.9 provides information on the level of significance for chieftaincy/cultural issues as a pathogen for success in project completion. Out of 54 respondents only 5.6% indicated that chieftaincy issue is the most significant pathogen that affect the successful completion of projects. However 27.8% of respondents indicated that chieftaincy issues are significant pathogens that affect successful completion of projects at the assembly level.

 Table 4.9.9.1: Summarized Statistics on the most Significant challenges affecting success in project completion

Items	R	Mean	Std.
			Deviation
Health or safety issues	$1^{st}$	4.58	.629
Project Financial constraints	$2^{nd}$	3.93	.428
Political Interference	$3^{rd}$	3.91	.875
Land Litigation issues	$4^{th}$	3.50	.947
Legal issues/ Contract inconsistencies	$5^{\text{th}}$	3.35	1.012
Chieftaincy/ Cultural issues	$6^{\text{th}}$	2.96	.971
Valid N (listwise)	54		

Source: Field Survey, 2019Mean Scale: 1=Not Significant2= Less Significant3=Neutral4= Significant5= Most SignificantSD Scale: SD<0.5= Closely spread data</td>

Table 17 provides summarized statistics on the most significant challenges affecting success in project completion. The mean value of 4.58 showed that respondents rank health or safety issues

as the most significant challenge affecting success in project completion. Also the mean value of 3.93, 3.91 and 3.50 showed that Project Financial constraints, Political Interference and Land Litigation issues are significant pathogens to construction project completion in the local assemblies. The standard deviations showed that responses are widely spread across the mean.

# 4.5 Descriptive Statistics on Appropriate solutions (Antidotes) needed to curb construction challenges

This section provides information on appropriate solutions or antidotes needed to curb construction challenges. Table 4.9.9.2-26 provides specific and detailed information on appropriate solutions needed to curb construction challenges. Table 27 however provides a summarized information on which solution or antidote is most appropriate in dealing with the challenges identified.

Response	Frequency	Percent
Neutral	5	9.3
Appropriate	5	9.3
Most Appropriate	44	81.5
Total	54	100.0

Table 4.9.9.2: Funding partners are required to minimize financial constraints in construction projects

Source: Field Survey, 2019

Table 4.9.9.2 provides information on whether finding funding partners to finance a project is the most appropriate antidote to project challenges. Out of 54 respondents 81.5% of respondents indicated that one of the most appropriate antidote to project pathogens at local assembly level is to engage Funding partners to minimize financial constraints in construction projects. Only 9.3% of respondents indicated this antidote as appropriate.

Response	Frequency	Percent
Not Appropriate	3	5.6
Less Appropriate	6	11.1
Appropriate	30	55.6
Most Appropriate	15	27.8
Total	54	100.0

Table 4.9.9.3: Develop and publish clear standards for the project

Table 4.9.9.3 provides information on whether setting and making known the standards for projects are most appropriate antidotes to the challenges outlined in this study. Out of 54 respondents 55.6% indicated this antidote as appropriate while 11.1% indicated it was less appropriate. However 27.8% indicated that it was most appropriate.

Response	Frequency	Percent
Neutral	5	9.3
Appropriate	10	18.5
Most Appropriate	39	72.2

Table 4.9.9.4: Mount standby health units on site

Source: Field Survey, 2019

Total

Table 4.9.9.4 indicates the level of appropriateness on mounting standby health units on site as an antidote to solving the challenges thereof. About 72.2% of respondents indicated that mounting standby health care units on site is the most appropriate antidote to the pathogens of project construction at the local assembly level. Only 18.5% of respondents indicated this antidote as appropriate for curbing the pathogens.

54

100.0

Response	Frequency	Percent
Not Appropriate	3	5.6
Less Appropriate	5	9.3
Neutral	10	18.5
Appropriate	27	50.0
Most Appropriate	9	16.7
Total	54	100.0

Table 4.9.9.5: Engage in negotiations to remove high cost of materials

Table 4.9.9.5 provides information on whether engaging in negotiations to remove high cost of materials can curb some project construction pathogens. Only 50% of respondents indicated that this antidote is appropriate to curb some project construction pathogens.

Table 4.9.9.6: Engage locals in educating them on the importance of the ongoing construction project

Responses	Frequency	Percent
Neutral	27	50.0
Appropriate	27	50.0
Total	54	100.0

Source: Field Survey, 2019

Table 4.9.9.6 showed that 50% of respondents regard the antidote of engaging and educating locals as appropriate to curbing the construction project pathogens at the local assembly level.

Responses	Frequency	Percent
Not Appropriate	6	11.1
Less Appropriate	7	13.0
Neutral	14	25.9
Appropriate	27	50.0
Total	54	100.0

 Table 4.9.9.6: Promote Forestry and Tree Planting

Table 4.9.9.6 showed that 50% of respondents indicate the antidote of promoting forestry and Tree planting as appropriate in curbing construction project pathogens. Only 11.1% indicated that this antidote was not appropriate.

Response	Frequency	Percent
Not Appropriate	3	5.6
Less Appropriate	23	42.6
Neutral	21	38.9
Appropriate	7	13.0
Total	54	100.0

Table 4.9.9.7: Reduce external loans/credit in funding local projects

Source: Field Survey, 2019

Table 4.9.9.7 showed responses that reducing external loans in funding local projects was the less appropriate antidote to curbing the construction project pathogens. Only 13% indicated this antidote as appropriate.

Response	Frequency	Percent
Not Appropriate	6	11.1
Less Appropriate	38	70.4
Neutral	5	9.3
Appropriate	5	9.3
Total	54	100.0

Table 4.9.9.8: Legal education in project management should be sought after

Table 4.9.9.8 showed that 70.4% of respondents indicate legal education in project management as the antidote to local construction project pathogens. Meanwhile 9.3% indicate that this antidote was appropriate.

Table 4.9.9.9: Politicization and political interference of social projects should be discouraged in the media space

Response	Frequency	Percent
Less Appropriate	15	27.8
Neutral	9	16.7
Appropriate	26	48.1
Most Appropriate	4	7.4
Total	54	100.0

Source: Field Survey, 2019

Table 4.9.9.9 showed that only 7.4% of respondents appreciate politicization and political interference of social projects as most appropriate antidote to curbing local construction project pathogens. Also 27.8% of respondents regard this antidote as less appropriate.

Items	Ν	Mean	Std.
			Deviation
Mount standby health units on site	$1^{st}$	4.69	.434
Funding partners are required to minimize financial constraints in construction projects	2 <sup>nd</sup>	4.53	.524
Develop and publish clear standards for the project	$3^{rd}$	3.89	1.110
Engage in negotiations to remove high cost of materials	$4^{th}$	3.63	1.051
Engage locals in educating them on the importance of the ongoing construction project	5 <sup>th</sup>	3.50	.505
Politicization and political interference of social projects should be discouraged in the media space	6 <sup>th</sup>	3.35	.974
Promote Forestry and Tree planting	7 <sup>th</sup>	3.15	1.035
Reduce external loans/credit in funding local projects	$8^{th}$	2.59	.790
Legal education in project management should be sought after	9 <sup>th</sup>	2.17	.746
Valid N (listwise)	54		

Table 4.9.9.9.1: Summarized Statistics on the most Appropriate solutions (Antidotes) needed to curb construction challenges

Source: Field Survey, 2019 Mean Scale: 1= Not Appropriate 2= Less Appropriate 3=

Neutral 4= Appropriate 5= Most Appropriate SD Scale: SD<0.5= Closely spread data

Table 4.9.9.9.1 showed a summarized response rate regarding the most appropriate antidote needed to curb construction challenges at the local assembly level. The mean value of 4.69 showed that respondents generally agree and consider most appropriate antidote that standby health units ought to be mounted at construction sites to deal with health challenges during construction projects at the local level. Respondents also consider Funding partners most appropriate antidote to dealing with financial constraints of construction projects at the local assembly level. Setting standards for projects, engaging in negotiations and educating locals about ongoing projects are all considered appropriate antidotes to construction project pathogens at the local level.

#### 4.6 Discussion of Major Findings

This section provides a thorough discussion in line with the specific research objectives. Each discussion will be compared with extant studies to provide a view point about the current study obtained in this study.

#### Challenges faced during the construction of social amenities in local assemblies

The analysis of the study established that there are health and safety pathogens faced during the construction of social amenities in local assemblies. The analysis showed that respondents generally agree that there are often not enough protective wears available for construction field workers. This is the first ranked challenge which support the view that there are health and safety challenges faced in local assemblies. Also under health and safety challenge the second ranked challenge showed that respondents generally agree that there is no availability of health point on construction site. This findings obtained in this study is highly consistent and synonymous to the study conducted by other scholars. For instance, Ofori-Kuragu, Baiden and Badu (2017) assessed the transformation of construction works in Ghana. The study identified that most field workers are observed not to have put on the appropriate apparel for construction purposes. While this finding is consistent with the current study another finding by Ofori-Kuragu, Baiden and Badu (2017) showed that there are serious health and safety issues that have not being attended to in most construction sites in Ghana such as contractors performing excavations without nose mask and visitors not given helmet and protective apparels.

The second set of challenge identified in the study was financial constraint pathogens faced during the construction of social amenities in local assemblies. From the analysis respondents generally agree that the internally generated funds are often not enough to embark on huge road projects. This represent the first ranked financial constraint pathogens during construction of social amenities in local assemblies. From the analysis also it was found that there is Lack of financial support for project supervision. This represent the second ranked pathogen faced during construction of social amenities. The third ranked factor is the delay in the honoring of payment certificates. Some scholars however have stated that some challenges affect the smooth completion of social projects in various localities in Ghana. For instance, Ahadzie and Amoa-Mensah (2010) indicated that the project management practice for Ghana's housing construction is largely fraught with financial challenges of investors and stakeholders so that affordable buildings will be put up for the middle and lower class. Hence, Ahadzie and Amoa-Mensah (2010) indicated that financial constraint is a key challenge in project construction of social amenities in Ghana. This finding by Ahadzie and Amoa-Mensah (2010) is strongly consistent with the findings of this study.

#### Most significant challenge affecting success in project completion

From the analysis the most significant challenges affecting success in project completion was also identified. The study measured health or safety issues as the most significant challenge affecting success in project completion. The analysis showed that Project Financial constraints, Political Interference and Land Litigation issues are significant pathogens to construction project completion in the local assemblies. Most scholars in the era of 21<sup>st</sup> century project management have agreed to a large extent to the significant challenges affecting success of project completion. As already highlighted Ahadzie and Amoa-Mensah (2010) indicates financial issues/constraints as the most significant challenge affecting success in project completion. Other scholars such as Ofori (2015) have listed a number of factors that significantly affect success in project completion. Ofori

litigations, political interference, project financial constraints as well as political interference. Therefore aspects of this finding is largely consistent with the results obtained by Ofori (2015). Aspects of Ahmad, Hatira and Valva (2014) study on how can the construction industry in Ghana become sustainable? Also outlined that political interference and health construction issues should form the vital part regarding the reasons why projects are not completed timely in Ghana.

#### The most appropriate solutions needed to curb construction project challenges

From the analysis conducted there was a clear understanding that some antidotes are most appropriate for curbing construction project pathogens. It was found that respondents agree and consider *most* appropriate the antidote that standby health units ought to be mounted at construction sites to deal with health challenges during construction projects at the local level. It was also revealed in the analysis of the study that 'Funding partners' is one of the *most* appropriate antidote to dealing with financial constraints of construction projects at the local assembly level. Setting standards for projects, engaging in negotiations and educating locals about ongoing projects are all considered appropriate antidotes to construction project pathogens at the local level. Various studies have indicated and have outlined similarly some appropriate solutions needed to curb construction project challenges in Ghana and beyond.

According to Akwei (2015) after investigating Challenges in Processing Payment for Road Maintenance Works in Ghana it was found that the most appropriate solution to poor cash flow during project execution is for stakeholders to share the cost or partner other project funders. Also Hillebrandt (2016) after investigating problems of larger local contractors and providing remedies it was outlined that health care should be the most appropriate service delivered to project managers. After Constantino, Marrengula and Ubisse (2015) assessed the Challenges and the Way Forward for the Construction Industry in Mozambique they arrived at a similar view provided in this research where health care and financial supporters form the salient part of curbing construction project challenges.

#### **CHAPTER FIVE**

#### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Introduction**

This section of the study provides information necessary to complete the project. This section highlights the summary of the entire research project, the conclusion and the recommendations. The conclusion of the study states the specific research findings as have been found. The recommendation of the study provides suggestions and solutions to the findings of the study.

#### **5.2 Summary of Findings**

The summary of this research was provided for each research specific objectives so that the overall aim of the study may be achieved. The summary of findings are highlighted below;

The study summarize that there are health and safety pathogens faced during the construction of social amenities in local assemblies. The study concludes generally that there are often not enough protective wears available for construction field workers. This is the first ranked challenge which support the view that there are health and safety challenges faced in local assemblies. Also under health and safety challenge the second ranked challenge showed that generally there is no availability of health point on construction site.

The second set of challenge identified in the study was financial constraint pathogens faced during the construction of social amenities in local assemblies. The study further summarize that the internally generated funds are often not enough to embark on huge road projects. This represent the first ranked financial constraint pathogen during construction of social amenities in local assemblies. It is also found that there is Lack of financial support for project supervision. The study also concludes that health or safety issues is the most significant challenge affecting success in project completion at the local assembly level. The analysis showed that Project Financial constraints, Political Interference and Land Litigation issues are significant pathogens to construction project completion in the local assemblies.

The study summarizes that the *most* appropriate antidote is that standby health units ought to be mounted at construction sites to deal with health challenges during construction projects at the local level. It was also revealed in the analysis of the study that 'Funding partners' is one of the *most* appropriate antidote to dealing with financial constraints of construction projects at the local assembly level. Setting standards for projects, engaging in negotiations and educating locals about ongoing projects are all considered appropriate antidotes to construction project pathogens at the local assembly level.

#### **5.3** Conclusion

The findings of this research have been adequately achieved and specific methods were used to arrive at the aforementioned findings. All in all, the researcher opines that financial constraints remain the beacon of problems in Ghana's construction industry. Once financial constraints are sorted over 70% of the construction industry's woes may have been dealt with. Therefore a frantic effort must be made towards the reconstruction of the financial management in the construction industry of Ghana.

The main aim of this research was to explore the pathogens and antidotes in relation to construction projects ongoing at the local assembly level of Ghana. It is theorized that these theses have come to the fore because of the limited attention given to this sector of project management. Another reason for the coming into being of this research is the fact that there are limited current findings existing from the Ghanaian scholarly perspective. In order that the aim of this theses will be realized some objectives were outlined and given maximum consideration. The following represent the key objective of the study. They include;

-To explore the challenges (in health/safety issues, project delays & financial constraints) faced during the construction of social amenities in local assemblies

-To ascertain the most significant challenge affecting success in project completion

-To assess the most appropriate solutions needed to curb these challenges in construction projects

These specific objectives provides specific guidelines to the completion of the project. One key significance of this study is that it will inform key players in the project management industry what ought to be done in dealing with the challenges associated with construction projects in Ghana at the local assembly level of governance. In order that some explanation is given to the pathogens and antidotes of construction projects in local assemblies some specific theoretical underpinnings were discussed. Also empirical literature review was done to give a small background to the findings deduced from already conducted study in this same area. Also methodological steps were followed to ensure that all the research philosophies are appropriately followed. The study adopted the deductive or quantitative approach to research.

This approach helped the research to provide specific steps that provide numeric coding to views and opinions expressed by respondents. The data gathering was conducted with the help of structured questionnaires with specific sections tailored to the objectives of the study. The simple random sampling technique as well as the convenience sampling techniques were used to obtain 54 respondents from specific departments of various local assemblies in Greater Accra region. After about few weeks of data gathering the response rate was more than 95% which provides some level of confidence in the data obtained.

After data was gathered IBM SPSS (version 23) was used to deduce the right analysis for the specific objectives outlined. Each of the objectives was given high priority and results were presented in tables and charts. Discussion and examination of the research findings in line with previous studies was outlined and highlighted. The conclusion and recommendations were given.

#### **5.4 Recommendation**

After conclusions are outlined the study provides some vivid recommendations to the findings obtained. The recommendation of the study are as follows;

The study further recommends that since there are health issues associated with project constructions at the local level a mandatory check-up policy should be instituted so that staff in the project management sector are well looked after without the local assemblies haven to deal with unexpected health complications on site.

Since it was also found that protective wears for field workers was inadequate, the local assembly should partner and share the responsibility of providing the staff protective clothes to secure themselves from any seen and unforeseen hazards.

The study recommends that some pathogens of construction projects at the local assembly level should be dealt with head-on and with the needed expertise to combat such pathogens. The timely response to the problems in construction project is very relevant since the 80-20% principle of

Pareto indicates that 80% of the problem is realized from 20% technique employed.

#### **5.5 Recommendations for Further Studies**

For further studies this current study recommends that the target group of this research should be broadened to include other local assemblies in Greater Accra not just the few sampled. Further studies should also highlight the causes of the challenges faced by project managers at the local assembly level.

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# KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY TOPIC: EXPLORING THE PATHOGENS AND ANTIDOTES OF CONSTRUCTION PROJECTS AMONG SELECTED MUNICIPAL ASSEMBLIES IN GREATER ACCRA

This current research aims at highlighting the problems and solutions confronted by project managers in constructing projects in the area of social amenities in selected localities in Greater Accra. Please your assessment and onward responds to these few questions will realize the goal of attaining the research objectives set out. You are assured that any information provided would be used for academic purposes only and will be held strictly confidential.

#### Please, tick the correct answer where applicable.

#### **A: PERSONAL DETAILS OF RESPONDENTS**

- 1.. Gender:
  - a) Male b) Female

#### 2.. Educational Background:

a) HND b) Undergraduate Degree c) Masters' Degree d) Professional certificate e) If other (please specify).....

#### 3. Respondent's department?

- a) Administration
- b) Planning/construction department
- c) Finance/Accounting/Treasury
- 4. How long have you been working with this organization?

a) less than a year b) 1-3 years c) above 3 years

B: Challenges (Pathogens) faced during the construction of social amenities in local assemblies

Answer by ticking in the empty boxes below where applicable 1=Strongly disagree 2= disagree 3= Neutral 4= agree 5= Strongly agree in the empty boxes below

	1	2	3	4	5
Health/Safety issues					
5)There are often not enough protective wears available for construction field workers					
6)Respiratory and nasal issues are recorded every time after on-field					
construction					
7)There is no availability of health point on construction site					
8)There are no briefings on safety tips before work begins					
9)It is not mandatory for staff to go for health checkup before a major project commence					
Financial Constraints					
10)There are delays in honoring payment certificates					
11)There is huge underestimation of material cost					
12)The internally generated funds are often not enough to embark on huge					
13) Lack of financial support for project supervision					
14)There are difficulties in accessing bank credit					

### C: Most significant challenges affecting success in project completion

Answer by ticking in the empty boxes below where applicable 1=Not Significant 2= Less Significant 3= Neutral 4= Significant 5= Most Significant in the empty boxes below

	1	2	3	4	5
15)Health or safety issues					
16)Project Financial constraints					
17)Legal issues/ Contract inconsistencies					
18)Political Interference					
19)Land Litigation issues					
20)Chieftaincy/ Cultural issues					

### D: Most Appropriate solutions (Antidotes) needed to curb construction challenges

Answer by ticking in the empty boxes below where applicable 1= Not Appropriate 2= Less Appropriate 3= Neutral 4= Appropriate 5= Most Appropriate in the empty boxes below

	1	2	3	4	5
21)Funding partners are required to minimize financial constraints in construction projects					
22)Develop and publish clear standards for the project					
23)Mount standby health units on site					
24)Engage in negotiations to remove high cost of materials					
25)Engage locals in educating them on the importance of the ongoing construction project					
26)Promote Forestry and Tree planting					
27)Reduce external loans/credit in funding local projects					
28)Legal education in project management should be sought after					
29)Politicization and political interference of social projects should be discouraged in the media space					