

SJAH Vol. 1, Issue 7, Page: 111-123,
June 2019, ISSN: 2676-2803
Impact Factor (SJIF): 9.305
Journal DOI: 10.15373/22501991
International Peer Reviewed &
Refereed Journal with Indexed Journal
Platforms

web: www.damaacademia.com
email: editor@damaacademia.com
[Download from Journal site](https://damaacademia.com/sjah/)
<https://damaacademia.com/sjah/>

Author(s)

Prince Elisha Nsiah-Asamoah
School of finance & Financial Mgt.
Business University of Costa Rica
Email: princeelishansiah@gmail.com

Correspondence

Prince Elisha Nsiah-Asamoah
School of finance & Financial Mgt.
Business University of Costa Rica
Email: princeelishansiah@gmail.com

Assessment of Causes, Effects and Solutions to Abandoned Building Projects in Ghana

Prince Elisha Nsiah-Asamoah

Abstract

In Ghana today, the landscape is littered with abandoned building projects. Therefore, the research work focuses critically into the causes and effects of abandoned building projects which have littered the Ghanaian landscape. Every nation aspiring to attain development must utilize its resources effectively; develop its industrial base, energy sectors among other things (United Nation, 2006). Unfortunately, Ghana has suffered a set-back in following these principles to development. Every year, government announces a huge amount of money to be spent on capital projects, only for all to be put to waste as a result of corruption (e.g. embezzlement), leaving the projects abandoned. Also, both the public and the private sectors experience the abandonment of building projects which makes it pronounced, in the harsh economic climate, in developing countries like Ghana. As a result of the involvement of the private sector, this has threatened job opportunities, rendering our economic development effort to suffer continuous set-back. Solving this problem, might really be of help and having a gross contribution to the economic development.

Keywords: Abandoned Building Projects, Project Failure, Project Completion

1.0 INTRODUCTION

The demand for and provision of housing is as old as the history of man. Due to the harsh weather condition, wild animals, need for security and privacy, it became necessary for man to provide shelter for himself and members of his family. Though, the type of houses built in those historical times, served its primary purpose of shelter but lacked the modern amenities, as a result of underdevelopment in the society (i.e. society with no industry). Construction processes were limited to the locally available materials, labour and technology. However, with civilization and technological advancement, man was exposed to a new life (i.e. access to modern amenities). Therefore, in recent times, there are various types of houses as a result of the numerous types of designs by the architects and the houses not only serve the primary purpose of shelter alone, but also have the modern amenities. There are different types of materials, plants and equipments produced to suit the modern constructions. There are also professionals like Architects, Builders, Quantity surveyors, Engineers, among others, trained in their respective field for proper execution of projects.

Also, we have the skilled and unskilled labours, who contribute grossly towards the execution of a project. All these are as a result of civilization and technological advancement which have impacted the construction industry. Hence, the construction industry is regarded as one of the largest industries in the world, as it contains the highest number of people, ranging from the clients, professionals, skilled labours, unskilled labours and suppliers of different building materials etc. Also, we have the skilled and unskilled labours, who contribute grossly towards the execution of a project. All these are as a result of civilization and technological advancement which have impacted the construction industry. Hence, the construction industry is regarded as one of the largest industries in the world, as it contains the highest number of people, ranging from the clients, professionals, skilled labours, unskilled labours and suppliers of different building materials etc.

Despite all these, abandoned building projects still litters our society, causing problems like security threats, promotion of illegal activities, unemployment, waste of human resources, poor landscaping, etc. Therefore, I will start by defining the abandonment of building project, as an act of giving up or stopping a building project with no intention of returning to it. Nobody initiates a building project for abandonment, because an uncompleted building project is always a source of sorrow to its owner, an unfulfilled hope and aspiration - a failure to achieve a purpose (Olateju, 1997). Unfortunately, in Ghana, when projects are abandoned there are no conscious efforts to ensure completion, instead, new projects are embarked upon, putting money, materials, time and effort to waste, and also, causing problem to the nation as whole. In Ghana, the situation of abandoned projects is further compounded by the continuous award of new contracts which eventually suffers the same fate (Frisch, 1996). We must really lay emphasis on the issue of

abandonment of building projects, because, it creates a lot of problems for everyone, both within and outside the construction industry and even on the economy as a whole. Likewise, the resources required to execute the projects, which include: labour, equipment, time, material and money, are wasted and the accommodation problem remains unsolved. Therefore, this dissertation attempts to examine the causes, effects and possible solutions to abandonment of building projects in the Ghana.

2.0 LITERATURE REVIEW

According to Olapade & Anthony (2012), in Ghana today, the landscape is littered with abandoned buildings projects. They further stated that, abandoned building projects can be described as the project that has started at an earlier date, but the construction work stopped for one reason or the other. This phenomenon is not limited to building projects, also observable in; roads, industrial structures, bridges, factories, dams, electricity, and communication projects. According to Akindoyeni (1988), it is difficult to believe that projects conceived to meet some important needs could be abandoned without remorse in spite of the huge amount voted into it, depicting a worrisome practice over the last decades of Ghana's history. Akindoyeni (1988), continued by stating that, under normal conditions, neither the client nor the contractor would ever admit to the intentional suspension of construction project. He went further to state the aim and objective of construction development which is to satisfy definitive needs, either for accommodation, some physical facilities (water, energy etc.), transportation, communication or any other purpose essential to life and comfort of man. Studies by Kolawole (2006) have shown that a good number of building project initiated with good intentions are abandoned at different stages of the design and construction process. These form the antithesis of the development concept.

2.1 Parties Involved in Project Execution

In execution of any project, there are parties involved in one activity or the other, playing their roles from the inception stage to the completion stage and the parties involved include; clients, architects, builders, quantity surveyors, land surveyors, engineers, etc. According to Onwusonye (2002), who classified the parties into two groups, namely; Clients and the professional team.

2.1.1 Clients

A client is a person who uses the services or advice of a professional person or an organization (Oxford, 2005). Client; whether public or private, as the one who owns and finances the projects from own resources or from other sources of external financing (Onwusonye, 2002). Also, we should not forget that private clients can be an individual or partnership and most of their projects are for their own use. Likewise, for the public clients, this ranges from ministries, agencies of the federal government, down through states and local government entities, to a multiplicity of boards, commissions and authorities (Clough, 1982).

2.1.2 The Professional Team

A professional is a person with an approved standard of professional practice, high level of education and orientation. According to Wikipedia (2014), a professional is a member of a profession. The team also describes the standards of education and training that prepare members of the profession with the particular knowledge and skills necessary to perform the role of that profession. In addition, most professionals are subject to strict codes of conduct enshrining rigorous ethical and moral obligations. Professional standards of practice and ethics for a particular field are typically agreed upon and maintained through widely recognized professional associations. The architects, builders, engineers, quantity surveyors, land surveyors, etc. make up the professional team and due to the nature of the work, everyone has a major role to play in the construction industry, any omission in the efficient execution of project may lead to delay or abandonment of building projects.

2.2 Types of Contract in Construction Projects

In construction, there is also a legal backing guiding both the client and the professional team, which brought about the contract types in construction projects. Contract is an official written agreement. Contract can also be defined as a legally binding agreement made between two or more parties, by which rights are acquired by one or more acts or forbearances on the part of the other(s). It can also be defined as an agreement between two or more parties which is intended to have legal consequences. The agreement been referred to in the definitions means a meeting of minds, that is, the parties agreed together about the same thing. The definition also emphasized that, the parties to the contract must intend that their agreement must be enforceable and binding the parties. Although, not every agreement is a contract but every contract is an agreement. There are various types of contracts commonly in use, which include;

Schedule of Rates Contracts: This is one under which the amount that is payable to the contractor is calculated by applying an agreed schedule of rates to the quantity of work that is actually performed.

Lump Sum Contracts: This is where a specific sum of money is stated in the contract as payment for building works. It is also called *A FIXED FEE*.

Cost Reimbursement: This can also be called *PRIME COST CONTRACT*. This is a type of contracts which provide for payment of allowable incurred costs, to the extent prescribed in the contract. According to Nwosu (2003), this is where the contractor is reimbursed, the total cost incurred plus allowance or fees for his services to cover overheads and profits. In choosing a suitable type of contract, the nature and size of the project must be considered.

2.3 Causes of Abandoned Building Projects

There is a large number of studies which discussed the causes and effects of abandoned building projects. The causes of abandoned construction projects identified from existing literatures can be broadly grouped into five categories, that is .1) mismanagement, 2.) unfavourable government policies, 3.) Inefficient public delivery system, 4.) unfavourable economic conditions and 5.) Financial problems. According to Ewa (2005), who identified that many projects are conceived without a well-defined objective in mind, poor costing, no specific start and end points, poor documentation of contract, lack of performance criteria and properly developed monitoring and evaluation template by supervising organizations, fluctuation in government policies, lack of planning, project mismatch, over-ambitious projects, political influence in establishing projects, disbursement constraints, failure for successive regimes to issue appropriate white papers on failed contracts and granting of injunctions under *ex parte* motions by Ghanaian courts.

Akuta (2011) stated that, policy continuation is something lacking and contributing to project abandonment in Ghana. Once a new government takes over power, they usually abandon previous government policies or programmes. In *The Abandonment of Building Projects in Ghana- A Review of Causes and Solutions* by Olapade Olalusi and Anthony Otunola (2012), making reference to Oyelola (2010) and Makalah (2008), they gave reasons for failed construction projects, which are: incorrect estimation; lack of available skilled personnel; inadequate planning; poor risk management; misunderstanding of work requirement; corruption and communication gap among the personnel. According to Ugofunle (2007), the factors leading to abandoned projects are: Economic factors, Human factors and Natural factors. I will also include the Social factors, which makes it four (4) factors leading to the causes of abandoned projects.

2.3.1 Economic Factors

The economic factors can be said to be one of the factors causing the abandonment of building project, considering Ghana as a developing country, whereby the economic factors have contributed grossly to the subject matter. In recent times, a large number of studies have shown that inflation has been one of the major economic factors affecting the abandonment of building project. Also, there are other factors like: Lack of policy continuation, Corruption and Inadequate or lack of budgetary allocations. Inflation is an increase in price of goods and services. Therefore, increase in goods and services can cause abandonment of building project, since, it will affect the overall estimated cost of the project, threatening the client's finances. Besides, inflation in Ghana is an unforeseen occurrence and there are factors that contribute to the inflation, factors include: Massive importation of goods and services, Imbalance in demand and supply, and Foreign exchange fluctuation.

Lack of policy continuation; this simply means the inability of a government to continue a legacy been laid by the previous government. It is observed that, for every change in government, there is bound to be changes in one form or the other. Though, it is said that there is continuity in government but probably Ghana is an exception. Looking at the changes over the years by different governments, as said earlier, according to Akuta (2011), we will see that the lack of policy continuation has really contributed to the abandoned projects.

Likewise, corruption and the inadequate or lack of budgetary allocations are also major factors contributing to the subject matter, because money to be used for projects have been embezzled or been misused as a result of the level of corruption in the country and lack of true leaders. This has also led to the inadequate or lack of budgetary allocations, forgetting the fact that growth in the construction industry indicates the economic condition of a country because construction industry is one of the largest industries in the world.

2.3.2 Human Factors

It was observed that in the abandonment of building projects, humans also have hand in it, probably due to mistakes. Though, there is no perfection where there are humans, therefore, mistake is inevitable and the construction industry is not an exception. The human factors will be looked at on the basis of the act of the participants in the industry, which are broadly classified under three (3) groups, namely:

- Clients.
- Contractors.
- Consultants.

2.4 Causes of Abandoned Building Project by the Client

The role of the client must be analyzed to know how the abandonment of a project can be caused by the client. Knowing full well that, all participants in the construction industry have a role to play. Fund is an important factor that provides both the private and public sectors the required provision to embark on project; therefore, adequate financial provision must be made before any project could be embarked upon. Any lapse in this regard might lead to total abandonment of the project. Therefore, it is the role of the client to provide sufficient fund for the project. According to Barwell (1987), clients do not consider the availability of funds before the award of contract which in turn lead to project abandonment knowingly or unknowingly.

Furthermore, design improvement and modification by the client can cause project suspension or abandonment, that is, after which the project has been embarked upon, the client decided to make some vital changes or modifications, which can cause delay or abandonment of the project. Ugofunle (2007) stated that, cases where there is a direct contract between the contractor or the sub-contractor and the client, the Architects' authority is weakened and his instruction might not be treated the way it should be and this may affect the successful completion of the project. Also, the death of the client is also a major cause of the project abandonment. Akindoyeni (1988) stated that, cases of death, whereby the client (i.e. an individual) dies intestate, and the project may be suspended or completely abandoned.

2.5 Causes of Abandoned Building Project by the Contractor

A contractor is a person or firm who undertakes to complete a building project in accordance with the contract document on behalf of the employer or the client (Nwosu, 2003). Despite the contractor's professional skills, he is also a party to project abandonment. Ugofunle (2007), any failure by the contractor to observe his full professional responsibility may lead to suspension or delay of projects. There are factors that can cause abandonment of projects by the contractor. According to Fugar and Agyakwah-Baah (2010), the availability of materials on site at the right time and in the right quantities is directly related to the ability of the client to honour certificates as when due. Liquidity problems make it difficult for contractors to procure materials. Again, materials suppliers are reluctant to supply materials on credit, because contractors will normally pay suppliers only when they themselves are paid. These can cause delay of the projects.

Fugar and Agyakwah-Baah (2010), also continued by saying, the extensive use of major equipment is rare on many projects, where equipment is required; the contractors have the option to hire. In the rare cases where some plants and equipments are owned by a contractor, breakdown is a major delay factor, perhaps, owing to old age or lack of planned maintenance. I observed that plant and equipment procurement is an important factor, because in an extreme case, where a project requires a special plant and it seems impossible or there is a delay in procurement, this will lead to the delay and at times, abandonment of the project. Therefore, it is advised that the contractor should make or prepare a good detailed plant and material schedule.

According to Seeley (1984), contractors become insolvent as a result of the following: Under or overvaluation of work, Bad estimating and planning, Accumulation of undecided claims, and Delay in payment to contractors arising from non-settlement of final accounts. Incentive giving to employees, such as good holiday pay, long service allowance, extra pay for shift work, uncomfortable, dirty and unhealthy conditions, good sick pay, free lunch, free education for managers' children, low interest loan, advice on personal affairs, death benefits to dependants etc. are basically categorized into financial and non-financial incentives and any contractor that fails to provide reasonable level of motivation is automatically exposing the workers to exhibit nonchalant attitude to work, which may drag down the progress of work and ultimately lead to abandonment of the projects (Nwume, 1989). Ugofunle (2007), other factors that can cause abandonment of projects by a contractor is in a situation where such contractor absconds and lack of man or machine capacity to perform.

2.6 Causes of Abandoned Building Project by the Consultants

This is classified into two (2) categories, namely; The Architects and the Engineers. The above professionals can cause the abandonment of building projects. Each of these professionals will be examined.

2.6.1 Abandonment of Projects Caused by Architects

In construction industry, the architect is regarded as the leader of a building team and he is usually the first to be contacted. He has some obligations, in which failure to do them can threaten a project. Part of the architect's

obligations is to design according to the briefing of the client and also know the financial capacity of the client in order to guide his design, so that it may not be too expensive or unaffordable for the client. Failure in this regard might lead to project suspension or ultimately lead to abandonment.

Also, complexity of the drawing and availability of building materials must be into consideration by the architect, because if the drawing is too complex, build-ability becomes a major problem and there are possibilities where special plants and equipments will be required, delay in procurement of the plants and equipments can also affect the successful completion of the projects. In the specification of the architects, availability of building materials must be considered, because unavailable or scarce building materials can cause delay of the projects and affect the progress of work. In the submission of Onwusonye (2002), the architect must avoid ambiguity as much as possible. Such architectural drawings must take into consideration factors like build-ability, maintainability, for these factors, if ignored during the drawing stage by the architect, may adversely affect the successful completion of projects.

2.6.2 Abandonment of Projects Caused by Engineers

In building projects, the structural engineer is one of the most important people among the consultants and failure in their duty may lead to suspension of the projects. A structural engineer provides the structural drawings and details for the project and lateness in the submission of the drawing can affect the successful completion of the projects. Likewise, proper supervision of the structural work must be adequately carried out, because this can also form the basis of project delay or suspension as a result of error committed by the contractor, when there is lack of supervision. Therefore, late submission of structural drawings and lack of supervision of structural work must be checked to avoid project delay or suspension and which can eventually lead to abandonment of the projects.

2.7 Natural Factors

This is also a factor we cannot neglect irrespective of the economic factors or human factors; they can render a site abandoned. Again, this is a factor we do not plan for; they come unexpectedly and disrupt the purpose of work. Considering Ghana, whereby the rate of natural disaster is low, unlike other countries where they witness tsunami, volcano, earthquake, typhoon, etc. In Ghana, flood is a major disaster, which cannot be easily predicted or detected by any site investigation or feasibility studies; it is disastrous and also destroys activities on site, which may lead to suspension and at times total abandonment of the projects. Also considering the soil condition and topography which are the geographical factors of abandoned building projects, the fact that they are unpredictable forms the basis of their gross contribution to the abandonment of building projects. Popoola(1981), cited in Ugofunle (2007) point out that “accident in the course of work are major area of concern. Factors considered under these are loss or damage, due to fire, lightening, explosion, bursting or overflowing of water banks, sudden collapse of parts of structures may lead to eventual delay or suspension of construction work.

2.7.1 Social Factors

Social factors include; project enforcement and improper need analysis. Project enforcement; this is basically on the part of the government, whereby the community interest is not their concern and for a project to be successfully executed, the community or community members must have initiated it. Imagine, constructing a recreational centre in a rural environment or community, whereby good health care services and learning centre would have been the best. You will agree with me that, such a project is likely to be abandoned. Hanachor (2010) quoted in Hanachor (2012) stated that “development project undertaken in the spirit of imposing our will on others and getting them see the folly of their way and the wisdom of our counsel invariably meet with resistance”. This account for the failure or abandonment of most federal and state projects in Ghana.

Improper need analysis; every project is meant to meet a particular need, either for residential purpose or business purpose, but in a situation where there is no proper need analysis, the project is likely to be abandoned. According to Hanachor (2012), any choice of project that did not represent the need of the majority of the members of the community is already heading for abandonment. In the submission of Hanachor (2012), lack of social analysis of a project; development projects which ignores the traditional values, and social organization of the intended beneficiaries, has a low success prospect and could be abandoned. No matter how important and most desired a project may be, to the members of a community, if the project goes against the cultural practices of the community, the project could be abandoned. This shows that social analysis of a project must be considered to avoid abandonment.

2.8 Effects of Abandoned Building Projects

When a project is abandoned, the effect is being felt in one way or the other; effect on the clients, contractors, consultants and the economy.

2.8.1 Effects of Abandoned Building Projects on Clients

Timely completion of projects is one goal of the client. Furthermore, abandonment of building projects has a lot of effects on the client, not forgetting the fact that “the longer the project duration, the more the cost incurred”. Therefore, time is of essence, if the project is abandoned or not completed on time, the client is bound to incur more cost on high maintenance cost due to dilapidation, increase in interest rate on the money borrowed, increase in total cost of the project due to inflation and also loss of return on investment.

2.8.2 Effects of Abandoned Building Projects on Contractors

Failure in the timely completion of projects may lead to abandonment and also have an effect on the contractor. There will be loss of money, that is, paying a certain amount of money to the client which may likely be equivalent to the amount ought to be gained by the client, and it may be in form of liquidated damage. Also, loss of materials, as a result of wastage; loss of money, if plants and equipment’s were hired and if owned by the contractor, there will be loss of maintenance cost on plants and equipment’s. The abandonment of projects may also ruin or tarnish the contractor’s reputation and his company.

2.8.3 Effects of Abandoned Building Projects on Consultants

The consultants are professionals and one of their objectives is to make profits from the services rendered. The abandonment of projects affects their profits, mostly in post-contract fee. Again, they suffer loss of time and energy in preparing necessary documents and drawings. Also, their reputations and those of their companies can be tarnished.

2.8.4 Effects of Abandoned Building Projects on the Economy and Society

It is a fact that any choice of project must be able to meet human need. Therefore, the abandonment of a project, does not only have effect on clients, contractors and consultants, it also has a great effect on the economy and society. These effects include: Threatening of the society or community security, that is, an abandoned project is bound to harbour hoodlums, which can be a menace to the society; Poor landscaping, that is, an abandoned project makes the landscaping of the environment look unorganized and seems to be a sign of underdevelopment and Unemployment; the abandonment of projects can lead to unemployment, considering the fact that the construction industry is one of the largest industries with highest number of employment or work force and when a project is abandoned, unemployment becomes a threat. In the submission of Osemena (1987), listed the effects of abandoned projects on the national economy are: Waste and under-utilization of human resources; Reduction in employment; Increase in bankruptcy of firms, companies and incidence of bad debt; Effects on community and neighborhood aesthetics; Impact on public health and safety; Promotion of illegal activities; Liability as a result of uncompleted project; Problems arising from high accommodation rate and housing problems; Low turn-up of foreign investors due to total loss of trust in professional competence of local contractor and Declining property values.

3.0 METHODOLOGY

This chapter describes the methods that will be adopted to gather data relevant to the study. It examines the sources of data, population of the study, sample size, sampling techniques and the method of data analysis.

3.1 Sample Selection

The population consists of professionals within the construction industry, which includes; the clients, architects, builders, engineers etc.

3.2 Sample Size

Sample size is the total number of the population that has been selected, having the attributes of the study to be carried out (Ugofunle, 2007).

3.3 Adopted Sampling Technique

In this project, a total number of thirty (30) questionnaires were administered to relevant professionals in construction industry and clients within the State, in which twenty-seven (27) were retrieved. A convenient sampling technique was adopted for the construction firms and clients based in Osun State. This is due to the short distance

between the researcher and the concentration of the firms and considering the time frame and the state, knowing full well that there are quite a number of towns in the state. Therefore, three towns were chosen, as said earlier in the introductory chapter.

3.4 Research Instrument

The major source of data will be primary which will be from questionnaire administration to gather the required information from the clients and the professionals in the construction industry, so as to fulfill the aim and objectives. The questionnaire consists of 5% open ended questions and 95% close ended questions. There are three (3) parts in the questionnaire; part A gives a general particulars of the respondents, part B deals with the assessment of the factors responsible for the abandoned building projects and part C deals with the effects of abandoned building projects and likely solutions.

3.5 Data Collection and Analysis

Data as widely defined are raw facts. The raw fact was collected though questionnaire as earlier discussed. The type of administration adopted was self-administration. There two ways of administrating questionnaire which are direct contact and mailing. The administration method used was direct contact because it is the most reliable and to make the research to be realistic. The data will be collated on a scale 1-4 (but scale 1-5 can be used if need be, where 5= Null) and analyzed with Statistical Package for Social Science (SPSS) version 17. Descriptive statistics and inferential statistical procedures will be adopted, as well as Relative Important Index (RII).

4.0 DATA ANALYSIS

This chapter deals with the data analysis and the result collected from the questionnaire, through the survey that was carried out in the Ghana

4.1 General Particulars of Respondents

Table 4.1: Years of experience of the respondents

	Frequency	%
1-5	7	26
6-10	9	33.3
11-15	4	14.8
16-20	4	14.8
21-25	3	11.1
Total	27	100%

SOURCE: Personal field survey (2014)

The data above gave response on the years of experience of the professionals in the construction industry, showing that 33.3% of the respondents have spent 6-10 years, 26% of the respondents have spent 1-5 years, 14.8% of the respondents have spent 11-15 years and 16-20 years and 11.1% of the respondents have spent 21-25 years. Hence, the professionals have gained quite an experience based on the number of years of working.

Table 4.2: Types of company where the professional works

	Frequency	%
Private Company	14	51.9
Public Company	6	22.2
Partnership	2	7.4
Others (Specify)	5	18.5
Total	27	100%

SOURCE: Personal field survey (2014)

The analysis above shows that 51.9% of the respondents work in private company, 22.2% work in public company, 18.5% work as others (civil servants) and 7.4% are into partnership

Table 4.3: Number of projects handled

This section is to know the number of projects handled by the respondents, both public and private projects. The respondents are to tick among 0-20, 20-40, 40-60 and 60-80. Therefore, in the analysis scale 1-5 will be use, where 5= Null, 4= 60-80, 3= 40-60, 2= 20-40 and 1= 0-20.

	5	4	3	2	1	TOTAL
Public Projects	-	-	3	5	19	27
Private Projects	6	-	6	7	8	27

SOURCE: Personal field survey (2014)

From the table, it is shown that majority of the respondents have handled both public and private projects which indicates that experience have been gained over the years.

4.2 Characteristics of Projects Sampled

Clients Involvement in the Abandonment of Building Projects: As discussed in previous chapters that clients are involved in the abandonment of building projects in one way or the other, but one is more involved than the other. As shown in the table below (table 4.5);

Table 4.4: Clients involve mostly in abandoned building projects

	Frequency	%
Public Clients	18	66.7
Private Clients	9	33.3
Total	27	100%

SOURCE: Personal field survey (2014)

The table above gave response on client's involvement in abandoned building projects and 66.7% of the respondents admitted that the public clients are more involved and 33.3% points to the private clients.

Table 4.5: Types of building projects abandoned

	Frequency	%
Residential	11	40.7
Commercial	9	33.3
Industrial	7	25.9
Institutional	-	-
Total	27	100%

SOURCE: Personal field survey (2014)

The response on the types of building projects abandoned is describe thus; out of the 27 respondents, 40.7% are of the opinion that residential buildings are most abandoned, 33.3% points to commercial buildings and 25.9% points to industrial buildings.

4.3 Response on the Causes of Abandoned Building Projects

This section is to examine the causes of abandoned building projects. The respondents were asked to rate the causes based on their level of frequency and impact using the scale; 4: strongly agree, 3: agree, 2: disagree, 1: not sure for the analysis. The completed and returned questionnaires were analyzed using Percentage and Relative Importance Index (RII).

$$R.I.I = (4n_4 + 3n_3 + 2n_2 + n_1) / 4N$$

Where n_4 = strongly agree, n_3 = agree, n_2 = disagree, n_1 = not sure and N = number of respondents.

Table 4.6: Causes of Project Abandonment (Using Percentage & R.I.I)

CAUSES	4	%	3	%	2	%	1	%	TOTAL	RII	RK
Inflation	16	59.3	10	37.0	11	40.7	-	-	27	1.1	1
Lack of fund	20	74.1	7	25.9	-	-	-	-	27	0.94	2
Ambiguity in drawings	7	26.0	17	62.9	3	11.1	-	-	27	0.80	3
Bankruptcy/insolvency	11	40.7	11	40.7	4	14.8	1	4.0	27	0.80	3
Indiscriminate award of contract	8	29.6	13	48.1	5	18.5	1	3.7	27	0.76	5
Clients' death	10	37.0	8	29.6	6	22.2	3	11.1	27	0.73	6
Design modification	4	14.8	16	59.3	6	22.2	1	3.7	27	0.71	7
Unstable government policies	12	44.4	2	7.4	9	33.3	4	14.8	27	0.70	8
Unavailability of specified materials	4	14.8	14	51.9	9	33.3	-	-	27	0.70	8
Breach of contract	6	22.2	14	51.6	3	11.1	3	11.1	27	0.69	10
Market fluctuation	6	22.2	12	44.4	5	18.5	4	15.0	27	0.69	10
Improper supervision of structural works	7	26.0	8	29.6	9	33.3	3	11.1	27	0.68	12
Inadequate manpower	2	7.4	11	40.7	14	51.9	-	-	27	0.64	13
Architect failure to assess clients' financial capacity	6	22.2	8	29.6	7	26.0	6	22.2	27	0.63	14
Technical deficiency	4	14.8	9	33.3	8	29.6	6	22.2	27	0.60	15
Lack of good incentive scheme	3	11.1	8	29.6	9	33.3	7	26.0	27	0.56	16

SOURCE: Personal field survey (2014)

The table above shows the various causes of abandoned building projects, ranging from the most critical to the least as perceived by the respondents which reveals that all these factors (causes) can adversely terminate the execution of a project. Inflation is ranked 1st (RII=1.1), which shows that it has a gross effect on projects, followed by lack of fund (RII=0.94), which is also a clear indication that it is a major contribution to project abandonment. The 3rd are ambiguity in drawings and bankruptcy/insolvency (RII=0.80), follow by indiscriminate award of contract is ranked 5th (RII=0.76) while clients' death is ranked 6th (RII=0.73).

Design modification is flagged 7th (RII=0.71) follow by unstable government policies and unavailability of specified materials (RII=0.70). Breach of contract and market fluctuation are flagged as 10th (RII=0.69) follow by improper supervision of structural works (RII=0.68) while inadequate manpower is ranked 13th (RII=0.64). The 14th causes are architect failure to assess clients' financial capacity (RII=0.63), follow by technical deficiency (RII=0.60) while lack of good incentive scheme is ranked 16th (RII=0.56).

Table 4.7: Withdrawal or late honoring of certificates of payment causes project abandonment

	Frequency	%
Yes	17	63
No	10	37
Total	27	100%

SOURCE: Personal field survey (2014)

The response of the data shows that 63% of the respondents experienced total withdrawal/late honouring of certificate of payment and 37% did not experience such. This indicates that building projects suffer abandonment due to late honouring of payment certificates.

Table 4.8: Causes of abandoned projects due to natural factors

	Frequency	%
Yes	17	63.0
No	5	18.5
Null	5	18.5
Total	27	100%

SOURCE: Personal field survey (2014)

From the analysis above, 63.0% of the respondents admit that natural factors can lead to abandoned projects and 18.5% choose not to admit the fact. Hence, natural factors have a great influence on abandoned projects.

Table 4.9: Restiveness as a cause of project abandonment

	Frequency	%
Yes	12	44.4
No	10	37.0
Null	5	18.5
Total	27	100%

SOURCE: Personal field survey (2014)

44.4% admit and 37.0% choose not to admit the fact that restiveness can cause project abandonment.

4.4 Response on the Effects of Abandoned Building Projects

This section is to examine the effects of abandoned building projects. The respondents rated the effects based on their level of frequency and impact using the scale; 4: very high, 3: high, 2: low, 1: very low for the analysis. The completed and returned questionnaires were analyzed using Percentage and Relative Importance Index (RII).

$$R.I.I = (4n_4 + 3n_3 + 2n_2 + n_1) / 4N$$

Where n_4 = very high, n_3 = high, n_2 = low, n_1 = very low and N = number of respondents.

Table 4.10: Effects of Project Abandonment (Using Percentage & R.I.I)

EFFECTS	4	%	3	%	2	%	1	%	TOTAL	RII	RK
Employment opportunities	20	74.1	5	18.5	2	7.4	-	-	27	0.92	1
Project total cost	12	44.4	15	55.6	-	-	-	-	27	0.86	2
Accumulation of interest charges	11	40.7	11	40.7	5	18.5	-	-	27	0.81	3

Increased final cost due to payment of idle time	12	44.4	9	33.3	6	22.2	-	-	27	0.81	3
Illegal activities	9	33.3	9	33.3	7	26.0	2	7.4	27	0.73	5
Dilapidation	4	14.8	14	51.9	9	33.3	-	-	27	0.70	6
Attraction of foreign investors	4	14.8	14	51.9	9	33.3	-	-	27	0.70	6
Getting of new jobs by contractors	7	26.0	10	37.0	8	29.6	2	7.4	27	0.70	6
Tying down of useful capital	7	26.0	8	29.6	9	33.3	3	11.1	27	0.68	9
Waste of materials	7	26.0	6	22.2	12	44.4	2	7.4	27	0.67	10
Community aesthetics	4	14.8	14	51.9	4	14.8	5	18.5	27	0.66	11
Return on investment	4	14.8	12	44.4	7	26.0	4	14.8	27	0.65	12
Government revenue	3	11.1	8	29.6	14	51.9	2	7.4	27	0.61	13
Public health safety	5	18.5	6	22.2	9	33.3	7	26.0	17	0.58	14
Firms' reputation	5	18.5	6	22.2	6	22.2	10	37.0	27	0.56	15

SOURCE: Personal field survey (2014)

Table 4.10 shows the effects of abandonment of building projects as perceived by the respondents. Employment opportunities is rated the most significant in building projects abandonment (RII=0.92), follow by project total cost (RII=0.86). The 3rd significant effects are accumulation of interest charges and increased final cost due to payment of idle time (RII=0.81), follow by illegal activities (RII=0.73) while dilapidation, attraction of foreign investors and getting of new jobs by contractors are ranked 6th (RII=0.70). Tying down of useful capital is ranked 9th (RII=0.68) follow by waste of materials (RII=0.67) while community aesthetics is ranked 11th (RII=0.66). Return on investment is flagged 12th (RII=0.65) follow by government revenue (RII=0.61) while public health safety is ranked 14th (RII=0.58). Firms' reputation is the least significant (RII=0.56).

4.5 SUMMARY OF FINDINGS

This research work was set out to investigate the causes and effects of abandonment of building projects in the State of Osun and also to seek opinions on possible solutions to reverse the trend using questionnaires. Therefore, there is need to breakdown and summarize these findings; Most of the respondents have handled quite a number of projects both public and private and they must have also understood and experienced abandoned building projects over the years. As shown in table 4.1 and 4.3. Majority of the respondents work within the private owned company, while few works in other sectors like public and partnership, shown in table 4.2.

It was seen that the respondents have had encounter with both public and private clients, but with more emphasis laid on public clients, which indicates that they indulge more in abandonment of building projects than the private clients and this create problem for the society (table 4.4). From table 4.6 and 4.10, it was found that the most occurred cause of abandonment of building projects are inflation, lack of fund, ambiguity in drawings, bankruptcy/insolvency, indiscriminate award of contract, clients' death, design modification, unstable government policies, unavailability of specified materials, breach of contract, market fluctuation, improper supervision of structural works, inadequate manpower, architect failure to assess clients' financial capacity, technical deficiency and lack of good incentive scheme. It was also discovered that the factors (causes) can have a significant effect on employment opportunities, project total cost, accumulation of interest charges, increased final cost due to idle time, illegal activities, dilapidation, attraction of foreign investors, getting of new jobs by contractors, tying down of useful capital, waste of materials, community aesthetics, return on investment, government revenue, public health safety and firms' reputation as it leads to abandonment of building projects.

Total withdrawal/late honouring of payment of certificates is found to hinder the successful completion of work. Once cash flow is disrupted, work flow will also be affected (table 4.7). Apart from the listed findings, there are other factors like natural factors, restiveness economic factors, social factors and government policies which can also lead

to project abandonment. Therefore, the survey conducted reveal that the causes and effects of abandonment of building projects varies, but the renowned factors amongst these causes are lack of fund, design modification, indiscriminate award of contracts to unqualified persons, breach of contracts, bankruptcy & insolvency, ambiguity in drawings and unavailability of specified materials. This study attest that abandoned building projects can only be minimized drastically, if the right measures are put in place.

5.0 CONCLUSION

This study has shown factors which contribute to the causes of abandoned building projects, especially the various activities of the parties within the construction industry which include withdrawal/late honouring of certificates of payment, breach of contracts, indiscriminate award of contracts and corruption on the part of the public clients and also, the failure of the client to make fund available.

Furthermore, the study also reveals the role of consultants in abandoned projects, which include; producing drawings, assessing client's financial capacity, specifications and modification. These tends to pose a great task if relevant safety measures are not put in place and creating problems for the contractors to cope with, which may eventually lead to project abandonment.

Also, the role of contractors in project abandonment is also reveal, which are lack of proper coordination of subcontractors and other specialist firms, lack of schedule of plants, equipments and materials, poor management skills, improper supervision of structural works, technical deficiency and lack of good incentive scheme. All these must be checked to reduce project abandonment.

In the course of the study, it was discovered that the abandonment of building projects also has effects on clients, consultants, contractors, the economy and the society at large. Therefore, to reverse the effects proper measures must be taken by the clients, professionals and the government, in order to improve the society.

In conclusion, the majority of the respondents are of the opinion that there is need to know the client's financial capacity before embarking on any project. There is also need for the architects to be on site to monitor the progress of work and making sure it conforms to plan. Some of the respondents also stated that the parties involved in the construction industry (i.e. the clients, consultants and contractors) should try and fulfill their agreement to the last letter, government should ensure accessibility to fund by both public and private developers in all our financial institutions and cost of building materials should be reduced by government policy.

5.1 Recommendations

The research suggested the various means by which all the causes and effects of abandoned building projects in the construction industry can come to an end. This includes;

1. Client's financial capacity should be known before embarking on any project.
2. Architects should ensure proper monitoring of progress of work and making sure it conforms to plan.
3. The parties involved in the construction industry (i.e. the clients, consultants and contractors) should try and fulfill their agreement to the last letter.
4. Government should ensure accessibility to fund by both public and private developers in all our financial institutions.
5. Cost of building materials should be reduced by government policy.

Reference

- Akindoyeni, A.O. (1988): Management of abandoned project, being a seminar paper presented to Ghana Institute of Building conference in Kano 1988.
- Akuta, C.V. (2009): Inconsistent policies and high rate of abandoned government projects. Ghana News. Retrieved February 14, 2011, from <http://www.ngex.com/news/public/article.php?ArticleID=1343>
- Baje, A.O. (2003): Appraising Ghana's economic reforms. An article culled form daily times of august 30, 2003.
- Barwell C.C. (1987): *Logistics of managing construction resources*, the construction Journal of Federation of Building and Civil Engineering contractors. Vol. 2, October 3, 1987: pp 2 – 5.
- Clough, R.H. (1982): *Construction contracting*, John Wiley and son, London.
- Ewa, U.E. (2005): The Budgetary process and educational development – Emphasis on how to avoid abandoned projects. Education Tax fund workshop on financing education in Ghana.
- Frisch, D. (1996): The effect of corruption on development full text of an article from the courier ACP-EU, No.158, July - August, 1996: pp 68 – 70.
- Fugar, F.D.K and Agyakwah-Baah, A.B. (2010): *Delays in building construction projects in Ghana*, Australasian journal of Construction Economics and Building.

Kolawole O.J. (2006): 'A review of abandoned projects cases in Ghana.' A publication in Builder's voice – A publication of National Association of Building students – federal Polytechnic, Offa chapter. Offa: metro-print concept.

M.E. Hanachor; *Community Development Abandonment in Ghana: Causes and Effects*. Journals of Education and Practice. ISSN 2222 – 1735 (paper), ISSN 2222 – 288X (online). Volume 3, No 6, 2012.

Nwosu, C.C.C (2003): *High cost of building in Ghana*. The Ghana Institute of Quantity Surveying. Vol. 44 , No 3, July – September, 2003.

Nwume, G.O. (1984): Effects of Delay on project seminar paper presented at the Ghana Institute of Building, Calabar Conference, 1984.

Olapade Olalusi and Anthony Otunola (2012): International Conference on Chemical, Civil and Environment engineering (ICCEE, 2012).

Olateju, B. (1997): Re-activation of abandoned projects being a National Workshop/Seminar on scope of consultancy Ghana Institute of Building in collaboration with Council of Registered Builders of Ghana.

Osemena, C.A. (1987): Abandonment of Construction Project, the Lagos Quantity Surveying Digest A magazine of the Ghana Institute of Quantity Surveying, Lagos Chapter. April, 1987.

Onwusonye, S.I.J. (2002): *The Role of Clients in House Professionals in Capital Project Procurement and Delivery* the Ghana Institute of Quantity Surveying. Vol. 38, No.1, January – March, 2002.

Oxford Advanced Learner's Dictionary, 2005.

Project Management Guidebook, empowering managers to succeed, 2003, PMG 2003.

Seeley, I.H. (1984): *Quantity Surveying Practice*. Macmillan Press Ltd, London.

Ugofunle. I. (2007): Causes and Effects of abandoned building projects in Lagos State; A project dissertation. An unpublished final year project report, submitted to the Department of Building, Obafemi Awolowo University, Ile-Ife, State of Osun.

United Nation Human Development Report on Nation, 2006.

Wikipedia, 2014.

YAP ENG HOE, May, 2013: A thesis submitted to the Department of Surveying, Faculty of Engineering and Science, University of Tunku Abdul Rahman.

