

An Assessment of the Causes and Effects of Abandonment of Road Construction Projects in Osun State Nigeria

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ABSTRACT

The results from the study show the causes of road construction abandonment to be corruption, lack of adequate funding allocation, inconsistency in government policy, improper project planning and scheduling, lack of stakeholder involvement, project manager incompetence, natural disasters, improper project estimates, delays in making payments, inadequate planning, unexpected bad economic conditions, and communication gaps among personnel. Effects of road construction project abandonment are impacts to the free flow of traffic, loss of economic value, increased unemployment, and waste of financial and material resources.

(Keywords: construction management, road development, project abandonment, public works)

INTRODUCTION

The construction industry plays a very important role in the economy of any nation. A healthy economy usually experiences an increase in construction activities but in a depressed economy, the incidence of project abandonment tends to be more prevalent. Abandoned projects and construction failures including road construction projects and other civil engineering infrastructure development litter the whole of Nigeria.

The fast modernization of living city life has paved way to the increased demand of construction industry. In Osun State, more roads are constructed in order to provide space for the growing population of people and industries. Nowadays, there are already numerous abandoned construction projects within the study area. According to Tijani and Ajagbe (2013), the most striking indication of neighborhood decline is abandonment of property.

In many countries, the development process in the construction industry plays an important role. It is both growth-initiating and growth dependent. The industry establishes buildings and infrastructure works required for socio-economic growth. The success of economic development will further lead to increase in disposable income, thereby generating demand for additional construction activities.

El-Rufai (2012) attributed the reasons for project abandonment to poor planning, haphazard procurement practices, incompetent project management, lack of coherence and consistency with other programs and pervasive lack of continuation in policies as occupiers of political offices change.

The expected prominence of any earmarked development projects is to be completed, while at the same time, adding values to the built environment aesthetics. Although, development projects are temporary endeavors undertaken to create a unique product and services with a defined beginning and ending date (Ihuah et al., 2014). However, road construction being a capital-intensive undertaking should be critically analyzed to ascertain its feasibility and viability before embarking on it. But, on several occasions as observed, governments, contractors and agencies have abandoned road projects mid-way into construction and completion.

The causes and effects of these road construction abandonments are not just related to a single reason but rather cut across several reasons (Ayodele and Alabi, 2011). Most of these abandoned road projects turn to death tolls, hideouts for criminals, etc. The failure of projects from a cost perspective is a worrisome trend in the road construction industry in Nigeria. Whereas in many cases, project cost variation is inevitable because of inflation and other unforeseen events, more often than not, poor

project conception and design by themselves make it impossible to make credible estimates of the costs of materials and of the project itself. This trend has become a handy excuse for corrupt contractors and administrators who resort to varying the cost of ongoing projects in order to make money from the situation. Technical competence in architecture, or building, civil engineering or management alone cannot qualify one as a professional project manager without the requisite training.

The inability to complete projects on schedule or to cost projections has sometimes led to total project abandonment. This has been encountered in road construction projects, where initial excavation and grading work can worsen the state of pre-existing roads, only for the project to be abandoned for one reason or other. This has created untold hardship in many rural and urban road construction projects, because such roads serve entire communities and could affect their economic fortune (Nzkwe, et al., 2015).

STATEMENT OF THE PROBLEM

The abandonment of road construction projects has resulted into many adverse effects which had affected the economic growth, social and environmental conditions of Osun State Nigeria. According to Nzekwe, et al. (2015), the rate at which infrastructure construction projects fail, or are abandoned, are retrogressive in most developing economies.

One of the biggest problems associated with most of the road construction projects in Nigeria today is the problem of delays and disruption at both the pre-contract and post-contract stages of and civil engineering work. The cost of construction increases as the delays and disruption in construction increases. Many construction projects in Osun State Nigeria needs huge capital outlay and time to execute them and disrupting the construction proper will result to terrible consequences that will affect the cost.

The unceasing abandonment and failure of development projects is so shocking in developing countries such that Nigeria has remained one of the countries in such difficulty (Ayodele and Alabi, 2011; Kotangora, 1993; Osemenan, 1987). Therefore, the significance that the incessant abandonment of projects and construction failure would bring several effects on the aesthetics of

the environment, real properties and its negative impact on the economy cannot be overemphasized since some of the development projects provide the basic services that should meet the needs of the people.



Plate 1: Map of Osun State Showing Local Governments across the State.
Source: www.nigerianmuse.com



Plate 2: Abandoned Road Project in Ajagba Village in Iwo Local Government Area.



Plate 3: Abandoned Road Project in Ilawo Town in Ejigbo Local Government Area.

LITERATURE REVIEW

Longman Dictionary defines abandonment as the act of giving up an action on something completely, with no certain intention of when to resume. When actions and activities on development projects are suspended without any stated time of resumption the projects are said to be abandoned. In most rural communities, this experience is not strange. There are traceable projects which were aimed at improving the lives of the members of the community in such condition. In some cases, most of the materials used for the project are already out of use due to delay in completion. Furthermore, a project is confirmed abandoned when the time lag between suspension and resumption is so much to attract loss and weakening of materials. According to Tamonu and Otto (2000), there are two time lags, the short-term and long-term. The short term lag, for short-term projects is between 1-2 years, long-term project is between 3-5 years. Where applicable, a project is termed abandoned when some of the physical features are seen wearing out and becoming out of use, such that will attract cost, for replacement.

According to Sidney (1991) permanent structures requires less attention than temporary ones, but as any house owner will confirm that even the best constructed construction projects need constant attention. Similarly, Gardiner (2005) asserted that no construction projects can exist throughout its span without one form of maintenance or the other; it is to say that much can be done at the design stage in order to reduce the amount of subsequent maintenance work.

The necessity for maintenance work on construction projects is noted in the fact that all construction projects, as well as the materials and components therein, deteriorate or suffer loss in aesthetic, strength, and/or functional value, with exposure to the elements of weather over time. The appearance and life span of a construction projects and also the quality of the materials would be affected depending on the manner to which maintenance is adhered to, in the construction projects (Gardiner, 2005). If the design process is to be enhanced, the construction projects team need to come together and contribute towards the construction project's maintainability at the project inception rather than leaving it for the maintenance personnel at the

end of construction to battle with the curative measure (Adejimi, 1998).

According to Cornick (1996) "the root cause of the problems that the construction industry and its clients experience lie in the division of the responsibilities between the design aspects and the construction aspect". Cusing (2002) was direct in his criticism of the organization of the construction industry noted that the industry is unique in that the design process is separated from production. The successful completion of any construction projects depends on many things, few of which are as important as the designer-contractor relationship. The two parties must be willing to work together so that the clients' get maximum benefit from their joint expertise. The contract should be able to contribute to the design process in matters relating to construction practice and the designer should be willing to receive, analyze and subsequently act on such recommendations.

Project abandonment is not a new thing in Nigeria. The incessant abandonment of projects is so alarming in so many states in Nigeria, especially Osun State in such that the state remained one of the states in such difficulty (Ayodele and Alabi, 2011; Kotangora, 1993). The abandonment of projects is the act of discontinuing any activities or an act of unplanned suspension of the work progress especially at the execution stage such as refusal or failure to complete a project at the required time.

Abandoned and failed projects are highly predominant in Nigeria today. However, there are several government abandoned projects in almost all the local government of Osun State. This phenomenon cuts across many economic sectors including the construction, manufacturing or industrial and service sectors. There had been cases which non-functional, unusable or unserviceable projects have been commissioned as "completed" (Ojo and Aroge, 2016).

Dubem, et al. (2014) are of the view that it is difficult to define exactly what constitutes a failed project. The Project Management Institute (2004) posits that the success or failure of a project is measured by the difference between what is expected of a project both during and after its completion and the actual observed performance of the project when it is put to use. In other words, when the expectations of the client and

other stakeholders in terms of cost, completion time and quality are not matched by the actual construction by contractors and other project teams, the project is adjudged a failure. The search for factors that can affect the success or failure of an infrastructure project like road construction has caught the attention of many scholars and construction practitioners over the years. This is because the ability to develop a set of project failure factors could aid the project team and contractors alike in evaluating their projects, if not objectively at least systematically. Several studies relevant to the identification of factors contributing to project failures for infrastructure projects are found in the literature. The following gives a summary of some of the studies to establish a theoretical framework for testing the theory empirically.

There is a large number of studies written to pinpoint the causes and effects of road construction abandonment. In road construction projects, a vast number of recognized risk factors that have been identified to be responsible for failure include, project leadership and management, organizational culture and structure, commitment and patterns of belief, user involvement and training, developer expertise, technology planning, scope and objectives setting, estimation and choice/use of methodology.

McFarlan (1981) and Cusing (2002). Citing Fichter (2003), Al-Ahmad, Al-Fagih, Khanfar, Alsamara, Abuleil, and Abu-Salem (2009) stated that from an investigative study carried out by The Coverdale Organization; seven major factors were reported to play a tremendous role in putting a road construction project in trouble. These are stated as follows: poor planning, unclear goals and objectives, having objectives changed during project implementation, unrealistic estimation of time and resources, and lack of executive support and user involvement. The failure to communicate and act as a team and inappropriate skills were spotted as having a negative effect on construction project success (Jenster and Hussey, 2005).

This was collaborated by 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, the 'Nigerian Factor', disbursement constraints, failure for successive regimes to issue appropriate white papers on failed contracts and granting of injunctions under exparte motions by Nigerian courts.

Johnson, (2001) identified the lack of executive support, the lack of user involvement, the lack of experienced project managers, the lack of clear business objectives and the minimized scope as factors that could hamper the IT project success. In knowledge management projects, Lam and Chua (2005), identified three main categories of causes of Knowledge Management project abandonment (KM project abandonment), namely poor project implementation, organizational mismatch and content deficiencies.

In public/government project abandonment, in an article on causes of abandoned projects in the Ministry of Housing and Local Government in Malaysia, New Straits Times Newspaper stated that the MHLG findings have shown that abandon projects are due to financial problems of developers, poor marketing and sales strategies, poor company management and disputes between developers and contractors or with landowners. In their comment on abandoned housing projects in Malaysia, National House Buyers Association attributed the increase in the number of abandoned housing projects on inadequacy of the enabling housing law of December 1, 2002. Akuta (2011), posited that policy continuation is something lacking and contributing to project abandonment in Nigeria. He stated that once a new government takes over power, they usually abandon previous government policies or programs.

For road construction not to be abandoned, the choice of the site is very important. Since the host community must of necessity be the custodian of the project, consensus must be reached on where the project is to be sited before embarking on it. This situation becomes more dangerous if the project is to be handled by government agencies or external bodies. To achieve the desired result, the institutions in the community such as the chiefs, youths, women and CDC members, (development stake holders) or beneficiaries need be consulted on the choice of the project site.

The guiding principle for the success of any project is that it is based on the felt need of the people. Any choice of project that did not represent the need of the majority of the members of the community is already heading for abandonment. The principle of need analysis stresses the identification of the needs of the community and prioritizing same in the order for which the members would expect them met, in the accomplishment of their development desires.

Road construction projects which ignore the traditional values, and social organization of the intended beneficiaries, has very 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 culture practices of the community, the project could be abandoned.

By contemporary standards, for a road construction project to be executed without any hitch, it must have been initiated by the citizens. When road construction projects are initiated by the members of the community, there is the assurance that it had past the acid test of felt need and consultation already disused. The possibility of abandonment is no easier. But when community development projects are planned by government without any input by the community members the projects are seen as been imposed on the community and it could be abandoned at any time.

Good Enough (1963) quoted in Hanactor (2010) points out 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 meets with resistance”. This account for the failure or abandonment of most federal and state projects in Nigeria.

Financial analysis is very important for the execution of a road construction project. No matter the type of project, sufficient funds are needed for the completion of the project. Most road construction projects usually require counterpart funding, when one or more parties to the finding fails the resultant effect will be insufficient funds for the project, and the project definitely will be abandoned.

In most countries, road construction projects are usually contracted out to specialists, either from within the country or from outside the country. Most contractors, in order to win the contract,

deliberately lower their quotation, only to apply for variations/modifications later. Some may go on as bid in the project but will resort to the use of inferior materials or even deviate from the original project plan.

Most of the road projects require technical inputs which must be attended to by experts. Where this aspect is not taken into consideration and the local crafts men are not able to handle it, the project would be put to a halt.

RESEARCH METHODOLOGY

Research Design

Design describes the techniques and procedures used by the researcher in conducting the study, the process of data collection, collating and analysis employed in the course of the study. It comprises of the description of the population of the study, sampling techniques, sample size, sources of data, method of data collection and method of data analysis and testing hypothesis with a view to be able to answer the research questions that were formulated at the beginning of the study. The research design must be tailored to meet the objectives of the study using relevant and appropriate statistical and scientific methods. For this study the descriptive survey design was adopted. This involved sampling the opinion of the eligible respondents that can proffer the required answer to the question of interest to the researcher.

Sample and Sampling Procedure

Due to the limitation of time and resources, the researcher could not reach the entire population eligible to provide answer to the research questions of the study; this necessitated the use of a sample. By definition, a sample is a part or a small representative portion of the population upon which a research is carried out and the outcome of the research is generalized for the whole population. One of the steps taken by the researcher to get a sample was to choose an area where the research would be carried out. Two local government areas in the State of Osun were chosen to understudy the abandoned road construction projects there.

Procedure for Data Analysis

Data analysis has been defined as those techniques used whereby the researcher extracts relevant information from the data which would enable a summary description of the subject studies to be made.

In analyzing the data collected for the purpose of carrying out this research, the statistical tool known as descriptive statistics and the Relative importance index (RII) were used. The use of sample percentage was also employed.

DATA ANALYSIS AND PRESENTATION OF RESULTS

Data Analysis

The questionnaire is divided into two sections A and B. Section A covers personal data of respondent and are analyzed using the descriptive method of analysis while section B covers the subject matter and are analyzed using both Relative Importance Index method.

Analysis of Personal Data (BIO-Data) of Respondents

Table 1: Analysis of the Distribution of Gender.

GENDER					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	67	67.0	67.0	67.0
	FEMALE	33	33.0	33.0	100.0
	Total	100	100.0	100.0	

Source: Research Survey 2017

Table 1 above shows that 67% of the respondents are male while 33% are female which indicate that most of the respondents that participated are male.

Table 2 shows that 2% of the respondents are below 20 years, 51% of the respondents are within the age range of 21-40 years and 47% are above 40 years which indicate that most of the respondents that participated are within the age range of 21-40 years.

Table 2: Analysis of the Distribution of Age.

AGE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<20 yrs	2	2.0	2.0	2.0
	21-40 yrs	51	51.0	51.0	53.0
	>40 yrs	47	47.0	47.0	100.0
	Total	100	100.0	100.0	

Source: Research Survey 2017

Table 3: Analysis of the Distribution of Educational Qualification

EDUCATIONAL QUALIFICATION					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary	13	13.0	13.0	13.0
	Tertiary	86	86.0	86.0	99.0
	None	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Source: Research Survey 2017

Table 3 above shows that 13% of the respondents are O'level holders, 86% attended tertiary institutions and 1% attended none which indicate that most of the respondents that participated attended tertiary institutions.

Table 4: Analysis of the Distribution of Marital Status.

MARITAL STATUS					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	84	84.0	84.0	84.0
	Divorced	3	3.0	3.0	87.0
	Single	12	12.0	12.0	99.0
	Widowed	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Source: Research Survey 2017

Table 4 above shows that 84% of the respondents are married, 3% of the respondents divorced, 12% of the respondents are single and 1% of the respondent is widowed which indicates that most of the respondents that participated are married.

Table 5 shows that 16% of the respondents are self-employed, 37% are civil servants, 14% are engineers, 19% are contractors, 5% are unemployed and 9% are privately employed which indicates that most of the respondents that participated are civil servants.

Table 5: Analysis of Employment Status.

EMPLOYMENT STATUS				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Self-employed	16	16.0	16.0
	Civil servant	37	37.0	53.0
	Engineers	14	14.0	67.0
	Contractors	19	19.0	86.0
	Unemployed	5	5.0	91.0
	Private	9	9.0	100.0
	Total	100	100.0	100.0

Source: Research Survey 2017

CONCLUSION

Abandonments of road construction projects are caused by corruption, lack of adequate fund

allocation, inconsistency in government policy, improper project planning and scheduling, lack of stakeholder's involvement, project manager incompetence, natural disaster, improper project estimate, unavailability of materials and equipment, delaying in making payment, inadequate planning, unexpected bad economic conditions, and communication gap among the personnel.

Effects of road construction abandonments are: it affects the flow of traffic, it leads to loss of economic value, abandoned projects increase unemployment, cost of rehabilitation is always high, it becomes a waste of financial and material resources, it increases the negative effects of environmental issue and decrease in revenue accruing to government.

Table 6: Causes of Road Construction Project Abandonment.

S/N	CAUSES OF ROAD PROJECT ABANDONMENT	SA	A	SD	D	R.I.I
1	Corruption	71	25	1	3	0.91
2	Lack of adequate fund allocation	30	57	6	7	0.775
3	Inconsistency in government policy	40	55	3	2	0.8325
4	Improper project planning & scheduling	34	53	5	8	0.7825
5	Lack of stakeholders involvement	24	53	9	14	0.7175
6	Project manager incompetence	22	50	7	21	0.6825
7	Natural disaster	22	39	13	26	0.6425
8	Improper project estimate	24	54	5	17	0.7125
9	Unavailability of materials and equipment	20	38	13	29	0.6225
10	Delaying in making payment	27	62	6	5	0.775
11	Inadequate planning	36	50	5	9	0.7825
12	Unexpected bad economic conditions	26	55	8	11	0.74
13	Communication gap among the personnel	16	43	10	13	0.565

Table 7: Effects of Road Construction Project Abandonment.

S/N	EFFECTS OF ROADS CONSTRUTION PROJECT ABANDONMENT	SA	A	SD	D	R.I.I
1	It affects the free flow of traffic	60	37	1	2	0.8875
2	It leads to loss of economic value	31	58	4	7	0.7825
3	Abandoned projects increase unemployment	26	61	6	7	0.765
4	Cost of rehabilitation is always high	30	54	6	10	0.76
5	It becomes a waste of financial and material resources	35	54	7	4	0.8
6	It increases the negative effects of environmental issue	31	57	6	6	0.7825
7	Decrease in revenue accruing to government	24	54	5	17	0.7125

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