



# An Evaluation of the Challenges of Tendering Procedures on Building Projects in Kaduna, Nigeria

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#### Abstract:

The high tender figure which cannot be justified with the quantity of construction work being quoted for has generated a lot of controversy within the industry and this has constituted a great and living menace in our environment like project abandonment, poor workmanship and completion of work behind schedule. The study aimed at evaluating the challenges of tendering procedures on building projects in Kaduna, Nigeria. The study largely derives qualitative measure in order to understand the challenges of tendering procedures on building projects, the study is a criteria – based study, in which certain criteria were outline for the selection of the construction firms. The respondent (stakeholders) samples used in the study were drawn from the total population of stakeholders in the 5 construction firms selected for the study. The total numbers of stakeholders are 170 while 119 were selected for the study following the rules of Krejcie and Morgan, (1970). The analysis of the questionnaires survey data was undertaken using (SPSS) version 20. Findings from the study shows that the tendering method adopted for a particular project is one of the major contributory recipe for the challenges encountered at post construction contract stage in building projects, and the research recommends that the best and most appropriate tendering method should be adopted for the award of construction contracts as this will help in minimizing the problems that are mostly encountered at post contract stage in construction projects execution in Nigeria.

Keywords: - Building, Challenges, Procedure, Contract, Tendering.

#### INTRODUCTION

Clients (especially public and cooperate) are more at home to invite and select contractors when a given project is large, complex and specialized. However, these clients often do not consider the above factors perhaps to give credence to "Due process" or the present government policy which seeks to exhibit transparency, competitiveness, accountability and even political maturity.

According to Aliyu, (2005), the rising cost in the construction project or the high tender figure which cannot be justified with the quantity of construction work being quoted for has generated a lot of controversy within the industry and this has constituted a great and living menace in our environment like project abandonment, poor workmanship and completion of work behind schedule. Aliyu, (2005) stated reasons for these to include the following

- 1. Poor selection of tendering procedure for any given contract
- 2. The construction projects are awarded to incompetent contractors who at the end cannot execute the work up to the expected/acceptable standard
- 3. The construction contracts are awarded on a percentage kick back and cause the project to go through different hands before finally reaching the contractor who is to execute the project principally.

In this case, even part of the estimated cost of the project must have been touched by those greedy people who are at the realm of affairs and thereby rendering the project ill funded which finally leads to abandonment.

According to (Ayeni, 1997) the tendering methods available for use in the award of construction contracts include the competitive and non-competitive tendering method. The

competitive tendering involves an open invitation to all contractors/tenderers/bidders for tendering, while non-competitive involves the invitation of a particular contractor for negotiation due to the nature of the contract and the past records of the very contractor. The reason for this method is to install the emergence of any kind of default from the side of any of the construction team members and the contractors inclusive.

In order to ensure that the purpose of tendering is achieved, a client and or his team of advisers should consider and analyse every contracting firm records with a view to ascertaining her reputation for good gravity workmanship, good record of individual relation, good business record, appropriate size and structure to suit the given project and adequate finance stability and should also ensure that adequate choice of tendering procedure is adopted for the award of contract to competent contractor.

The problem of this research is that wrong tendering procedure is associated with many problems like: It result to considerable and unnecessary waste of time, It lead to the selection of an incompetent contractor, It lead to bankruptcy as the result of selecting in experience contractor, It lead to increasing cost of tender, It is often a times associated with risk, It may lead to petition if wrong analysis is done and this problem poses serious challenges on the contractors which in turn leads to project abandonment, poor workmanship, completion of work behind schedule etc.

Previous studies on tendering procedures focused on the important factors affecting tendering procedures with little or no emphasis given to the problems and challenges of tendering procedure at post contract stage of building projects in Nigeria. Hence, this research aims to examine the challenges and problems of tendering procedures at post contract stage of building projects in Kaduna, Nigeria.

# LITERATURE REVIEW

#### **Tendering processes**

Tendering is the process of inviting contractors or suppliers to submit bids for the execution, supply or procurement of a given project Odunsami and Ojo, (2005) according to Onifade, (2011) there contains numerous sellers and buyers for the same construction project in the construction contract market. (Skitmore, 2000) noted the commonness of tendering as a method of procuring a lot of dissimilar goods and the worth of the goods exchanged through auctions or tender is large. The normal preliminary to the conclusion of a building and engineering contract is an invitation by the employer to one or more contractors to tender at a price at which they are willing to carry out the works Odunsami and Ojo, (2005) Tendering has also virtuously defined according to Faizal (2010) "Tendering arises when the type of contract appropriate to a given project has been decided and attention turns to the selection of the contractor". The method adopted in the selection and acceptance of a tender revolve on some given criteria which include the nature of the project, lowest evaluated tender, reasonable completion time and client desire.

Tendering as also be defined by (Ayeni, 1997) is the act by which submission is made by a tenderer when so desired by a client which may be individual, a group of people, a company, government ministry or any of its parastatals.

(Aqua group, 1990) stated that a tender quote not just a price, but also a time in which to complete the work. The purpose may not be for one job only but may be considered in terms of the total programme of which that job is just one project.

As a definition, tendering processes refer to the overall methods used by a client so as to arrive at a tender figure.

However, there are other methods through containing some characteristics of each and or combination of the principal methods and these include serial tendering and the all in service.

The following factors are considered before adopting any method of tendering.

- 1. Nature of the client.
- 2. Client's wish
- 3. Cost of the project
- 4. Duration of the project.
- 5. If work is to be started before design is completed.
- 6. Consultants' knowledge or lack of knowledge about the contractors in the locality of the proposed project.
- 7. The nature of the project that is whether traditional or system building.
- 8. Any assistance required from the contractor in the early stages of the project.
- 9. If the project requires the contractor's participation in the design e.g. design and build (Onwusonye, 2006)

# Types of tendering processes/methods

# **Open tendering**

Open tendering is one by which the employer advertises his proposed project, and permits as many contractors as are interested to apply for tender documents. Sometimes he calls for a deposit from applicants, the deposit being returned 'on receipt of a bona fide tender'. However, this method can be said to be wasteful of contractors' resources since many may spend time preparing tenders to no effect. Also, knowing their chances of gaining the contract are small, contractors may not study the contract in detail to work out their minimum price, but simply quote a price that will be certain to bring them a profit if they win the contract. Basically open tendering involves simply advertising in the national and or technical press the minimum requirement expected from interested tenderers who must have been legally registered with the cooperate affairs commission (CAC) and the clients' organization to submit tenders (Faizal, 2010).

### Selective tendering

Selective tendering, in this type of tendering, the employer advertises his project and invites contractors to apply to be placed on a selected list of contractors who will be invited to bid for the project. Contractors applying are given a list of information they should supply about themselves in order to 'pre-qualify' (Onifade, 2011).

The advantage to the employer is that he can select only those contractors, who have adequate experience, are financially sound, and have the resources and skills to do the work. Also, since only half a dozen or so contractors are selected, each contractor knows he has a reasonable chance of gaining the contract and therefore has an incentive to study the tender documents thoroughly and put forward his keenest price (Onifade, 2011).

Selective tendering as practiced in the past especially for public works procurement remained one of the arms of competitive tendering and used in the vast majority of building and civil engineering contracts Faizal (2010) opined that selective tendering aims at satisfying the client that he has got the best often available.

Basically, selection was exercised either by advertising for firms to indicate their interest (requiring them to supply particulars of their financial and technical capability in appropriate cases) and selecting a short list from those applying or simply by a selection from standing lists of investigated and approved firms and whose capabilities were known at least in general terms.

# **Negotiated tendering**

Negotiated tendering is a specialized form of selective tendering is which encourages a one-name list of tenderer.

(Faizal, 2010) opined that negotiated tendering is restricted to those projects where specialist technical ability prevents or restricts competition or where the client has some overriding reason to employ a particular firm.

Furthermore, institute of builders 1976 submits that negotiation permits early contractors involvement and consequent opportunity for overlap of design and construction, closer integration of construction method/design and resultant saving in overall time.

It follows therefore that there exists a better understanding of problems between the designer and the contractor.

However, the client design for negotiated tending may be on the basis of:

- 1. Business relationship: the client or the contractor may be a subsidiary company of the other or associated in the same way.
- 2. Ideology affinity: this happen when an important purpose of the client is the furtherance of some ideology whereby he preferred a contractor who is similarly minded.
- 3. Loyalty of the locality: this situation arises when the client preferred a contractor who is traditionally connected with the same locality. For example, the decision of a parish council to engage a parishioner contractor to construct a parish hall building. Similarly, the federal government engaging a Nigerian nationality to construct a national prestige/security edifice.
- 4. Project financing project: this situation is experienced when the building project is contractor financed.
- 5. Project financing: this is usually common especially on Turnkey, build own operate and transfer, build lease and transfer etc.

#### Post construction contract tendering challenges/ problems

According to Mccaffer, (2001) and Bamisele, (2005) indicates that lost production time can regularly account for about fifty per cent of the working days, with even higher levels not uncommon. The causes are usually inter connected and typically arise through unsatisfactory execution of managerial and supervisory function surrounding short time planning, daily and weekly scheduling, material standardization and control, information flow, constructability of design, subcontractor and supplier's performance, work goals and competency rather than specifically in the method of working. Indeed, detail information obtained directly from the workforce in the structured questionnaire survey (Sani, 2011) shown below illustrate the kind of problems causing serious construction difficulties which whenever identified will need rooting out and remedies devising:

- 1. Lack of material due to waste, transport difficulties, improper handling on site, misuse of the specification, lack of proper work plan, inferior or excessive paper work.
- 2. Excessive whether delays.

- 3. Equipment breakdown.
- 4. Drawing and specification changes.
- 5. Variation orders.
- 6. Inadequate tools or equipment.
- 7. Inspection delays.
- 8. Absenteeism
- 9. Poor work plan.
- 10. Repeat work due to poor finishing, negligence, congestion, over complicated drawing and or specification, poor supervision, improper material and poor design or engineering.
- 11. High labour turn over due to low pay, casual labour, remote site, late pay days, work discontinuities, poor work facilities and lack of materials.
- 12. Work interference.
- 13. Poor construction communication.
- 14. Poor site management and/or organisation

Table 1: Problems causes post building construction contracts difficulties

S/No	Categories	Sub – categories					
3/110	Categories	a- Client's poor financial and business management.					
1	Late payment	•					
		b- Withhold of payment by client.					
		c- Constructors invalid claims.					
		<ul> <li>d- Delay in valuation and certification of interim payment by consultant.</li> </ul>					
		e- In accuracy in valuation of work done.					
		f- In sufficient documentation and information for					
		valuation.					
		g- Involvement of too many parties in the process of honouring certificates.					
		h- Heavy work load for consultant to do evaluation for					
		variation order.					
	Poor cash flow management	a- Contractor handling too many projects at the same time.					
		b- Contractor's unsuitable financial background.					
2		c- Unqualified contractor under bidding the project cost.					
		d- Lack of regularly cash flow forecasting.					
		e- Poor credit arrangement with creditors and debtors.					
		f- Capital lock-up					
		a- Difficulties in obtaining loan form the financiers					
		b- Allocation of government budget not in place.					
3	Insufficient financial resources						
	Financial market instability.	a- Increment of interest rate in payment of loan.					
		b- Inflation (material price, labour wages, transportation					
4		costs)					
		c- Increment in foreign exchange rate (imported material and plant).					

Sources: (Harris and Mccaffer, 2001)

#### RESEARCH METHODOLOGY

According to Creswell, (2003) that the factor to be consider in selecting the best research methodology should be the influence that such method has on the research problem and objectives. The study largely derives qualitative measure in order to evaluate the challenges of tendering procedures on building projects in Kaduna, Nigeria. The stakeholders considered for this research are the contractors, architects, quantity surveying, civil engineers and builders working within the contractor's organisations. The study is a criteria – based study, in which certain criteria were outline for the selection of the construction firms and their stakeholders.

# Those criteria are:

- 8. The construction firm must be built/civil engineering, construction.
- 9. The construction firm must be more than twenty (20) years in civil/building construction work.
- 10. The construction stakeholders must at least be with the construction firm for not less than fifteen (15) years.
- 11. His qualification must be at least B.Tech/MSc or HND.
- 12. The location of the study is Kaduna, Nigeria.

Five (5) construction firms were identified that meet the study criteria and as such five (5) of the construction firms were selected for the study. The selection is based on sample selection rules of Krejcie and Morgan, (1970). The respondent (stakeholders) samples used in the study were drawn from the total population of stakeholders in the 5 construction firms selected for the study. The total numbers of stakeholders that meet the study criteria in the 5 construction companies are 170 while 119 were selected for the study following the rules of Krejcie and Morgan, (1970) formula, the value was reduced to a minimum of 119 at 95% confidence level and at 5% limit of error; showing that 119 is the minimum number of questionnaires that can be administered within the population.

The research questionnaires were administered to 119 permanent stakeholders within the 5 construction firms in Kaduna. The analysis of the questionnaires survey data was undertaken using the statistical package for social science (SPSS) version 20. Which is a software package used for statistical analysis. It is now named "IBM SPSS Statistics". It is manufacture in Chicago USA, by SPSS Inc.

Table 1 shows that 170 respondents were identified within the research population, from which a total of 146 structured questionnaires (on a five-point Likert scale), were administered, and 119 were retrieved with all fully answered and valid for analysis, representing 86% response rate.

Table 2: Sample Frame of the Study

Respondents	Population	Questionnaires	Questionnaires retrieved and	Percentage rate
	Size	administered	valid for analysis	_
Quantity surveyors	50	44	36	32.9%
Architect	40	34	27	14.4%
Contractors	45	39	33	26.4%
civil engineers and builders	35	29	23	12.3%
Total	170	146	119	86%

Source: Researchers' survey, 2019

<sup>&</sup>quot;Sustainable Housing and Land Management" School of Environmental Technology, Federal University of Technology, Minna  $3^{rd} - 5^{th}$ , May 2021.

The collected data were analyzed by using the descriptive methods (percentile and frequency). Data processing was done with the aid of Statistical Package for the Social Sciences (SPSS) software.

The frequency was adopted to determine the level of occurrence (frequently, rarely, not at all) of the identified problems and challenges of tendering procedures at post contract stage of building projects.

# RESULTS AND DISCUSSION

Table 3: Frequency of problems and challenges of tendering procedures at post contract stage

S/N	Problems	Frequency			Percentage (%)		
		Frequently	Rarely	Not at all	Frequently	Rarely	Not at all
1	Project abandonment	16	9	1	61.52	34.62	3.85
2	Failure to agree on final account	21	3	2	80.77	11.54	7.69
3	Delay in construction project	24	2	0	92.31	7.69	0.00
4	Cost over-run	8	18	0	30.77	69.23	0.00
5	Liquidation	3	20	3	11.54	76.92	11.54
6	Bankruptcy	4	12	10	15.38	46.15	38.46
7	Poor communication between contractor's and client's team	5	18	3	19.23	69.23	11.54
8	Non-performance of obligation by contractor	8	16	2	30.77	61.54	7.69
9	Non-performance of obligation by client	5	15	6	19.23	57.69	23.08
10	Delayed payment	8	8	10	30.77	30.77	38.46
11	Drastically design change	12	8	6	46.15	30.77	23.08
12	In experience team	15	7	4	57.69	26.92	15.38
13	Accelerated completion	10	8	8	38.46	30.77	30.77
14	Low productivity/out-put	14	5	7	53.84	19.23	26.92
	Total	153	149	62			

Source: Researchers' survey, 2019

Table 3 represents the frequency of occurrence of problems and challenges encountered by the respondents at post construction contract stage in building projects. Project abandonment 61.52%, Failure to agree on final account 80.77%, Delay in construction project 92.31%, Increase in cost of projects (cost over-run) 30.77%, Liquidation 11.54%, Bankruptcy 15.38%, Poor communication between contractor's and client's team representing 19.23% and 11.54% respectively, Non- performance of obligation by contractor 30.77%, Non-performance of obligation by client: 19.23%, Delay in payments 30.77%, Drastically change of design or specifications during construction 46.15%, In-experience management or supervisors 57.69%, Time constraint and/or accelerated completion 38.46% and Low productivity/out-put with a frequency of occurrence at 53.84%.

#### CONCLUSION AND RECOMMENDATION

The poor selection of tendering procedures has constituted a great problem in the construction environment, especially at post contracts stages of projects executions like projects abandonment, poor workmanship, and completion of work behind time schedule. This is as a result of construction contracts awarded to incompetent contractors whom at the end cannot execute the work up to the expected standard. it could be deduced that the tendering method adopted for a particular project is one of the contributory recipe to the problems encountered at post construction contract stage in building project. These problems include project abandonment, failure to agree on final account, delay in construction project (time over-run),

<sup>&</sup>quot;Sustainable Housing and Land Management" School of Environmental Technology, Federal University of Technology, Minna  $3^{rd} - 5^{th}$ , May 2021.

increase in cost of project (cost over-run), liquidations, bankruptcy, poor communication between contractor's and client's teams, and non-performance of obligation by contractor with liquidation, and non-performance of obligation by client as problems that rarely occurred in construction site.

Given the findings above the study recommends that, all projects within the construction industry no matter what should be awarded to a competent contractors that are capable of carrying out the work for a successful delivery, past record/experience of the contractor should be thoroughly examined by the client to assess the performance of such contractor in his previous contract before awarding the contract., Clients and consultants should only call for tender with complete project documents in order not to make room for contractors to price high to cover unknown risks, lastly, consultants should produce all the necessary drawings that are within the financial whims of the client so as to aid the estimator to come up with an accurate and realistic tender figure to minimize the problems and challenges encountered at post contract stage in building projects in Nigeria.

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# **SUB-THEME 5:** SUSTAINABLE AND RESILIENT CITIES