

INVESTIGATING CAUSES OF DISPUTES IN BUILDING CONSTRUCTION PROJECTS IN NIGEIRA

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Abstract: Disputes in building construction projects have been very worrisome to stakeholders in the Nigerian Construction Industry. This paper addresses the causes of disputes in building construction projects. Preliminary data were collected by way of questionnaires survey. Out of 220 questionnaires distributed to respondents, 129 valid responses were obtained from a combination of client, consultants and contractors. The data collected were analysed using relative importance index. The result revealed that changes or modifications of scope that increase consequential cost beyond initial cost. Variation and late confirmation of variations, design professionals, failure to remain within the client budget and design objectives, discrepancies/ambiguities in the context documents, late information delivery, over measurement and under measurement of work by consultants to work in progress, design and specification oversight, error or omissions resulting from uncoordinated civil structural, architectural as the most important underlying causes. The paper recommended that enough time should be devoted to planning, detailed designs, clear and unambiguous contract documents.

Keywords: Causes, disputes, building construction, projects, Nigeria.

1.0 INTRODUCTION

Cheung and Pang (2010) cited in Tillet (1991) defined Construction dispute as the incompatibility of two (or more) people's (or groups) interest, needs or goals.

Kehakale and Funtase (2013) defined dispute as the assertion of a claim by one party and repudiation thereof by another. They went further to assert that neither a more claim without repudiation nor a pair of claim and counter claim, can be called a dispute.

Disputes are unavoidable in every field of human endeavour. The building industry is not insulated to occurrences of disputes. Disputes usually arise when parties are unable to resolve or arrive at a common ground when they disagree on contractual issues.

The Construction Industry is a complex and competitive environment in which participants have different views, talents and levels of knowledge of the construction process work together. In this complex environment, participants from various professions each has it's own goals and each expects to make the most of it's own benefits in the construction

industry, since differences in perceptions among the participants of the projects, conflicts are inevitable. If conflicts are not well managed; they quickly run into disputes (Khekale et al 2013)

It is universally agreed that unresolved conflicts usually result in disputes. According to Mba (2013; cited in Okuntade 2013) the word conflict brings to the mind image such as antagonism, struggles between parties; opposition processes and threats to cooperation but not all conflicts come in those forms especially in the construction industry, they come in form of need to be met or desires to be satisfied. He further stated that managing a project without any form of misunderstanding; ill-feeling and crisis is almost impossible because misunderstanding is natural to human being in every sphere of life.

According to Collins (1995) conflicts has been defined as serious disagreement and agreement to something important.

Significant factors that have been identified as contributing to time and cost overruns in India construction projects are rework, variations, incorrect design and incomplete documentation and late authority approvals. As a result of such issues arising in projects, conflict and disputes may occur which can lead to the disruption of construction schedules increased project costs, and even adversely influence relationships between project participants. If a dispute is not resolved promptly, then it may escalate, and ultimately require litigation proceedings which can be extremely costly for the parties concerned (Simha and Wayal (2007) cited in Cheng et al 2004).

According to Ogunlana and Mahato (2011) cited by Khahro and AC, (2014) conflict is a serious disagreement between parties due to various reasons i.e payment, communication, public interruption etc. It can give rise to problems including, project cost overrun, project delay, reduce productivity, loss of profit and damage to business relationship. Conflict do take place in the public and private sector projects, the construction industry of Pakistan is not exceptional.

Disputes have been blamed as one of the factors responsible for the poor performance of the Nigerian construction industry (Oladapo and Onabanjo 2009).

The objective of this study therefore is to identify the factors causing disputes in the Nigerian Construction Industry.

2.0 LITERATURE REVIEW

The seed of most construction disputes were sown at the planning stage of the project in an attempt to hurriedly commence construction due to pressure mounted on consultants.

Drawing are prepared with very little details, poorly prepared tender and contract documents. Basically building construction contracts come into existence by way of agreement, between the building owner usually referred to as the employer or Client and the contractor. The agreement entered contains contractual obligations from both parties. However, those obligations are in some instances not well defined presenting diverse interpretations, which may eventually lead to disputes if not well managed.

There have been studies made on this subject by researchers in Nigeria and outside the country. This research is focused on the building construction industry in Nigeria as much of the earlier researches done has generally on the construction industry.

2.1 CAUSES OF DISPUTES IN BUILDING CONSTRUCTION PROJECTS

No construction project design or contractual arrangement is perfect. Hence, as in all other interpersonal and contractual relationships, disputes are inevitable in construction contracts. Infact, disputes are common occurrences in construction and dispute for project participants – (Cheung et al 2004, cited in Adebayo et al 2009).

Adebayo et al (2009) further stated that construction disputes originated from a variety of sources ranging from unrealistic schedules and expectations to changes in the economic situation as summarized in Table 1.

Table 1: Summary of the literature on the causes of construction disputes
(Sources: as indicated in the table)

Cause of dispute	Literature sources										
	Hewit (1991)	Heath et al (1994)	Rhys Jones (1994)	Semple et al (1994)	Bristow & Vasilopoulos (1995)	Conlin et al (1996)	Sykes (1996)	Harmann (2003)	Peckar (2005)	Gebken & Gibson (2006)	Revi Kumar et al (2007)
Unrealistic schedules and Expectations		*			*			*			*
Unpredictability of construction including weather effects			*				*				
Poorly prepared contract documents and terms		*	*		*						*
Lack of communication and Information leading to Misunderstandings		*	*		*		*				
Unexpected or changed Conditions/variation orders	*	*		*	*					*	
Payment and financial issues		*				*			*		
Tendering pressures			*								*
Unfair allocation of project risks								*			
Changes in the economic situation			*					*			

Claim is another source of dispute in the construction industry. According to Khekale and Futane (2015), During the execution of a project, several issues arise that cannot be resolved among project participants. Such issues typically involve contractor requesting for either time extension or reimbursement of an additional cost, or sometimes both. Such requests by the contractor are referred to as 'claim'. If the owner accedes to the claim of contractor and grants him extension of time or reimbursement of additional cost, or both, the issue is sorted out. However, if the owner does not agree to the claim put out by contractor and there are differences in the interpretations, the issue takes the form of dispute, as explained in fig. 1

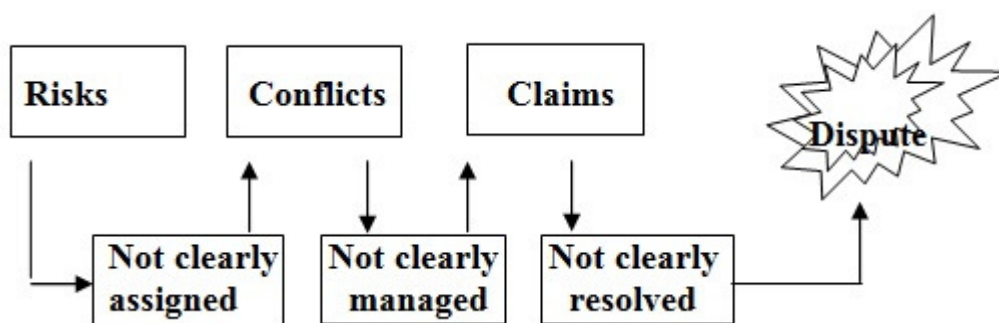


Figure 1: Risk, Conflict, Claim and Dispute continuum

Source: Khale and Funtane (2015)

They further stated that claim may arise due to the owner or the contractor and the following were identified as causes of Claims.

- 1) There may be defects and loopholes in the contract document. For example, the contract document may not be clear, may have dual meanings at different places, or may not have sufficient details. Also, an unresponsive contract administration may lead to contractor raising the claim.
- 2) There may be delay in release of areas as per contract. Besides, site conditions differ to a large extent from those described in the contract document.
- 3) The owner may desire to get the work done at a faster pace than is required by the contract document.
- 4) There may be delay in supply of power, water and other materials from the owner.
- 5) There may be hold on works due to delay in release of drawings and other inputs.
- 6) There may be delay in release of payments to the contractor.
- 7) The scope of work may be substantially modified by the owner.
- 8) There may be levy of liquidated damages on the contractor. Other recoveries from bills may also lead to contractor raising the claim.

- 9) There may be delay on the part of contractor in completion of works due to inadequate mobilization of labor, material and plant.
- 10) There may be loss of profit and investment to the owner due to delays caused by the contractor.
- 11) Construction claims can also arise on account of inclement weather.

Construction development professionals need more expertise, understanding and technological advancement techniques to adequately administer and resolve disagreement, conflicts and disputes efficient and effectively so that the project progress and the quality of the product will be greatly enhanced.

International construction development projects are also faced with many difficulties during the course of execution of the work. They are as follows:

According to Ikechukwu (2011)

- (A) Authenticity of information from stakeholders or professional experts to contractors and structural engineers;
- (B) Misconceived perceive by stakeholders regarding the deliverables or services promised by contractors. Stakeholders can presume that they are entitled to ask for further support or specifications than the contractor has agreed to or can do;
- (C) Fragile construction development administration expertise in the areas of legalities and dispute resolutions that lengthen conflicts;
- (D) Cultural multiplicity and intricacies that to a large extent leads to poor communication and understanding among the different parties to the contract.

Conflict or disagreement is the character of construction development projects in either established construction market or energetic market. With impediment or hindrances of information and experiences, international construction development parties, who are different in professional orientation, might feel aggravated when conflicts are inevitable in international construction administration. Thus, it is significant for construction development managers to prevent dysfunctional conflicts and encourage and support functional views.

According to Okuntade (2014) conflict may arise in many ways you see contractors making claims against owners, designers fight blame for errors which he may or may not be responsible for, and the public often feels left out of decision making forums. Builders may face environmental challenges that the designers didn't consider, or nearby residents may object only after the project begins.

Verma (1998 cited in Ogunbayo 2013) attributed the most prevalent causes of conflict in projects as breakdown in communication and lack of respect; defective listening skills and perception differences, and these can lead to serious communication problem. The following are the leading causes of conflict caused by communication breakdown in projects; misinterpretations of design drawings, A. misunderstood change order delay in delivery of critical components; failure to execute instructions.

Ayuthya (2011) identified violating condition of the contract, insufficient working drawing details, delay in progress payment by owner, Evaluation of completion works, poorly written contract as the major causes of disputes in construction projects.

Mitkns and Mitkns (2014) identified unfair behavior of the parties to a construction agreement and psychological defense mechanism, unsuccessful communication between the client and contractor as likely causes of conflicts in the construction industry.

Almutari, Rashinagi and Sullivan stated the only delivery method found to have no litigation issues was the Best Value Performance Information Procurement System (BVPIPS).

3.0. METHODOLOGY

A survey of experts on Causes of Disputes in Building construction projects in Lagos State Nigeria was conducted. A well structured questionnaire was designed and administered to construction stakeholders.

These groups comprise Building Owners, Contractors and Consultants on building projects (Architects, Structural Engineers, Mechanical Engineers, Electrical Engineers and Quantity Surveyors). The questionnaires were distributed to a random sample of 40 Clients, 70 Contractors, 110 Consultants located in Lagos State.

3.1. Data Analysis Procedure

Of the 220 questionnaires that had been sent out to targeted groups, 129 questionnaires were returned which yield an overall response 58.64% rate of which is 26% from Clients, 43% from Contractors and 60% from Consultants.

Most of the questions in the questionnaire involved assessing some of the effects of delays on building construction projects on a five (5) point Likert's Scale. The data analysis therefore employed the following steps:

- (a) Computation of Relative Importance Index using weighted average formula.

$$RII = \frac{5n_1 + 4n_2 + 3n_3 + 2n_4 + 1n_5}{5N}$$

$$5N$$

Where n1 = frequency of respondent for very high, n2 = frequency of respondents for high, n3 = frequency of respondent for moderate, n4 = frequency of respondents for low, while n5 = frequency of respondent for not relevant.

3.2. Data Presentation and Analysis

Data from expert opinion survey are as presented in the following tables:

Table 2: Respondent too questionnaire survey.

Professional Group	Sent No.	Received No.	%
Clients	40	26	65
Contractors	70	43	61.43
Consultants	110	60	54.55
Total	220	129	58.64

Source: Field survey (2015).

Table 3: RII and R of potential causes of construction disputes

1= Not Important, 2= Of Little Importance, 3=Moderately Important, 4=Important, 5= Very Important

RII= Relative Importance Index, R=Rank

Causes of Disputes	Percentage of respondents scoring					RII	Rank
	1	2	3	4	5		
Changes or modifications of scope that increase consequential costs beyond initial cost	0.0	0.0	19.4	6.5	74.2	910	1
Variations and late confirmation of variations							
Design professional's failure to remain within the clients project budget and design objectives	0.0	0.0	12.9	35.5	51.6	877	2.5
Discrepancies/ ambiguities in the contract documents	3.2	0.0	12.9	22.6	61.3	877	2.5
Over measurement or under measurement of work by consultant to work in progress	3.2	0.0	9.7	38.7	48.4	858	4
Late information delivery	0.0	0.0	25.8	25.8	48.4	845	5
Unconfirmed oral instruction							
Failure to choose the appropriate procurement method	0.0	6.5	16.1	25.8	51.6	845	5
Design and specification oversights and errors or omissions, resulting from uncoordinated	3.2	3.2	12.9	32.3	48.4	839	8
civil, structural, architectural, mechanical and electrical designs	0.0	3.2	16.1	38.7	41.9	839	8
Conflicting instruction	12.9	3.2	3.2	12.9	67.7	839	8
Disruption or delays to the works caused by client							
Contractors failure to plan adequately and to follow planned schedules							
Late payments to subcontractors and suppliers	0.0	9.7	3.2	51.6	35.5	826	10
Clients expectation at variance with contract documentation	6.5	3.2	6.5	38.7	45.2	826	10
Under invoicing and over invoicing by contractors	6.5	3.2	19.4	16.1	54.8	819	13
Unclear lines of communication							
Delays in the supply of working drawings	0.0	6.5	22.6	25.8	45.2	819	13
Failure to use specified materials, skilled operatives and recognized methods	3.2	6.5	12.9	32.3	45.2	819	13
Award of contracts to incapable Contractors	3.2	9.7	0.0	48.7	38.7	819	13
Over measurement or under measurement of works by consultant to work in progress	6.5	9.7	3.2	32.3	48.4	813	17
Clients design vision not communicated effectively to the design team	0.0	6.5	9.7	54.8	29.0	813	17
Deficient management, supervision and coordination efforts on the part of the project manager	6.5	0.0	6.5	54.8	32.3	813	17
Poor and unfair allocation of project risk	0.0	0.0	32.3	29.0	38.7	813	17
Inaccurate valuation of variations and works in progress	0.0	12.9	0.0	58.1	29.0	806	20
Unclear and incomplete description of items in the Bills of Quantities	0.0	12.9	9.7	38.7	38.7	806	20
Failure of the client to honour payments as and when due							
Incomplete or inaccurate response to problem to presented by one party in the contract to another party in the contract	6.5	3.2	6.5	51.6	32.3	800	22
Over design and under estimating the cost involved	3.2	3.2	25.8	29.0	38.7	794	24
Contractors failure to coordinate subcontractors' work	0.0	3.2	29.0	35.5	32.3	794	24

Contractor fundamental misunderstanding of what is allowable under the terms of the contract	9.7	3.2	9.7	35.5	41.9	794	24
Site conditions with differ materially from those described in the contract documents(especially unforeseen underground conditions)	0.0	12.9	16.1	35.5	35.5	787	27
Failure to choose the appropriate procurement method	3.2	0.0	29.0	35.5	32.3	787	27
Ineffective communication between the parties on the project							
Non-responses to questions of problems presented by one party in the contract to another party in the contract	3.2	9.7	16.1	35.5	35.5	781	30
Poor financial arrangements by the clients leading to late payments	0.0	3.2	22.6	54.8	19.4	781	30
	0.0	6.5	35.5	22.6	35.5	774	33
	6.5	0.0	19.4	48.4	25.8	774	33
	12.9	0.0	6.5	48.4	32.3	774	33
	0.0	22.6	12.9	22.6	41.9	768	35
	9.7	9.7	6.5	38.7	35.5	761	36
	12.9	0.0	16.1	35.5	35.5	761	36
Cumbersome procedure for requesting information							
Unrealistic claims for variations of works by contractors							
Inadequate descriptions of the Preliminary items in the Bills of Quantities							
One party taking entrenched position during negotiating							
Government policy which encourages low evaluated tenders followed by claims	0.0	25.8	3.2	38.7	32.3	755	38
Poor interpretation of specifications	12.9	0.0	16.1	38.7	32.3	755	38
Contractor's failure to read the contract documents	0.0	22.6	9.7	38.7	29.0	748	40
Lacks of understanding and agreement on the type of contract between the client and the contractor	0.0	16.1	25.8	32.3	25.8	735	43
Inexperience on the part of the consultant	6.5	0.0	35.5	35.5	22.6	735	43
Improper determination of the employment of the contractor under the contract							
Disruptions and delays by the contractor that create deviation from initial programme of works	3.2	0.0	38.7	41.9	16.1	735	43
Contractors' failure to price properly for the works	0.0	3.2	45.2	32.3	19.4	735	43
Application of Liquidated Ascertain Damages (LAD)	3.2	3.2	35.5	38.7	19.4	735	43
Disruption and delays by the contractor that create deviation from initial programme of works							
One party taking entrenched position during contract negotiating	0.0	22.6	19.4	25.8	32.3	735	43
Inadequate site management	9.7	3.2	22.6	41.9	22.6	729	47
Unfair grant of extension of time							
The parties failing to identify and deal with issues on time	3.2	22.6	12.9	32.3	29.0	723	48
The absence of team spirit among members of the project team over design and under estimating the cost involved	9.7	3.2	32.3	25.8	29.0	723	48
Poor records keeping by client contractor and consultant	6.5	6.5	22.6	51.6	12.9	716	50
Acceleration of work requested by client that affected schedule	0.0	16.1	16.1	61.3	6.5	716	50
Application of Liquidated Ascertain Damages (LAD)							
Rigid budget control by the client	9.7	3.2	29.0	38.7	19.4	710	53
Non- availability of specified materials							
	6.5	16.1	19.4	32.3	25.8	710	53
	3.2	32.3	6.5	29.0	29.0	697	55
	0.0	22.6	22.6	41.9	12.9	690	56
	9.7	3.2	45.2	19.4	22.6	684	57
	9.7	22.6	12.9	25.8	29.0	684	57
	3.2	6.5	45.2	38.7	6.5	677	59
	12.9	19.4	9.7	48.7	9.7	645	60
	25.8	6.5	25.8	25.8	16.1	600	62
	12.9	6.5	58.1	19.4	3.2	587	63

Source: Field Survey (2015)

DISCUSSION OF RESULTS

Analysis of the respondents shows that 20.16% work in client organization, 33.33% and 46.51% work in contractor and consulting organizations respectively.

Tables 1a and 1b is the descriptive statistics showing the Relative importance indices and ranking of 63 disputes factors of the 63 factors assessed the 20 most critical factors causing disputes are charges or modifications of scope that increase consequential cost beyond initial Regio variations and late confirmation of variations, design professional's failure to remain within the client's project budget and design objectives RII=0.877 discrepancies/ambiguities in the contract documents RII=0.858 late information delivery and over measurement or under measurement of work by consultants to work in progress RII=0.845, Design and specification oversights, error or omissions resulting from uncoordinated civil, structural, architectural, mechanical and electrical designs, unconfirmed oral instructions, and failure to choose appropriate procurement method RII=0.839, disruptions or delays to the works caused by client and conflicting instructions RII=0.826, contractors failure to plan adequately and to follow, planned schedules, late payment to subcontractors and suppliers, under invoicing and over invoicing by contractors, unclear lines of communications, delay in the supply of working drawings, failure to use specified materials, skilled operatives and recognized methods RII=0.813, client design vision not communicated effectively to design term over measurement and under measurement of work in progress by consultants RII=0.806.

The following findings are valid in that most of the factors listed above are very strong influence on the overall cost of the project. A lot of the factors listed above will consequently necessitate agreeing the method to be used in arriving the additional cost of the project, which might lead to disputes if not well handled. Variation that might result in the reduction of the scope of the project input generates claims for loss of profit and overhead cost which may also lead to disagreement and eventually disputes if parties refuse to shift grounds.

CONCLUSION

The study confirmed that disputes incidences occur in construction projects in Lagos State, Nigeria. However, the factors that give rise to disputes are many and could be contractor related, client related or consultant related.

It is interesting to note two of the highly ranked disputes influencing factors occur at the post contract stage and are client/consultant related. The factors are indication of poor planning, brief not detailed enough, and scanty details in designs.

Consequently, effect to minimize disputes incidences in building construction projects must focus on eliminating/reducing the impact of the factors identified in this study.

RECOMMENDATION

Building Construction disputes will mitigate the speedy realization of the objectives of the building owner. Therefore, it hereby recommended the following must be well attended to in order to reduce the occurrence of disputes in building construction projects.

- Adequate time should be devoted to planning at the inception stage of the project
- Changes or modification in design of scope must be brought to the barest minimum
- The incidence of variation must be minimal if it cannot be totally avoided
- Contract documents must be very concise and unambiguous
- Consultants instructions must be clear and unambiguous
- Effort and time should be devoted to the preparation of bills of quantities
- Experienced contractors and consultants must be engaged to handle the construction and supervision of building construction projects.

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