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# An Investigation into the conditions of contract with regards to claims in some selected building projects.

BY

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A thesis submitted to the Postgraduate School, Ahmadu Bello University, Zaria in partial fulfillment of the requirements for the degree of M.Sc. in Construction Management.

## DECLARATION

I declare that this thesis has been written by me and that it is a record of my own research work. It has not been presented in any previous application for a higher degree. All quotations are indicated and the sources of information are specifically acknowledged by means of references.

MUSA M. M. MSHALGAVA

OCTOBER, 1982

ACKNOWLEDGEMENT

I wish to register my profound gratitude to Mr. Z. J. Sikora (B.Sc., M.Sc.) my main thesis Supervisor, for his unflinching support, guidance, and good suggestions during the course of producing this work. Also acknowledged for good suggestions and guidance, is Mr. A. A. Okwa, (B.Sc. bldg., M.Sc. Constr. Mgt.), my Co-Supervisor on the thesis who undertook the pains for checking me in my Office in order to render his help on the work.

The acknowledgement would be grossly deficient if I fail to mention Dr. D. A. Muazu (B.Sc., M.Sc., Ph.D., MNIOB, AIC, PZITB), Mr. Tim O. Mosaku (Associate Professor, Ag. Head of Department), Mr. A. A. Huseini (B.Sc., M.Sc.) and Mr. D. Kolawole (B.Sc. St., M.Sc. Constr. Mgt.) without whose advice, contributions and encouragement, even the choice of the thesis topic could have been a problem. Their sincere contributions the M.Sc. programme in general and to me in particular will remain fresh in memory.

Finally, my sincere gratitude goes to all staff of Building Department, Mr. Manir Yakubu (Kaduna State Ministry of Works), Mr. Kabir M. Maina (Kano State Ministry of Works), Mr. Gana H. Malgwi (Borno State Ministry of Works), Emmanuel Ashibogwu (Estate Department, Kaduna Polytechnic), Bala Ahmed (A. B. U. Estate Department), E. Abari, Cyril Ugwuanyi and a host of other good samaritans the contributions of whom in one form or another helped in speeding the production of this thesis.

ABSTRACT

One of the fundamental issues associated with an increasing population is the inordinate demand for houses, schools and hospitals. While houses provide shelter and schools provide the suitable abode of teaching and learning, hospitals provide the environment for extending welfare services to the teaming population. Hence, not only does the government vote huge sums of money for the provision of these basic facilities, in recent times, but individuals and co-poration also invest heavily in them for the purposes of promoting business. And this demand is expected to be on the increase as long as the population continues to increase.

These facilities (houses, schools, and hospitals) may otherwise be known as building products; the production of which involve the participation of many parties, each entering it at different time and with different interest. Principal of these parties are the financer of the projects called the employer, and the executor of them called the contractor. In between exist the consultants who, by mandate and agreement, see to the effective and proper erection and completion of the projects. These projects are usually executed by means of contracts.

In order to protect the diverse interests of the parties to the execution of the projects and the survival of the projects themselves, certain terms and conditions that define duties and

responsibilities that are obligatory on the parties to the contract for the execution of the projects usually form part of such contracts. These terms and conditions have undergone the test of time, and are usually standardized into suitable forms.

The inclusion of these terms and conditions not-withstanding, huge amount of claims are frequently instituted and collected on the building projects. Perhaps, that is why there is rampant saying that final project prices these days usually over-run their initial estimates by unpardonable margine.

"An investigation into the conditions of contract with regards to claims on some selected building projects" was therefore carried out in order to see whether or not the claims that do surface on projects actually have roots in the conditions of contract; and if it is the case, to suggest possible ways of ameliorating the situation.

This piece of work, however, is not a witch-hunting exercise that tries to aportion blame to some or all of the parties of building projects because there is no particular case in mind. Nor, is there any pre-formed idea about some or all of the clauses of the conditions of building contract that should be **modified** in accordance with personal opinions. This is because, as mentioned earlier, these terms and conditions have undergone test of time on building projects and so their modification may be very difficult. Rather, it tries to see how the ethical operation of the conditions of contract on projects could support or give rise to claims; and to use the

results of the findings if any and possible, in recommending possible ways of ameliorating the situation in order to save the costs of providing these facilities, the demand of which continues to grow with the population- frown unjustified escalation beyond pardonable levels.

LIST OF TABLES:


| | | | PAGES |
|---|---|---|---|
| Table 1.11 | - | The position of the construction sector in the National Gross domestic products. | 3 |
| Table 2.1 | - | Contractual relationship between parties of building contract. | 13 |
| Table 2.2 | - | Features of building contract. | 28 |
| Table 5.1 | - | Raw data | 75-77 |
| Table 6.1 | - | Synchronization of clauses in the contract conditions with the factors responsible for claims on the data project. | 87 |
| Table 6.2 | - | Magnitude (size) of claims related to supporting clauses. | 100 |
| Table 6.3 | - | Abstracted 'JCT' and Govt. 'COC' standard forms of conditions of building contract that relate to claims. | 102-103 |
| Table 6.4 | - | Size of claims relative to original contract sums. | 106 |

LIST OF FIGURE


| | | | PAGES |
|---|---|---|---|
| Figure 1.1 | - | The Challenges of construction. | 5 |
| Figure 6.1 | - | Amount of claims relative to original contract sums. | 84 |
| Figure 6.2 | - | Occurrence of the clauses that supported claims in relation to the projects. | 99 |

EXHIBITS OF THE CLAUSES THAT FORMED BASIS FOR CLAIMS ON THE PROJECTS EXTRACTED FROM SOME OF THEM.


| | | | PAGE |
|---|---|---|---|
| Exhibit 1a | - | Variation clause (JCT) | 88-89 |
| Exhibit 1b | - | Variation clause (GCOC) | 90 |
| Exhibit 2a | - | Legislation clause (JCT) | 91 |
| Exhibit 2b | - | Legislation clauses (GCOC) | 92 |
| Exhibit 3a | - | Fluctuation clause (JCT) | 93-95 |
| Exhibit 3b | - | Fluctuation clause (GCOC) | 96 |

## ABBREVIATIONS

| | | |
|---|---|---|
| Q/S | - | Quantity Surveyor |
| 'JCT' | - | Joint Contracts Tribunal |
| Govt. | - | Government |
| 'COC' | - | Conditions of Contract |
| Fig. | - | Figure |
| GDP | - | Gross Domestic Products. |
| NGDP | - | National Gross Domestic Products. |
| M.Sc. | - | Master of Science |
| Kad. | - | Kaduna |
| Poly. | - | Polytechnic. |

TABLE OF CONTENTS

PART ONE


| CHAPTER ONE: INTRODUCTION | | PAGE |
|---|---|---|
| 1.1 | Need for the work | 1 |
| 1.2 | Scope of the work | 5 |
| 1.3 | Method of simplication | 8 |
| 1.4 | Special Characteristics of the work | 8 |
| **CHAPTER TWO: BUILDING CONTRACTS** | | |
| 2.1 | Generally | 10 |
| 2.2 | Formation of building contracts | |
| 2.3 | Types of building contracts | 18 |
| 2.4 | The contract documents | 24 |
| 2.5 | Contracting procedure | 26 |
| **CHAPTER THREE: THE CONDITIONS OF CONTRACT** | | |
| 3.1 | Generally | 30 |
| 3.2 | Types of contract conditions | 30 |
| 3.3 | Relationship of conditions of other contract documents | 36 |
| 3.4 | The conditions of contract relating to claims. | 37 |
| **CHAPTER FOUR: CONTRACTUAL CLAIMS** | | |
| 4.1 | The rational for claims | 42 |
| 4.2 | Contractual basis for claims | 44 |
| 4.3 | Types of claims | 50 |

| | | |
|---|---|---|
| 4.4 | Identification of factors giving rise to claims | 53 |
| 4.5 | Possible ways of preventing claims | 56 |
| 4.6 | The procedure for claims | 58 |
| 4.7 | Contractual disputes | 61 |
| 4.8 | Arbitration | 62 |

PART TWO

CHAPTER FIVE: THE COLLECTION AND PRESENTATION OF DATA

| | | |
|---|---|---|
| 5.1 | Methodology | 67 |
| 5.2 | Collection of the data | 73 |
| 5.3 | Presentation of the raw data | 74 |
| 5.4 | Problems of data collection | 78 |
| 5.5 | | |

CHAPTER SIX: ANALYSIS OF THE PRESENTED DATA

| | | |
|---|---|---|
| 6.1 | Generally | 80 |
| 6.2 | Analysis of the tangible aspects of the data | 82 |
| 6.3 | Analysis of the intangible aspects of the data | 100 |

CHAPTER SEVEN: SUMMARY

| | | |
|---|---|---|
| 7.1 | Generally | 110 |
| 7.2 | Observation | 112 |
| 7.3 | Conclusions | 114 |
| 7.4 | Recommendations | 116 |

CHAPTER EIGHT: BIBLIOGRAPHY 120

# CHAPTER ONE

# INTRODUCTION

## 1.1 NEED FOR THE WORK

The construction Industry comprising building, civil engineering, repairs and maintenance works; can be viewed as being fragmentary both in place and time; and the total process which produces its products include the poliferation of participants, each entering it at a different point in time and with private interests and requirements. The industry can also be distinguished from other industries by the nature and characteristics of its products which include their custom-built nature, immobility, costliness, complexity, contineously changing technology, relatively longer period of production, and heavy dependences upon the fortunes of a number of other industries for raw materials.

Anatomy of above statements invariably leads any one to the conclusive facts that the construction industry is not only capital and time intensive, but it is also susceptible to uncertain circumstances due to other several factors such as those induced by the environment. Perhaps, that is why costs of construction projects often overrun the initial estimates.

Yet, the size and nature of the products notwithstanding, and despite the fact that their final costs usually overrun the initial estimates the demand and supply for them have been and are still on the increase all over the world (though with the disparity of demand always superceeding supply) due to physical, social, psychological and political factors.

This, can easily be seen when one looks at the gross domestic product (GDP) of Nigeria covering the years 1976 up-to 1982 as shown in table 1.1 on the next page. Though the percentage annual change fluctuates, the amount allocated to the construction sector as well as its yearly ratio of the total Gross Domestic Product (GDP) increase steadily.

This observation has been realized long ago; and in order to control both the process and procedure for executing construction projects, certain terms were formed and standardized (through experience and practice) that define the rights and obligations of the parties to construction contracts. These terms are called Contract Conditions, and have many formats and contents suitably designed for the different types of projects and practices in the construction industry. Each term of contract conditions in its own area of application, has been used over a reasonable period of time, and thus can be said to be time-tested; even though it is important to notice here that its operation in whole or in part on a particular contract largely depends on the nature, size and complexity of the project.

However; perhaps, because of the locational variability of construction products and the involvement of so many participants in the process, the various time-tested contract conditions within their own limitations, are often found to ladk grip (either due to defficiencies contained therein or the parties' negligence) of purpose on constructs, and so allow unnecessary actions on the contracts in terms of claims (time, money or both).

TABLE 1.1

THE POSITION OF THE CONSTRUCTION SECTOR IN THE NATIONAL GROSS DOMESTIC PRODUCTION (NGDP)

| SERIAL NUMBER | YEAR | TOTAL GDP (ALL SECTORS) (₦ MILLION) | CONSTRUCTION SECTOR (₦ MILLION | PERCENTAGE OF TOTAL GDP |
|---|---|---|---|---|
| 1 | 1976 | 23826.60 | 2150.00 | 9.02 |
| 2 | 1977 | 26758.50 | 2488.50 | 9.30 |
| 3 | 1978 | 27370.20 | 2981.00 | 10.89 |
| 4 | 1979 | 31424.70 | 3491.00 | 11.11 |
| 5 | 1980 | 34593.00 | 5964.20 | 11.46 |
| 6 | 1981 | 38396.80 | 4508.00 | 11.74 |
| 7 | 1982 | 44994.80 | 5184.40 | 12.35 |

OBTAINED FROM "GUIDELINES FOR THE FOURTH NATIONAL DEVELOPMENT PLAN, 1981 -1985"

And in a standard contract, claims whether just or otherwise take roots from the terms of its operational contract conditions. Claims are becoming part and parcel of every construction contract nowadays especially in Nigeria where gigantic construction projects are being crashed to meet socio-political requirements; and claims usually constitute undesirably high proportion of the original construction contract sums and contract periods. This is an unfortunate situation, as Claim. are serious menace to the construction industry in particular, and the national economy at large.

Thus, it is in light of all of the above that there is need to carry out some investigations into the field. Hence the title of this thesis (An investigation into Contract conditions with regards to claims in some selected building projects); and its aim is to investigate, analyse, and interprete if any, the contract conditions of some selected executed building projects that explicitly or implicitly supported claims in order to establish the legality of such claims. To achieve this aim, decision has been made to carry out some study of the contract conditions of the selected and executed building projects with a view to determining the circumstances if any, that gave rise to claims, and how the circumstances were used to achieve the claims. Based on the findings of the investigation and in conjunction with the attendant literature review, some subjective recommendations may be made on how the contract conditions may possibly be modified to minimize the number and amount of claims on future projects.

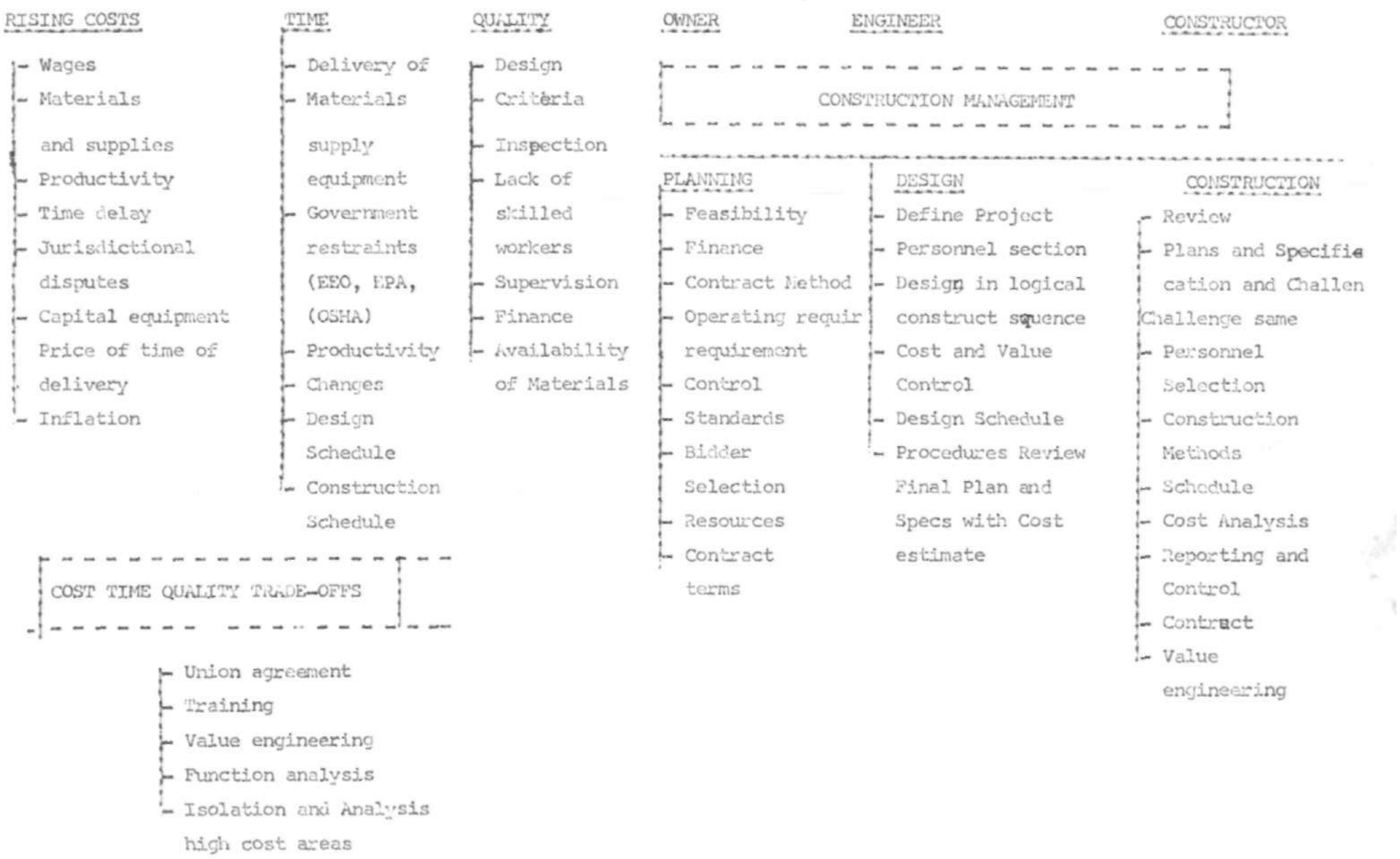
## 1.2 SCOPE OF THE WORK

The Construction Industry is large and diverse, with the notable sectors mentioned in the first paragraph of section 1.1. of the this Chapter contained within it. In similar vein, the types of contract, contract conditions, and all relevant provisions that go along with it are many in order to reasonably control and co-ordinate the various types of construction methods and practices under various circumstance. Furthermore, "the challenges of the construction" industry as developed by Paulson; and adapted from "Construction Management - A professional approach" by Kavanagh shown in figure 1.1, indicate that the construction industry could be both complex and demanding in many spheres of human knowledge, especially Technological, legal, financial and administrative knowledge and experience. Thus, to be honest, it is extremely difficult to treat all the aspects of construction in a single book of this type.

This thesis is therefore limited to the treatment of Building projects only, with particular attention to Housing, Schools and Hospitals. For the contract conditions, it is convenient to treat only the Joint contract tribunal (JCT) standard form of building contract (The 1963 Private edition for use with quantities), and the Northern states' government agreement and schedule of conditions of building contract. On the other side, claims will pertain only to financial claims. It is important to note that claims under this thesis would be those that increase original contract sum.

FIGURE 1.1

THE CHALLENGES OF CONSTRUCTION



That is to say, claims treated in this book are contractors' claims on the selected projects. Little or no mentiond would be made about employers' claims mostly in terms of liquidated and assertained damages. The choice of these areas out of so many others in their individual domains is for clarity and convenience. Building projects are chosen not only because they constitute the lion portion of the construction industry, but because they are also relatively simpler to to handle; perhaps due to the fact that they are constructed in large numbers every year. The "JCT" standard form of conditions fo. building contract as well as the Government's agreement and schedule of conditions of building contract are chosen because they are the most widely used on both government and private jobs in Nigeria. Time and financial claims constitute almost hundred percent of all claims entertained on construction contracts although in this thesis, financial claims are being treated in order to avoid complexity. And of the claims instituted on building contracts, contractors' claims constitute more than ninety percent both in value and occurence. One more aspect that needs to be mentioned is the type of contracts used in the construction industry. In this work, only building projects executed on lump-sum contracts (which are modified form of entire contracts) are considered. Lump-sum type of contract is also chosen out of other numerous types because of its wide application in Nigeria.

Finally, data for the work are soley obtained from three States in the Northern part of Nigeria. These States are Borno, Kano and Kaduna States.

Location, policy of individual States and methods of practice may constitute factors responsible for claims. But choice of these States for the work is not based on any or more of such factors. Rather, it is based on the availability and the ease with which relevant data could be obtained. Thus, while this thesis cannot claim total representation of all parts of Nigeria because the data was obtained from only three States, it is hoped that analysis of same will bring out some useful results for use on future projects.

## 1.3. METHOD OF SIMPLICATION

In order to promote clarity and perhaps minimize cramping ideas, the whole of this work is divided into two broad parts. Part one contains the introduction and general literature review; while part two covers the investigation and analysis of data, conclusions and recommendations. To enable a reader get straight to the subject matter of this thesis, a lot of otherwise relevant information have been ommitted in both parts. The ommissions are partly due may be to the limitations of the writer's knowledge in the field and partly deliberate; as only facts which are directly or latently relevant to the aims and objectives of the work are considered and treated.

For further simplication, unnecessary terminologies have been avoided, and as much as possible effort has been made all through to avoid meandering by the use of simple phrases to bring out meanings vividly.

## 1.4 SPECIAL CHARACTERISTICS OF THE WORK

As mentioned in section 1.2 of this Chapter this thesis need adequate knowledge in law (law of building contracts) economics,

finance and methods of construction. Though one might be associated with building construction for quite a reasonable time, it is hard to claim adequate knowledge in the mentioned fields required for this work work. Thus, all the legal financial and technological terms and expressions used to portray aims and objectives are either borrowed or self-formed with deep apology to specialists in these respective fields.

# CHAPTER TWO

# BUILDING CONTRACTS

## 2.1 GENERALLY

Generally, a contract may be described as the writing containing the agreement of parties with specified terms and conditions, and serving as a proof of the obligation or obligations undertaken by the parties. But, before such agreements are signed and obligations incurred by parties to a contract, there are usually preceeding discussions, negotiations and the making of committments by the parties which later form the terms and conditions of the contract. The conduct of the parties, however, as well as the interpretations of the contract or agreement, are governed by the law of the country or jurisdiction in w ich they reside, conduct their business or lelect to be the governing jurisdiction. Vital in the formation of any contract is that, there has to be an offer, an acceptance, and some consideration between the parties.

Thus, specifically, building contract may be said to be an agreement involving two parties (The employer and the contractor), where one party (the contractor) is to render a service (construct a building) to the other party'(the employer) in return for the payment of an agreed sum of money (or an agreed basis of evaluation). Offer in this case is communicated in the contractor's tender to the building employer. Acceptance is made when the building employer accepts the offer of the terndering contractor in its entirety; whereas consideration between the two parties consists of the agreement by the employer to pay a specified sum of money for the

performance of the agreed amount of work. This is the legal base upon which a contractual agreement is built. As may be seen later, building contracts are varied in nature and method.

There are generally only two parties to a legally building contract; having equal status under the contract. These parties are:

(1) The employer who is the person for whom the building is going be constructed, and who will pay the price of the building.

(2) The contractor who undertakes to construct the building to the terms and conditions agreed upon with the employer, and who receives the price for the construction of the building. The employer may be an individual, government or corporation whereas in a standard contract, the contractor may either be an individual or a corporation.

There are other numerous parties without the involvement of whom the building project may not be successfully implemented. These are usually professionals in their fields who come in as agent or employees of the employer or contractor under separate contract agreement. They are in no way parties to the aforementioned legally binding contract. Depending on the size and/or nature of the building project, such parties may include all, or even more of the following:-

(i) Architect
(ii) Engineer
(iii) Quantity Surveyor
(iv) Sub-contractor
(v) Supplier.

The Architect is an agent of, and usually the first consultant to be employed by the employer. He is either directly or through a qualified representative, engaged in the design of the structures, supervision of the erestion, and control of the performance. The contract conditions do define both the direct and indirect scope of authority of the Architect as an agent of the employer. The functions of an engineer on an engineering project are similar to those of the Ardhitect.

Quantity Surveyor may also be employed by and on behalf of the employer to perform such functions as measurement of quantities to enable tender documents to be prepared, preparation of valuations for iterim payment, and the measurement and valuation of variations. Under this type of arrangement, the Quantity Surveyor is not an agent of the employer, and therefore has no authority through the contract to person such functions as the issuance of instructions on behalf of the employer. He may also be employed by the Contractor to work for him.

A sub-contractor or supplier may be a firm or person engaged by the contractor to carry out part of the work) (in the case of sub-contractor) or supply materials (in the case of supplier), and who may be required to enter into a contract with the contractor for the execution of that duty. In this case, the sub-contractor or supplier has no contractual relationship with the employer or his agents. The sub-contractor or supplier may, on the other hand, be nominated by the Architect working for and on behalf of the employer. Infact the contractual relationship existing between parties involved in the erection and completion of a building project may be as shown in table 2.1.

TABLE 2.1*

CONTRACT RELATIONSHIP — CONTRACTUAL RELATIONSHIP BETWEEN PARTIES OF BUILDING CONTRACT.

| LEGAL FORM | EMPLOYER | ARCHITECT | QUANTITY SURVEYOR | CONTRACTOR | SUB-CONTRACTOR | SUPPLIER |
|---|---|---|---|---|---|---|
| EMPLOYER | | Not party to main agreement. But Employer is agent through contract | Employer's consultant on cost matters | Main contract party | Not party to main contract. | Ditto |
| ARCHITECT | Employment Agreement | | Co-consultants to to employer. | Architect directs contractor in accordance with contract conditions | Architect terminates him. | Ditto |
| QUANTITY SURVEYOR | Employment Agreement | | | P/s negotiates cost matters with contractor | | |
| CONTRACTOR | Main Contract | | | | Party in sub-contract | Party in supply agreement |
| SUB-CONTRACTOR | | | | Sub-Contract Agreement | | |
| SUPPLIER | | | | Supply Agreement | | |

*ADOPTED AND MODIFIED FROM UNPUBLISHED NOTES ON CONSTRUCTION CONTRACTS BY VOCE.

## 2.2 FORMATION OF THE CONTRACT

Formation of the building contract is the process whereby all the terms and conditions that are to the obligatory upon the parties, to the contract are discussed, negotiated, established, and formalised; with the full participation and consent of the parties. It is of paramount importance that this stage of receives complete care and attention. This is because in the event of subsequent dispute, the courts or arbitrator will usually refer back to the formation of the contract to establish whether or not contract exists between the parties; and if it exists, terms of the contract. The processes involved in the formation of the contract are:

(a) Offer
(b) Acceptance
(c) Agreement of terms ( which will be embodied in offer and acceptance).

### (a) OFFER

In relation to a building contract executed in the normal way, offer is communicated in the contractor's tender to the building owner or employer. Depending on the type and nature of the invitation, the employer may therefore have a series of offers to enter a contract; only one of which may be converted to a contract by the employer's acceptance. There are certain rules associated with an offer which must be observed. These rules are as follows:-

(i) An invitation to tender is not an offer

(ii) The terms of offer must be certain. Because acceptance of offer immediately creates a legal contract, the terms at this stage must be clear and understood by both parties.

(iii) A statement of price is not an offer. Therefore, it is important to establish that the tender for a contract is an offer and not a statement of price.

(iv) Lapse of offer. It is normal in tender situations to specify a period for acceptance, by which time if acceptance has not been made, the offer ceases. If no period is specified, acceptance must be made within a reasonable time. Should either party become incapable of entering a potential contract before acceptance (e.g. death of party, liquidation of firm), the offer will be deemed to have lapsed.

(v) Revocation of offer. The contractor (offeror) may withdraw his offer (tender) at any time prior to acceptance. But once acceptance has been made or reasonably communicated, a contract is formed and revocation becomes impossible.

(vi) Communication of offer. The offer must be communicated in good time to the offeree (employer).

(ii) ACCEPTANCE

From the building contract point of view, acceptance is made by the employer involving his acceptance (Agreement) of the offer of one of the contractor's in its entirety. Like offer, acceptance too has string of associated rules that should be observed.

These can be itemized as folows:-

(i) Unqualified Agreement. The agreement of the offer must corespond exactly with the terms of the offer. Thus, by signifying acceptance, it is implied that the employer is in agreement with all the terms of the contractor's offer.

(ii) Counter offer constitutes rejection - If an employer does not agree with the terms of the offer made by the contractor and makes a counter offer embracing different terms, the contractor's offer is deemed rejected and the counter offer of the employer stands for acceptance by the contractor.

(iii) Acceptance must be properly communicated. Acceptance becomes effective only from the time it is communicated to the offeror; and in the case of acceptance being communicated by post, it becomes effective only from that it is properly posted.

(iv) Performance may constitute acceptance. If an offer is deemed to include a term providing that performance shall be sufficient acceptance, communication of acceptance is not necessary. In the building contract, the presence of a contractor on site will be construed as constituting the employer's acceptance of his offer if formal acceptance has not been made.

(c) TERMS OF THE CONTRACT

The terms of the building contract are the contents of the contract. It is the terms of the contract that determines the extent to which parties to the contract are in agreement, because it is here that the rights and obligations of the parties arising through the contract are defined. Terms of a contract may be expre expressed or implied.

(i) Expressed terms: These are the terms agreed upon by the parties during negotiation (offer and acceptance) by which they intended to be bound. In the case of a building contract, expressed terms may include the conditions of the offer represented by the tender or contract documents. Statements made by the parties during negotiations, but did not intend to make them binding terms, may also be taken into consideration if they help to deduce the meaning of the contract.

(ii) Implied terms: It is presumed that the parties to the building contract have expressed every material term to be affective upon the contract. If however, it is found that terms covering an aspect of the contract are absent, the courts in the case of disputes, may infer a term which will be binding upon both parties. Such terms may be inferred by the courts either to give effect to the presumed intention of the parties or on grounds of statute.

It is however, very rare in building contracts for terms to be implied since standardized contracts are used.

From the foregoing, it may be established that the proper performance of a building contract depends on the formation of the contract as it helps in the determination of the actual point at which the contract is made; so that in the case of dispute, actual offer and acceptance can be identified, and the precise terms of the contract understood.

## 2.3 TYPES OF BUILDING CONTRACTS

One should be very careful in his attempt to discuss types of building contracts. This is because as put by Wundram, "the procedures for selecting the organisation to supervise, manage and perform building construction and the types of contract avaialble have proliferated in recent years because of the increasing complexity of building designs, escalating costs, legal constraints, magnitude of public projects, accelerated social needs, and increasing demands on building owners and their staff". Thus, no list can help but omit many significant variants in contracting methods. Furthermore, most of the contracting methods do transfuse in one another that distinct democration may be impossible. Many countries and many practices do use different contracting methods.

Nevertheless, standard contracting practice favour the use of some or all of the following types of building contracts depending on the nature, requirements, and availability of documents on the project:

(a) Lump sum contracts

(b) Schedule (re-measurement) contracts.

(c) Cost Reimbursement contracts.

(d) Target Cost contracts

(e) Stage contracts.

(a) LUMP SUM CONTRACTS

This is also referred to as the fixed price contract, and it is the one most used and known to contractors the world over. Almost all public works and a majority of private works are tendered on this basis, and award is usually based on reasonable lowest price. Thus, lump sum contract may be defined as an agreement to perform the building works for one fixed price, regardless of the costs to the contractor. Escalation clauses under such contract for increases in the cost of labour or materials are rare in private works and almost forbidden in public works. The fixed price for which the contractor undertakes to perform the works is computed from specifications, drawings and Bills of Quantities. Thus, for such price to be fair, and reasonably accurate, the design of the project has to be complete before tender, so that Bill of Quantities can be accurately prepared; and the contract requires suitable period to prepare his price. Close supervision of works by experienced staff of both parties is also recommendable for the successful execution of such a contract.

The advantage of lump sum contract to the employer is the elimination of construction risks to be born by him.

On the other hand, the advantage of this practice to the contractor is the reduction of excessive book-keeping expense for him as well as the complete freedom to select his own subcontractors.

With the employer and contractor maintaining opposing financial interests in this type of contractual arrangem nt, both parties must take considerable pains to protect their positions. This is because, the process of incorporating change is difficult, costly, and generally time consuming. Additionally construction starts are usually delayed until all design is complete and tenders are received, reviewed and contracts awarded.

(b) SCHEDULE (RE-MEASUREMENT) CONTRACTS.

These type of contracts are very rare in practice. It is also called unit price contracts. Schedule contract is generally applied to building project when and where the information available relating to the project is inadequate to enable reasonably accurate price of the whole project to be assessed.

Under such situation, a schedule of all the likely items to be ecountered is prepared, and rates are applied by the contractor. As the work proceeds, measurements enables quantities to be inserted and the cost evaluated using the appropriate rates.

(c) COST REIMBURSEMENT CONTRACTS

This is also called cost plus contracts. A cost reimbursement contract is an agreement to perform work and be re-imbursed on the basis of actual cost, plus a percentage (or fixed amount) fee for the

the contractor. Such contractual arrangements are applied in a situation when and where unusual or particular skills are required for a project and there exists little opportunity for competition among contractors, accurate definition of the work to be performed is not practical, or the employer wishes to continue to use a particular contractor. For this type of contract, the employer or his agents need special experience in order to determine the need for this form of contract and to appreciate the risks involved.

The advantage of this type of contract is that, it allows work to start on the project before plans are complete or even before all requirements are known; and this may be particularly desirable after say, a disaster; when an employer wishes to quickly get back into operation. This method also allows a great deal of flexibility to make changes at their actual cost.

It is important to note however, that by definition, cost reimbursement contract does not guarantee a final cost. Therefore, it is in the interest of the employer or his agents to select a contractor that is experienced in this type of contract, efficient, and who also has management experience in order to minimize risks of escalating costs.

(d) TARGET COST CONTRACT

This is another type of cost reimbursement contract; sharing common features. Except, in target cost contracts, a "target prime costs" is agreed upon by the parties and a fee for management is calculated.

The "actual" prime cost is paid to the contractor, but the fee is usually adjusted in relation to differences between "target" and "actual" costs. While it is important to agree on an accurate target cost, it is not necessary to prepare Bills of Quantities for the purpose.

(e) STAGE CONTRACTS

This type of contractual arrangements can assume any of the aforementioned types. The only slight difference which gives it the name is that, under this type of contract; the contractor agrees to construct the whole of the building works in consideration of specified price made up of separate payments for each of the separate parts of the whole.

It is important to note that, no matter the list of the types of contracts, building contracts can genuinely be classified under one general type. This, in essence, may be termed "entire" contracts; and all the aforenamed types are considered as variations to it. An entire contract may be described as the one where the entire fulfilment of the promise of one party is a condition precedent to call for the fulfilment of the promise of the other party. This means that when the contractor has completed the works, the employer is to pay the agreed sum. Infact, in a genuinely entire building contract, the following rules apply:

(i) The contractor cannot claim payments until completion of the works. "No completion (substantial), no payment and claim of damages".

But if only trivial items are left outstanding, the courts may deem a contract complete and may counter-charge the contractor for the outstanding work.

(ii) The contractor carries risk of completion (regardless of hindrances and hazards) with no claims for extra payment, but with the possibility of extension of time.

(iii) The employmer must pay whole price as soon as the work is completed. He cannot hold back money in respect of defects, but must take action for breach of contract.

(iv) Neither party can vary the contract.

(v) Any work or materials reasonably necessary for the completion of the works are deemed to be included. But, as was mentioned at the carly stage of this section that there is an increasing complexity in the design of building project, escalating costs, and all pther associated problems, entire contract is unrealistic in the face of all the risks and uncertainties that charcteristize the building industry. Thus, modifications are frequently introduced in practice which have the effect of softening the rigorous conditions of the entire contracts discussed above. Such modifications include:-

(i) Right for the contractor to receive interim payments subject to retention.

(ii) Right for the employer to retain part of the fund for a period (usually six months) after completion against clearance of defects.

(iii) The transfer of some risks from contractor to employer (e.g. damages to work); though this may be additional requirement on contractor to insure it.

(iv) Recognition that certain contingencies will release contractor from obligation to complete.

(v) Provision made for contractor to be paid for extra-work carried out.

(vi) Provision for the Architect (employer's agent) to vary the work, and issue instructions on how the works are to be carried out.

(vii) Where Quantities form part of contract, they do not destroy continuity. It is on the basis of these - modifications that the different types of variations to the entire contract resulted.

2. THE CONTRACT DOCUMENTS

In the formation of building contracts discussed earlier, we made reference to the terms of contract as being the contents of the contract which the courts will look for in the event of dispute between the parties to the contract in order to establish the point at which they are in agreement. Such contents include some physical or tangible documents which can be presented before the courts to serve as evidences. Thus, contract document, as the name depicts, can be in the form of one single sheet of paper documenting the agreement between the parties and signed by both, or it can consist of several

hundreds of pages documenting the detailed obligatory conditions, and various considerations that need to be present in order to cover all possible situations that may be encountered in building contracts. In general practice, building contract document consists of some or all of the following:-

(a) Articles of agreement

(b) Conditions of contract

(c) Drawings

(d) Specifications

(e) Bills of Quantities.

Article of agreement is a form which must be completed and signed by both parties. It identifies the parties to the contract, name the Architect, defines the work, and states the contract sum.

Conditions of contract are usually embodied in a standard form, and they constitute the terms that are to bind the parties in the contract.

In strict adherence to contratual arrangements, a limited number of drawings are usually selected as the contract drawings which outline the projects, and are signed by the parties to the contract.

In specification, description of works to be executed, materials and standard of workmanship are dealt with.

But specification is not used on most building projects nowadays because of the use of Bills of Quantities which usually incorporate all the informations required from specifications.

Finally, Bills of Quantities are legal document incorporating not only the specification of material and workmanship, but also measured quantities, rates and the total cost of the works.

## 2.5 CONTRACTING PROCEDURE

Contracting procedure in another way can be referred to as "general pre-contract preparation", and it outlines the various stages involved in processing building contract from the clients conception to the period the contract is finally awarded to the successful contractor. The Simon report, although published as long ago as 1944, sets out in paragraph 22 what still remains an excellent summary of good practice in pre-contract procedure[3].

> The paragraph reads, "Good practice in placing a contract for a large building has been as follows:
>
> (a) The Architect, with the building owner, has prepared a statement of the latter's requirements.
>
> (b) He has selected the consultant and the Quantity Surveyor, obtaining, where necessary, the approval of the building owner.
>
> (c) He has prepared sketch plans and, with the Quantity Surveyor, a preliminary approximate cost.
>
> (d) He has selected such sub-contractors as he has considered it necessary to nominate in advance of signing the contract.

(e) With the help of the consultants and nominated sub-contractors, he has prepared a full set of drawings and specifications.

(f) The Quantity Surveyor has prepared detailed bills of quantities, describing in words every service to be performed.

(g) Tenders have been obtained on the basis of the bills of quantities from a selected list of firms.

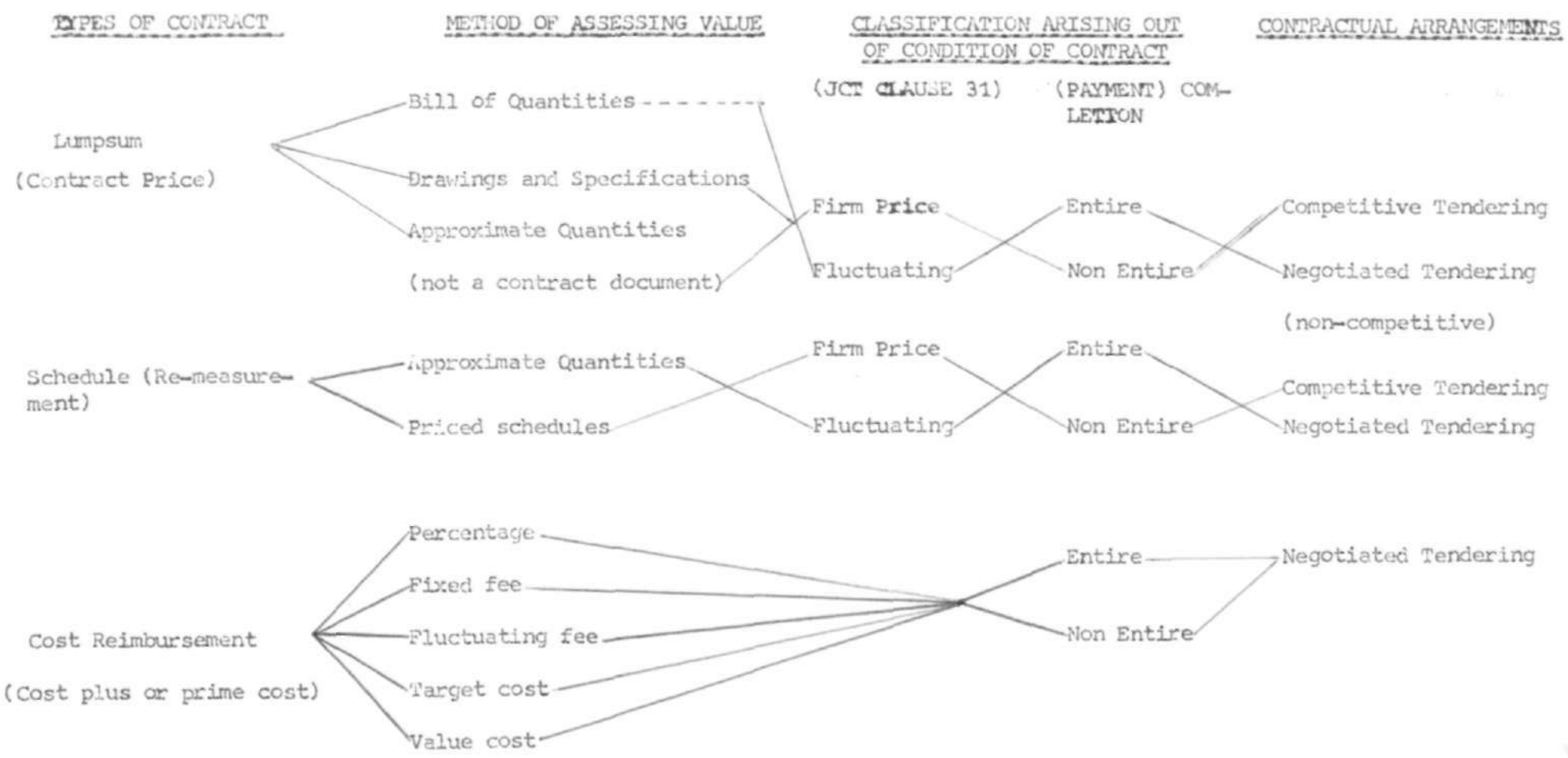
(h) The Architect has, with the building owner, selected the general contractor.

(i) He has, with the consultants and Quantity Surveyor, prepared the contract documents.

(j) The general contractor has signed the main contract and contracts with the sub-contractors - some nominated by the Architect, some selected by himself". Improvement on this as a summary of basic good practice would be difficult. Modifications however, are usually made to suit particular requirements, and one distinct process that has been committed from the list but usually practiced nowadays is some aspects of cost planning which have become essential features of a contract.

It is highly important that the contracting procedure is understood and practiced by all parties concerned at the intial stage of the contract because all the disputes and claims that arise later in the contract (during the post contract stage), usually take their root from this stage. As long as enough care and time are taken in evaluating the contracting procedure, there may be great unlikelihood of problems surfacing during the post contract stage which is essentially concerned with the administration of the contract originally contracted down to its completion and handing over. In summary, building contracting as represented in this Chpater can be shown in form of table as provided in table 2.2.

FEATURES OF BUILDING CONTRACT TABLE 2.2*




*ADAPTED AND MODIFIED FROM UNPUBLISHED NOTES BY SEEGAR

FOOT NOTES

$F^1$ - Edward C. Wundram frown his paper "The American Approach to Contracting" which appeared in the textbooks" "Management in the Construction Industry".

$F^2$ - K. D. Stafford in his unpublished notes on the types of Contract.

$F^3$ - Simon report obtained from "Pre-Contract Practice for Architects and Quantity Surveyors" by the aqua group.

# CHAPTER THREE

## THE CONDITION OF CONTRACT

### 3.1 GENERALLY

Conditions of contract are terms that define the rights, responsibilities, and relationships of the parties to the contract. These terms or conditions of contract are usually consolidated into one standard form called standard form of building contracts; and represents items identified over years of building construction industry experience that must be observed as precedents if disputes are to be avoided, and the contract executed in a fair manner. It is important to note at this juncture however, that the standard forms of conditions of building contract are varied; and although the terms embodied therein are time-tested legal expressions(modification of which could be implicatory), the degree to which they may be put to use in a building contract depends on the nature and type of both the project and contract employed. The standardized general conditions are usually modified in form of deletion or extended in form of supplementary provision or both, in particular situations to suit specific projects.

### 3.2 TYPES OF CONTRACT CONDITIONS

It has been mentioned in section 3.1 of this Chapter that contract conditions are usually consolidated into one standard document called s standard form of building contracts; and that there are various types of this standard form. Thus, there are numerous standard forms of contract conditions covering the whole span of the construction Industry that have been tested over reasonable period of time; though

the use of which depends on several factors such as the nature of construction project, nature of construction client, nature of construction contractor, size of project, etc. Standard building contract conditions may be one of more of the following types:

(a) Joint contracts tribunal (JCT) standard form of conditions of building contract, private edition for use with and without quantities or with approximate quantities; and the local authority's edition also for use with and without quantities or with approximate quantities.

(b) The Federal and State governments Agreement and Schedule of conditions of building contract for use with Quantities

(c) Nominated sub-contract standard form of contract ("Green form")

(d) Non-nominated sub-contract standard form of contract ("Blue form"). There are numerous other standard forms of contract conditions covering Civil Engineering and service aspects of the construction industry, the mention of which will make the work uninterestingly bulky. There are also certain clauses from either of the above-mentioned types of contract conditions that are curved out and treated into a standard form (like the "formula rules standard form of building contract) to suit particular situations that one does not want to delve into for similar reasons. Rather, in comformity with the scope of work discussed in the introductory part of the dissertation,

treatment will be concentrated on the first two mentioned types only; and perhaps, with rudimentary mention of the last two where applicable.

(a) THE JOINT CONTRACT TRIBUNAL STANDARD FORM OF CONDITIONS OF BUILDING CONTRACT

This document has several variants as follows:

(i) Local authorities edition
with quantities
without quantities
with approximate quantities.

(ii) Private edition
with quantities
without quantities
with approximate quantities. It has also undergone so many editions and revisions; the latest of the editions being 1963 edition while the latest of the revision is the 1980 revision. The July 1977 revision of the standard document sets out 35 conditions that pertain to building projects as follows:

| CLAUSES NO. | CONDITIONS |
|---|---|
| 1 | Contractor's obligations. |
| 2 | Architect's instructions. |
| 3 | Contract documents |
| 4. | Statutory obligations, notices, fees and charges. |
| 5 | Levels and setting out of works. |

| | |
|---|---|
| 6 | Materials, goods and workmanship to confirm to descriptions, testing and inspection. |
| 7 | Royalties and patent rights. |
| 8 | Foreman-in-charge |
| 9 | Access for Architect to the works. |
| 10 | Clerk of works |
| 11 | Variations, provisional and prime cost sums. |
| 12 | Contract bills |
| 13A | Contract sum |
| 13B | Inclusive and exclusive value Added tax supplemented agreements. |
| 14 | Materials and goods unfixed or off-site. |
| 15 | Practical completion and defects liability |
| 16 | Partial possession by employer |
| 17 | Assignment or sub-letting |
| 18 | Injury to persons and property and employer's indeminity |
| 19 | Insurance against injury to persons and property |
| 19A | Expected risks, nuclear perils etc. |
| 20 | Insurance of the works against fire etc. |
| 21 | Possession, completion and postponement |
| 22 | Damages for non-completion |
| 23 | Extension of time |
| 24 | Loss and expense caused by disburtance of regular progress of the works |

| | |
|---|---|
| 25 | Determination by employer |
| 26 | Determination by contractor |
| 27 | Nominated sub-contractors |
| 28 | Nominated suppliers |
| 29 | Artists and tradesmen |
| 30 | Certificates and payments |
| 30B | Finance act ( No.2) 1975 - statutory tax deduction scheme. |
| 31 (A-E) | Fluctuations. |
| 32 | Outbreak of hostilities |
| 33 | War damages |
| 34 | Antiquities |
| 35 | Artitration. |

It is the standard form of the conditions of building contract that is mostly widely used on private and large government contracts, especially when the services of sonsultants are employed particularly in Nigeria - probably because of its compparatively more comprehensive treatment of the conditions that govern the proper execution of building projects.

(b) <u>THE GOVERNMENT AGREEMENT AND SCHEDULE OF CONDITIONS OF BUILDING CONTRACTS</u>

There are also many versions of this document. However, that used w'th quantities by the ten Northern State is nearly identical, and has 32 schedule of conditions outlined as follows:

| CLAUSE NO. | CONDITIONS |
|---|---|
| 1 | Definitions |
| 2 | Individual liability |
| 3 | Scope of contract |
| 4 | Drawings and Bills of Quantities ect. |
| 5 | Notices and fees |
| 6 | Setting out of works. |
| 7 | Material and workmanship to confirm to descriptions. |
| 8 | Foreman |
| 9 | Access for Architect to works |
| 10 | Duties and powers of Architect's representative |
| 11 | Accertainment of prices for variations |
| 12 | Quality and quantity of works |
| 13 | Unfixed materials when taken into account to be the property of employer. |
| 14 | Defects after completion |
| 15 | Assignment or sub-letting |
| 16 | Indemification against injuries to persons and property |
| 17 | Insurance |
| 18 | Date for possession and completion |
| 19 | Damages for non-completion |
| 20 | Delay and extension of time |
| 21 | Determin ation by employer |
| 22 | Determination by contractor |
| 23 | |

| | |
|---|---|
| 23 | Nominated sub-contractors |
| 24 | Nominated suppliers |
| 25 | Direct payment to nominated sub-contractors and suppliers |
| 26 | Artists and tradesmen |
| 27 | Certificates and payments |
| 28 | Fluctuations |
| 29 | War risks |
| 30 | War damages |
| 31 | Arbitration |
| 32 | Fair wages clause. |

When the two types of contract conditions are compared, one may justifiably say that they are nearly the same in outline, but quite differnt in details. The "JCT" standard form of conditions of building contract can be said to be the universal set from which the government version has been extracted, perhaps for simplicity and suitability of government policy requirements in dealing with some of its projects. No matter the pupose for which it is used, the government standard form of building contracts has more loose ends than the "JCT" type; and therefore can create more contractual problems.

## 3.3 RELATIONSHIP OF CONTRACT CONDITIONS TO OTHER CONTRACT DOCUMENTS

Every standard building contract consists of several documents which are complementary and, it is when they are taken together, that they represent an integrated contract. The relationship of contract conditions to the other contract documents discussed in last Chapter therefore is great.

Most of the terms in contract conditions have the direct or indiredt tendency of protecting the limitations and uncertainties that usually pervade the other contract documents. For example, contract drawings portrays graphically the work to be constructed with respect to dimensions, location, arrangement of components, and siting; while the contract bill of quantities sets out in a systematic manner, all the quantities and full description of items of labour, materials and plants required to erect and complete the building works. Since these documents are usually prepared before actual performance of the work starts, they deal with what initially does not exist, the transformation into existence of which may be hampered by shortcomings which are not visualized at the time they are being prepared. The standard form of building contracts within its own limitations therefore, is aware of this, and tries to incorporate terms, conditions, and procedure about how these problems shall be settled as they may arise. It may be noted however, that notwithstanding the protection accorded them, the contract conditions as a contract document cannot claim overwhelming superiority over the other documents, because without the existence of the others, it will have no standing point.

## 3.4 THE CONDITIONS OF CONTRACT RELATING TO CLAIMS:

Claims which will be treated in details in the next Chapter can be said to be a function of time and cost; and it is a subject of great concern in the construction industry as time and cost are the prime parameters of construction characteristics, and indeed, business life as a whole.

As gathered from the previous sections of this Chapter also, standard form of contract conditions, regardless of its format and content usually has the purpose (if observed) of ensuring three things pertaining to the building project viz:

(a) That the project is executed in good time;

(b) That the project is executed at a fair price, and

(c) That the project is executed in accordance with required standard. Therefore, it is not uncommon to find so many clauses of any standard form of conditions of building contracts relating directly or indirectly to claims, as the purpose of such contract conditions has direct bearing on claims. But, as usual, treatment to this section will be based on both the 1963 private edition with quantities of the "JCT" standard form of building contract and the Government's standard form of agreement and schedule of conditions of building contract for use with quantities.

(a) THE "JCT" STANDARD FORM OF BUILDING CONTRACT

Clauses of this document relating to claims can, according to opinion and convinience, be divided into three broad categories as follows:

(i) Those that may explicitly or implicitly cause or give rise to claims through their operation.

(ii) Those that prevent certain claims if they are included and observed in the contract.

(iii) Those that recognize the possibility of claims resulting in a project, and hence outline the procedure for settling them.

The first category constitutes all the clauses in which the Architect is empowered to issue instructions and variations on matters concerning the contract as extracted and reproduced below.

Clause 1 (2) Discrepancies in documents.

Clause 4 (1) Compliance with acts of parliament, by-laws, and other regulations.

Clause 5 Instructions regarding levels and setting out.

Clause 6 (3) Opening up for inspection

Clause 6 (4) Removal of work, materials or goods not complying with the contract.

Clause 11 (1) Instruction involving variations in the desing, quality or quantity of work.

Clause 11 (3) Expenditure of prime cost and provisional sums.

Clause 15 (3) Making good defects.

Clause 21 (2) Postponement of the execution of any work.

Clause 27 Instructions regarding nominated sub-contractor's work.

Clause 28 Instructions regarding nominated supplier's work.

Clause 32 (2) Protection of the work in the event of war.

Clause 33 Action in the event of war.

Clause 34 (2) Instruction regarding antiquities found in the execution of the work.

The procedure for the issuance of Architect's instructions are covered in clause 2 of the same document, while the procedure for the valuation of variations are covered in clause 11 (4).

On the other hand, those clauses that prevent certain claims if included and observed in a contract (second category) are the insurance claims covered in clauses 19 and 20. Unfortunately, these clauses even if used are not seriously observed particularly in Nigeria. As such, there are very few cases if any, where the operation of these clauses surfaced as preventive in matters of claims.

Finally, the last (third) category of the clauses embodied in the "JCT" standard form of building contract that recognize the likelihood of claims resulting from a contract are extracted as follows:

Clause 22: This clause deals with damages in event of non-completion within the agreed time.

Clause 23: Dealing with the circumstance that will entitle the contractor to extension of time

Clause 24: This is closely linked to clause 23 and deals with the circumstances that will entitle the contractor to claim for loss and expense.

Clause 31 which relates to the payment to the contractor of additional costs arising out of fluctuations in the price of labour, materials and plants.

Clause 34 (3): This is the clause relating to loss and expense caused by the operation of the antiquities clause.

It is important to remember that there is no hard rule in categoring the clauses of the "JCT" form of building contract (and in fact, there is no conventional rule at present) as appeared above. There are so many clauses that can belong to more than one category, such as clause 6; while other clauses are difficult to be fitted into any of the three categories, even though they may latently affect claims.

Similarly, looking at the outline of contents of the government's form of agreement and schedule of conditions of building contract in section 3.2 (under types of contract conditions) and perhaps, the document itself, the conditions that relate to claims can vividly be entracted and discussed. Mention need be made at last, however, that, in all aspects of claims, the causes as provided for in the clauses of the conditions of contract must be established; and depending on whether its occurence is as a result of the contractor's fault, the employer's fault, or as a result of a matter outside the control of the two parties, the procedure and final settlement of the claims vary.

# CHAPTER FOUR

## CONTRACTUAL CLAIMS

### 4.1 THE RATIONAL FOR CLAIMS

In the light of building contracts, contractual claims are the means whereby the contractor can be compensated for the loss he would suffer where and when the obligation that he undertook in the contract agreement has become more onerous than he anticipated through no fault of his own. Claim can also be instituted by the client or building owner against the contractor if for any cause outside his own fault or that of his agents, he suffers a loss as a result of the contractor's action that is contrary to the provisions of the contract agreement.

The rational for contractual claim is rooted in the very nature and characteristics of building projects. The nature of building works (be it houses, schools, hospitals or factories) comprise the completion of projects involving large complicated schemes, fairly long contract periods, high degree of complex documentation, and difficulty of finalizing design at the time of tender which makes the complete understanding of the project at the early stages difficult for all parties concerned (client, consultants and contractors). In a complete building contract, it is likely to have diverse parties contributing to the completion of the project. Such diverse parties may include Architects/Structural Engineers, Quantity Surveyors, employer, contractor, sub-contracts, suppliers, statutory authorities, client's employees, and contractor's employee; any of whom may disrupt or interfere with the progress of the works.

Also the uncertainty such as weather, availability of resources, and site conditions under which building projects are carried out makes it very difficult for the contractor to predict and allow for in the costs of completing the works. Government action may also warrant claims on on-going project without the fault of either party to the contract. For example, when the Federal Government of Nigeria passed a legislative act on minimum wages (₦100.00 minimum wage) with effect from April, 1980, all contractors executing projects as at 1st April, 1980 had to claim for the unanticipated amount of money required to pay up workers' arrears between April and the time the act was passed (November, 1980) as well as for the increased amount of each worker's pay brought about by the legislation for the rest of the project periods, as these additional costs had not been allowed for during the time they tendered for the jobs.

As a result of this act alone, a contractor working on a ₦3.4 million Hospital project in Nigeria submitted and collected labour claim of ₦90,203.66. Some Stage governments later also passed legislative acts pertaining to minimum wages, and operative within their individual states. For example, Kano State pegged minimum wage ceiling at one hundred and two naira (₦102.00). Shortly after, through pressure and demands from Nigerian Labour Congress, the Federal Government of Nigeria re-pegged the minimum wage ceiling at ₦125.00. All these affected on-going projects during their respective periods.

The volatility of the markets for raw materials of building projects is a further case in point. Building projects depend on the products of a diverse number of other industries for their successful completion, and the inflationary character of these industries especially in Nigeria make claims evident. For example, a contractor tendering for Housing Projects with Estate Department of Kaduna Polytechnic in 1980 submitted a quotation of ₦29,000.00 based in addition to others, on the price list he obtained from General Metal Products (GMP) Ltd., Kaduna, because he intended to buy some of the materials from the firm. He won the contract. But, just a month after he signed the contract agreement, he discovered that 'GMP Ltd.' had increased the prices of its products by 100%. He then re-evaluated the projects which amounted to ₦47,000.00. He submitted the claim to the client who had no option but to agree to the revised contract sum. Antiquities met during the execution of the project and damages caused by war would also warrant a claim for loss on a project. It is in the light of all the above that contractual claims, though considered as a menance and should be discouraged, cannot be possibly ruled out even on building project of smallest scale.

even

## 4.2 CONTRACTUAL BASIS FOR CLAIMS

Because of the various variations in circumstances that may arise from the varied and uncertain conditions that bedevil building projects, and which will directly affect the contractors' ability to carry out the works, contract conditions (earlier dealt with) are introduced to compensate the contractors and the clients as situations may warrant for unpredictable losses that may subsequently arise.

The possibility to pay aocontractor claim costs outside the principal contract sum enables him to price the known factors of completing the works at the time of tender, without having to provide for the unknown factors. The contractor can therefore reduce his risk allowance in confidence, knowing that he will be compensated later through the contract, for losses arising from prescribed circumstances. The principle of contractual claims embodied in the contract conditions therefore, is that, the contractor shall be paid for a change of condition affecting the circumstances under which he has agreed to carry out the works (whether arising naturally relating to matters over which he has no control(or through the default of the employer or his agents) that causes him loss or expense. Similarly, the contract conditions also provide for the employer to exercise his right in claiming for loss or expense caused by the contractor and his agent; even though, most often than not the claim has one-way traffic - from the contractor against the employer.

It is, however, interesting to note here that claims are not payable in all circumstances that may cause the contractor or employer loss. Those occurances which give rise to a right to compensation are identified in the contract agreement and conditions of each particular project. Thus, as treated in Chapter Three (conditions of contracts), every normal building contract is supposed to incorporate variations. The use of this clause besides the case of changed conditions, is necessary for substitution, addition, or omission of a part or whole of the contract works.

The issuance of orders within the scope of such a clause does not invalidate the contract of any performance agreement. The legitimate issue of variation order under such a clause, means the contractor is obliged to carry out extra work, but for which he will not be reimbursed under the valuation of varied work (Clause 11 (4) of JCT). This is because, payment of such a claim would have to include works, the introduction of uneconomic or standing time, cost of returning or diverting resources to site, or the cost of prolonged contract period arising from a variation of works instructed by the employer or his agents. Other clauses (also treated earlier) in the contract conditions that give basis for contractual claims cover such areas as fluctuations of different types and magnitudes, war and damages, force majeure, and government actions. It can be seen from Chapter Three also, that there are some clauses in the conditions of contract which, through the operation of other clauses, give latent basis for claims.

Thus, depending on the provisions of the conditions of contract, whenever a contractor executing a particular project incures any cost which he feels is not covered by the contract conditions and agreement, he can make a request for compensation for the extra work. Such a request is called a claim. When the scope of such extra work and the basis of payment are specific in the conditions of contract, all that the contractor has to do is to maintain and submit a record of labour, materials, equipment, and indirect expenses; and the claim can amicably be settled.

Difficulty however, arises sometimes when the employer or his agents instruct verbally but hesitates to confirm in writing, an extra work lest it becomes a basis for claims. Because such extra work is not covered by variation order as stipulated in the contract conditions, if it is executed on the faith of only the verbal instruction, settlement of the claim may present difficulty.

When there are many contractors on a building project, it is the responsibility of the employer and/or his agents to co-ordinate their work. If the employer and/or his agents fail to co-ordnate the activities of the contractors, it may have effects on one or more of the contractors' work. Lack of progress on the part of one contractor due to whatever reason may cause another contractor to be delayed and compel him to perform part of his operation in a segregated manner not originally contemplated, thereby increasing his cost of performance. When such delays occur, the contractor who has been delayed can make claims against the employer and seek to hold him responsible for the damages sustained. Likewise, project schedule developed by the employer or his agents for the contractors is unrealistic, most or all of them will be affected, because such changes or delays in work, both of which give rise to claims by the contractors against the employer.

Any imposed change, if it affects the contractor's costs or schedule, is a grand for claims by the contractor. The change may be due to scope changes, errors and ommisions in drawings, suspension of works and work stoppage, delayed access to work or availability of

site, variations from the specified quality as instructed by the client, variations in quantities, disagreement on interpretation of soil investigation or soil data, or a change in project environment such as soil settlement. Another cause of claims is the accelaration of work required by the employer. Though entitled to time extension, a contractor may be directed by the employer to accelerate a portion or the whole of his remaining work to meet the original contract com completion data which is likely to be delayed for reasons outside his own fault. Both situations can substantiate a claim. If the contractor's work is suspended by the employer who later asks the contractor to accelerate his work to make up for the lost time, the contractor has a basis for a claim.

Claims also arise if finished parts of the facility under construction are put into use by the employer before the project is completed if it is not expressedly provided in the conditions of the contract, because it may impede final work by the contractor and thus cause him loss. When the employer allows another contractor to start work before the first contractor has completed his part of the work, the contractor can claim interference by the employer if it is catered for in his conditions of contract. This type of claim may be substantiated by lower labour and equipment - productivity, decreased safety of workers, and increased unit costs.

The consequences of delays by the employer or his agents also can cause claims.

These delays may include delayed approval of drawings, delayed tests and inspection, delayed payments, delayed delivery of equipment and materials or failure of the employer to make decisions on time. If the employer insists strictly with the provision of time of completion, he, himself must have performed his part of the agreement on time and must not have contributed to the party's delay. Where the work to be done by the contractor cannot be performed until certain approval or decision by the employer is conveyed, failure of the employer to complete his work on time is a sufficient excuse for the contractor's delay beyond the agreed time for completion. Finally, claim may also arise from variance in estimated quantities of work or changes in related laws or taxes, and failure to agree on the impact and responsibility of abnormal market fluctuations in inflationary times.

At the beginning of the section, mention was made of the fact that claims are not payable in all circumstances that may cause the contractor loss. Yet from the anatomy of all that followed, one is supposed to be right in claiming that there are some elements of contradiction, as the contractor has a basis for claim on all actions of the employer or his agents whenever such actions (if are not covered by the contract conditions) cause him loss. But there is no trace of contradiction. The statement is true since only the claims supported by expressed or implied provisions of the contract conditions are negotiable. But these contract conditions are prepared subject to human limitations. Furthermore, contract conditions as discussed in Chapter Three are not the same in all circumstances, and on all contracts; but are usually modified to suit particular

type of project or suit particular interest. Therefore, there are bound to be some pitfalls christined in each particular set of contract conditions even though the degree of such pitfalls may vary.

So if the contract conditions of any project is so restrictive on the subject of legitimate claims (claims on all the basis discussed) as they fall due, the contractor will be grossly injured (even though he should have studied the contract conditions before tendering for the contract), and this situation usually results in disputes (also treated in this Chapter). It is also unfair to have loose contract conditions that easily allow the contractor to have unwarranted claims, because that invariably means the employer will pay more than the fair price of the work done for him. There should be a judicious balance of interests represented in the contract conditions.

## 4.3 TYPES OF CLAIMS

Having coming to grip with the circumstances that give rise to claims, let an attempt be made to categories the subject. Related to the principal obligations that the contractor undertakes in the building contract (to complete the works by a prescribed date for a fixed sum of money), contractual claims can be conveniently classified into two broad categories viz:

(a) Claims relating to circumstance which cause a delay in the completion date.

(b) Claims for compensation for the loss and expense caused to the contractor by prescribed circumstances or claims by the employer for non-completion within the agreed time.

(a) DELAY CLAIMS

Because the contractor has undertaken to complete the works by a fixed date, and has agreed to pay the employer damages should he fail to complete by the agreed date, he may wish to establish that the cause of his failure to complete on time is a factor outside his control for which he is entitled to an extension of time as prescribed by the contract. His objective in this case is to avoid a claim for payment of damages by the employer. Delay claims have specific clause in standard contract condition (e.g. clause 23 of 'JCT' form of contract), spelling out in details, causes of the delay which will entitle the contractor to an extension of time, the procedure to be followed when delay is anticipated, and the subsequent approval by the employer or his agents.

To ensure that he does not have to pay damages to the employer, the contractor must make his application for an extension of time before the employer or his agents (mostly the Architect) issues a certificate under clause 22 of the 'JCT' form of contract stating that the contract ought to have been completed on time. Delay claims frequently involve the development of argument relating to the cause of delay, and the contractor's assessment of the duration of the delay caused by such factors.

The extent of the delay is usually assessed by a logical consideration of the factors relating to the particular case.

(b) CLAIMS FOR LOSS AND EXPENSE

Should the contractor, as a result of prescribed occurrence, be involved in loss or additional expense in completing the contract, he is entitled to be paid some money additional to the contract price. Many clauses if inserted in the condition of contract (e.g clauses 6, 24, 41 and 34 of the JCT standard form of conditions of building contract) may give rise to this type of claim. Claims for loss and expense may further be ... divided as follows:

(i) Disruption claims. This is a situation where the contractor wishes to claim for the financial effects of inefficiency that is introduced in his administration of the project due to occurrences which entitle him to claim. Such claims may relate to factors which cause the contractor loss as a result of accelaration of the progress of work instructed, inacessible conditions which impede method of work, and inefficiency caused by consequential sequencying of the work instructed by the employer of his agents.

(ii) Prolongation claims: Where as a result of claim occurrences, the contract duration is extended, causing the contractor additional costs. Items of additional cost that may be incurred as a result of prolongation

claim include preliminaries (since the cost of many preliminary items is directly time related), climatic costs, extended attendance (additional cost of attending on sub-contractors and suppliers) cost, and overhead costs.

(iii) Direct loss claims: This situation arises when the contractor is able to identify particular losses that arise directly as a result of claim occurrences, for which he will be entitled to recovery if he can justify such losses as being directly related to the claim. As must have been observed, most loss and expense claims arise as a result of the occurrence of other claims, and therefore, consitute the claims referred to earlier as resulting from latent factors.

## 4.4 IDENTIFICATION OF FACTORS GIVING RISE TO CLAIMS

The importance of this section is to see how and when factors giving rise to claims are identified both by the contractor and employer (or his agents), and either on site or in the office. We know that the contractor is entitled to make application for an extension of time or for the payment of loss and expense once any of the factors prescribed in the contract agreement and conditions as being causes for claims occurrences surfaced. In theory therefore, the contractor's claim application will closely follow the occurrences that give rise to claims, and a vital part of the project management function is the identification, recording and notification of factors which occur that entitle the contractor to make a claim application.

In practice, however, contractors do not always identify an occurrence which gives rise to a claim situation at the time of that occurrence. This may be because it is difficult at the time of the occurrence to identify that it is a claim consequence, or alternatively, it may not be possible to identify the disrupttive effect of the occurrence until sometime after it has happened. It is thus important that once a contractor feels a claim might be appropriate he gives notice to the employer or his agents of his intention to claim for delay or loss and expense.

To facilitate the identification of claim occurrence, which give rise to claims and to enable an evaluation of the delay and cost effects of disruptions which occur during the contract to be made, it is important that the contractor maintains a monitoring process which will alert him when claim situations may arise, and will record the effects of such disruptions once they are identified. Types of information monitored and recorded which facilitate the identification of disturbances which may give rise to claim applications include:

(a) Delays in programme

(b) Poor financial results.

(c) Difficulty in planning the works.

(d) Specific losses in cost reports.

(a) DELAYS IN PROGRAMME

This is a situation where the contractor identifies the development of delays in the progress of the works which is

possibly being caused by factors outside his control for which he is entitled to extension of time, or reimbursement for loss. Once such a development has occurred, and no claim application has already been made for it, the contractor should study the cause of delay in order to identify that it is caused by a claimable factor.

(b) POOR FINANCIAL RESULTS

Unfavourable financial results on a project recorded through the construction team's periodic cost reports may identify causes of loss for which the contractor is entitled to be reimbursed as prescribed by the conditions of contract.

(c) DIFFICULTY IN PLANNING THE WORKS

This is a situation where problems encountered by the contractor and his site team in short-term planning of the works may identify causes for claims. For example, late receipt of information, discrepancy in documentation, or variation based on claims could lead to in-ordinate claims later in the project life.

(d) SPECIFIC LOSSES IN COST REPORTS

The project team (contractor's agents) may identify specific areas of cost in their cost reports for which no revenue is provided through the contract, or areas of apparent loss for which there is no reasonable explanation as being caused by factors of the contractors's responsibility covered by the contract conditions. Such causes may be the subject of a claim entitlement.

## 4.5 POSSIBLE WAYS OF PREVENTING CLAIMS

It is not possible to eliminate claims completely from a contract. Yet, the menance of claims on the finances of building projects, and on the relationship of parties to building contracts could be so grevious that early consideration of the ways for preve preventing, as much as possible, all likely factors giving rise to it becomes a matter of necessity. Thus, the prevention of claims should be an on-going process (especially by the employer or his agents who often settles the claims in terms of money or extra time), beginning from the conception of the project down to its completion; making sure that all traces of factors which may likely give rise to claims are timely identified, evaluated, and if possible, promptly treated.

Under normal conditions, a contract is usually awarded to the contractor with the lowest bid. With such situation in mind, some contractors try to quote their minimum prices, hoping that they will be able to put some claims later in the contract (if awarded to them) so as to make up for the loss. Given the grounds (in the contract conditions), a contractor on a low-bid contract will claim as much as possible since to him, it is an opportunity to increase his profit margin rather than a judicious compensation for loss suffered. It is therefore, in the interest of the employer or his agents to obtain the complete breakdown of prices from the bidding contractors, and study these during tender evaluation in relation to the contract requirements ( as a contractor generally bids to very strict interpretation of the contract documents) before awarding the contract to the qualified bidder.

An alternative solution is to invite only qualified and experieiced contractors in relation to particular contract to bid. This is the case of selective tendering. As has been treated in Chpater Two, there are numerous types of contracting methods. Therefore, to prevent causes for claims, it is necessary for serious consideration to be given to the particular contracting method chosen before bids are invited from contractors.

An employer or his agents can prevent the occurrence of claims by creating a climate of co-operation rather than conflict on the project by sincerely trying to meet his obligations and commitments as stipulated in the contract conditions promptly; because such actions will also encourage the contractor to use his best efforts in minimizing claims so as to maintain the cordial relationship.

Substituting changes when project is in progress could be a reason to believe that the employer was not sure of his needs at the planning stage; or there had been very poor consultancy services either prior to tender or in dealing with unexpected conditions. This situation can usually be prevented if the employer or his agents undertake lengthy and detailed investigation of the project and select the form of contract that suits the situation before the contract is awarded.

Finally, periodic site meetings open dialogues, communications, and prompt identification of responsibilities amongst all parties concerned on a project; enhancing the co-ordination of all works done on the project, and keeping a check on claims.

## 4.6 PROCEDURE FOR CLAIMS

Claims are not arbitrarily treated, but follow some laid down procedure (whether expressed by the contract conditions or implied). Documented evidence forms the best basis for a contractor's claim. Infact, the following, though not exhaustive, forms one of the procedures usually observed in the treatment of contractual claims:

(a) Notification of claims.

(b) Evaluation of claims

(c) Negotiation and settlement of claims.

### (a) NOTIFICATION OF CLAIMS

Under most terms of contract (especially the JCT standard form of conditions of building contract), the contractor immediately after the identification of claims as discussed earlier in this Chpater, is required to notify the employer or his agents (the Architect as provided in the JCT form of contract) in writing of any occurrence which gives rise to a claim; once it becomes reasonably apparent that such occurrence will cause him delay or loss. The contractor may lose his right to a claim if he fails to notify the Architect of his intention to claim within a reasonable time.

### (b) EVALUATION OF CLAIMS

As provided by the JCT standard form of conditions of building contract, it is the responsibility of the Architect to make an award to the contractor of an extension of time or payment for loss and expense of such proportion as he considers fair and reasonable.

In practice therefore, the contractor normally prepares an evaluation which he feels will satisfy his loss, for the Architect to consider, and upon which the Architect will base his award. It means therefore, that this is the area where the contractor is expected to do his best in order to prove his case. This is the reason why the evaluation of claims may be a very long and detailed process, involving contributions from all members of the contractor's project team. Careful maintenance of records throughout the project is a must in evaluating claim data. A contractor should record all variation orders affecting his work, date of notices to proceed, amount of loss estimated, date of notification, time and amount of loss approved, and date of approval. He should also maintain a record of his claims with their descriptions, and the documented decisions of the Architect. He should keep progress drawings, photographs, test reports, and copies of correspondents with the Ardhitect in his record. In an evaluation of claims, the contractor is expected to include an attempt to justify both direct and indirect costs incurred by the delay. He should therefore, maintain a record of labour, materials, equipment, and indirect costs for the additional extra work. In summary, the process of evaluating a claim by the contractor will involve the detail records and consideration of any or all of the following information:

Correspondences

Site meeting minutes

Architect's instructions

Labour allocation sheets

Site Diary

Weather reports

Receipt of drawing schedules

Tender build up

Plant records

Day work records

Programme

Cost information

Cost reports.

(c) SUBMISSION OF CLAIMS

Once the contractor has evaluated the claim, he will make a formal submission to the Architect for his consideration. The claim submitted is usually a detailed document in which the contractor argues his case and show details of his evaluation. It is in the interest of the contractor that he impresses the Architect with his submission with the objective of convincing the Architect of the authenticity and value of the claim.

Normally, claim document submitted by the contractor to the Architect will include the following:

(i) Contract particulars - which will serve as a back-ground to the case.

(ii) Claim particulars - which show cause of claim, and an argument of the case.

(iii) Evaluation of claim - which usually represents the contractor's detail calculations of delay and loss suffered.

Receipt of drawing schedules

Tender build up

Plant records

Day work records

Programme

Cost information

Cost reports.

(c) SUBMISSION OF CLAIMS

Once the contractor has evaluated the claim, he will make a formal submission to the Architect for his consideration. The claim submitted is usually a detailed document in which the contractor argues his case and show details of his evaluation. It is in the interest of the contractor that he impresses the Architect with his submission with the objective of convincing the Architect of the authenticity and value of the claim.

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(ii) Claim particulars - which show cause of claim, and an argument of the case.

(iii) Evaluation of claim - which usually represents the contractor's detail calculations of delay and loss suffered.

(iv) Appendices - which will indicate support documentations.

(d) NEGOTIATION AND SETTLEMENT OF CLAIMS

Once the Architect has considered the contractor's claim . submission, he may give the contractor the opportunity to argue his case through a meeting before finally making his award of the claim, which he will later communicate to the contractor in writing. Such a meeting facilitates negotiations, and if the contractor accepts the Architect's award of the claim without conditions, it means the claim is settled amicably.

4.7 DISPUTES

Dispute arises in a situation where and when parties to a contract are in disagreement • over settlement of matters expressedly or impliedly related to the contract.

In the context of claims however, disputes results when there is no con-currence to the settlement of claims. Because of the involment of diverse people in the execution of a building contract, numerous factors account for disagreements in the settlement of claim, thereby giving rise to disputes. Unfortunately, such factors are usually self-centred. The contractor, in trying to deliver the product specified in the contract conditions at lowest possible cost in order to maximize profit (his main objective) will not forfeit even the slighted claim if it is covered by the contract conditions.

The employer, though wants the final product to provide maximum function, wants it to be executed at minimum price, and therefore will be reluctant to entertain claims. The consultants (Architects, Engineers, Quantity Surveyors etc), either confident that they have an air-tight and perfectly developed designs and services to thei client or concerned that they may be faced with a loss of reputation, unneeessarily go on the defensive. These type of attitudes usually form the root cause of disputes over the subject of claims. No, wonder, in 1963, the National Joint Consultative Committee of Architects, Quantity Surveyors and Builders in England, published a book entitled "Building Project Management" in which paragraph fourteen of this booklet contains a pertinent comment on this subject: "None of the parties can regard the making of claims (or the infliction of penalties) as reflecting credit on their Management.. The more thorough the planning of the work and the more efficient the management of the contract, the less will claims and penalties occur". If dispute escalates to the extent where all efforts made to reach a fair settlement by negotiation fail, parties can resort to the court or to the use of arbitration as may be contained in the contract conditions to settle their disagreements.

## 4.8 ARBITRATION

Standard contract conditions (e.g. clause 35 of the JCT form of conditions of contract) often enshrine arbitration clauses which may become effective in settling claims whenever there is a dispute between the contractor and employer or his agents regarding the assessment of matters surrounding the claim.

Thus, as provided by the 'JCT' standard form of conditions of building contract, in the case of disagreement over the settlement of claims, the party wishing to refer the matter to arbitration must ask the other party, in writing, to concur in the appointment of an arbitrator. Usually, the two parties do not agree amicably to the mutual appointment of an arbitrator; and the appointment in such cases may be made by the court or as enshrined in the 'JCT', by the President or Vice-president of R.I. B. A. (Royal Institute of British Architects). Since the contract contains the agreement that matters in dispute should be referred to arbitration, it implies that all matter in dispute shall automatically be referred to the arbitrator upon his appointment. A person appointed as an arbitrator should be known for fairness, honesty, and impartiality. Also, he should preferrably be a person who is knowledgeable in the subject of arbitration so as to be able to understand and weigh the evidences that may follow during the arbitration proceddings. The renumeration made for the arbitrator's service is usually agreed upon and signed by both parties to the contract; and the arbitrator is not entitled to take or receive from either party any sum of money greater than that agreed on.

The power of the arbitrator ends at the expiration of the time stipulated for making a decision. If considered necessary, more time however, could be obtained either by the arbitrator or by the court depending on the submission. The arbitrator is duby bound not to delegate part or whole of his work to any other person, and to use his discretions reasonably so as to give a verdict in strict accordance with the evidence submitted to him.

For arbitration award to be fair, all deliberations and discussions of the arbitrator on the subject should only take place when all parties to the arbitration are present, so as to avoid the expression of the judgement of one party in the absence of the others. All parties to arbitration are to be given reasonable and proper notice of the time and place of each hearing; and during the hearings, both parties to the disputes must be heard either directly or through their counsels, each in the presence of the other. Ahuja [f4] detailed out the pro cdure usually observed during the arbitration proceedings as follows:

"A. FIRST MEETING (PRELIMINARY)

1. Reading of submission and appointment of arbitrator/s
2. Reading of notice of meeting.
3. Statement of appearance of parties.
4 Opening statement by party instituting proceedings.
5. Discussion of such matters as:
   (a) Inspection of property and documents.
   (b) Production of documents, papers, etc.
   (c) Fixing time to proceed with subsequent meeting.

B. SUBSEQUENT MEETINGS

1. Examination, cross-examination, and re-examination of each witness of the party commencing proceedings.
2. Examination, cross-examination, and re-examination of each witness of the opposing party.
3. Reply, if any.
4. Arguments on behalf of each party.
5. Close of proceedings".

It is a usual practice that each party should announce the close of his case of defence after he has tendered all the evidence

deemed available by him; so that further evidence from him no longer be received except by the expressed consent of all parties concerned. Based on the documented evidence before him coupled with his experience in the subject, fairness, and impartiality, the arbitrator passes his judgement in form of award which may be enforceable by attahhment or court action. For all concerned (arbitrator and pa ties in dispute) to make the arbitration exercise meaningful, they must try to see that the final award strictly complies with the following requisites:

1. It must be within the scope of the submission
2. It should be final and unconditional.
3. All differences must be adjudicated.
4. It should be in writing, unless otherwise provided by the submission.

It is important to note finally that most contract conditions in which arbitration clause is embodied favour the commencement of arbitration on all matters after practical completion; unless with written consent of the parties to the contract; and some contract conditions (as in the case of JCT standard form of conditions of buil ing contract) do try to highlight matters of dispute which may be dealt with by arbitration during the progress of the works.

FOOT NOTES

$F^4$ - From the Chapter claims contained in the book "Construction Performance Control by network" by H. N. Ahuja.

# CHAPTER FIVE

## THE COLLECTION AND PRESENTATION OF DATA

### 5.1 METHODOLOGY

The methodology employed in the investigation of relevant information and subsequent collection of pertinent data relating to any field of interest vary; depending on certain circumstances. Among other circumstances, it usually depends on the nature and type of information sought, area of coverage, availability of such information and the type of respondents. This piece of work is not an exception. Because of its nature (an investigation into contract conditions with reggrds to claims in some selected building projects), the methodology employed in the collection of data was restricted only to the building sector; and to all circumstances that warranted easy disbursement and collection of the information and data contained therein. Ministry of Works and Housing of three State Governments, estate departments of three institutions, and three quantity Surveying firms were chosen as area of coverage for this thesis in addition to the information obtained from five contractors. These State Governments include Borno, Kano and Kaduna while the estate departments are those of Ahmadu Bello University, Kaduna Polytechnic and University of Maiduguri respectively. The Quantity Surveying firms are Murt-Lamy Associates (Kano), Raga Construction Consultants Ltd., (Kano) and Shelta Construction Consultant Ltd., (Maiduguri). In Borno and Kaduna States' Ministry of Works, most of the information and data were obtained from the Principal Quantity Surveyors with supplementary assistance from relevant officers of lower ranks working within the same respective Ministries of works.

But in Kano State Ministry of Works, all of the information and data were obtained from the acting deputy Chief Architect and two quantity Surveyors. The information and data obtained from all the three estate departments mentioned above, and the Quantity Surveying firms were from Professional Quantity Surveyors. Of the contractors interviewed, only one is fairly recognized, at least in the Northern parts of Nigeria. It is in form of a firm called "Ado Yau & Sons Ltd.," at Kano. Here an interview was held with his site Quantity Surveyor. The rest of the contractors, although experienced in the field of construction through long practice, are local in the sense that they practice on personal and individual basis. Their status notwithstanding however, invaluable information has been obtained from them.

The information and data from the mentioned areas were obtained through personal contacts and oral interviews. Oral in the sense that only the interviewer wrote all what the respondents said or explained. Thus the information and data collection was wholly and personally carried out by the writer with the help of some prepared questions on which he sought and obtained the information and data. The form and content of the questions are shown on pages 69 - 72. Personal interview with respondents instead of the conventional questionaire form was preferred due to the nature of the work. Because of the specialist character of the title of this work the information and data sought for, must have similar orientation.

M.Sc. CONSTRUCTION MANAGEMENT 1981/82 SESSION

Thesis Topic: An investigation into contract conditions with regards to claims in some selected building projects.

Types of information sought for the thesis during interviews with respondents, sorted out into categories as follows:-

CATEGORY A: GENERAL INFORMATION

1. Type of building project (e.g. Housing, School, Hospital)
2. Location of building, project.
3. Characteristic of the building project.

CATEGORY B: LEGAL AND/OR FINANCIAL INFORMATION

1. Client of the building project
2. Contractor on the building project
3. Type of contractor of the project (Individual, Corporation)
4. Type of contract used.
5. Type of contract conditions used
6. Original contract period
7. Original contract sum.
8. Type of claim, if any (Time, money or both)
9. Basis for the claim
10. Amount of the claim
11. Revised contract sum
12. Revised contract period

CATEGORY C: MISCELLANEOUS INFORMATION

1. Number of occurence of claims on the particular building project.
2. Evaluation of claim.
3. Time of claim: (a) Notification (b) Settlement.
4. Settlement of Claim - how? (amicably, legalaction, Arbitration)

CATEGORY D: OPINION INFORMATION

1. View on claims
2. Efforts being made to check claims:
   (a) Agreed modification made to the contract conditions to suit proper implementation of project.
   (b) Results of (a)
3. What should be done on the contract conditions to suit proper implementation of future projects.

M.Sc. CONSTRUCTION MANAGEMENT 1981/82 SECTION

Typical Questions asked during interviews with respondents, the answers of which constituted the information and data used in this thesis.

After brief introduction, and explanation of the subject of interview which include name of organisation, name and rank of respondent, subject of interview etc.

1. Have you ever experienced claims on building projects executed for/by you, or supervised by you?
2. What specific building project was that?
3. Where was the project located?
4. Who were the client and contractor respectively?
5. What was the original contract sum?
6. What was the original contract period?
7. When was the contract signed?
8. When did the contractor take possession of the site?
9. What was the type of contract used for this project?
   Lumpsum, cost-plus, schedule or rates etc?
10. What was the type of contract conditions used? - JCT, Government condtions?
11. Can I have a copy if there is any?
12. Were there any modifications made to this contract conditions to facilitate the proper execution of the project?
13. Which clauses and why?
14. What was the reaction of the opposite party to the modification?

15. When was the execution of the project completed?

16. What was the nature or type of the claim/claims on the

17. project? (time claim, finahcial claim, or both?)

17. What was the basis or ground for the claim? (e.g. fluctuation, variation etc)

18. What was the amount of the claim?

19. What then did the final or revised contract sum/period amount to?

20. When was the claim notified?

21. When was the claim settled?

22. How was the claim evaluated?

23. How was the claim settled? (By court action, Arbitration, or amicably?).

24. How many times did claim occur on this particular project?

25. Was there any special characteristics of this building project or its contract that directly or indirectly gave rise to, or supported the claim?

26. Who was the receipient of the claim?

27. Ist there any other specific building project on which you have witnessed claims? (If yes, questions 1 - 25 follows).

28. Now, how did you come to know about the claim/claims?

29. What can you say about claims on awarded building contracts gnerally?

30. What, in your personal opinion, should be done in order to minimize claims on future building projects? Thank you.

Thus, even within the relevant section of the building sector, the information an' data on this work could only be obtained from very few persons who are either experienced in the field by way of practice and training, or in a position to lay hands on them. So, it was meaningless to distribute questionaire forms to workers on site and expect to get satisfactory information relating to such matters as settlement of claims or the type of contract and contract conditions used on the project from them. It may be important to note here too that most interviews were carried out on appointments in order to warrant the sacrifice of substantial time by the respondents to enable the collection of adequate information and data. Where documents were not readily available and there was a doubt as to the authenticity of information, further appointments were subsequently made; which were all fulfilled either through personal contacts or by correspondence.

## 5.2 COLLECTION OF THE DATA

The amount of data collected for a thesis would depend, among other things, on the objective function of the thesis. Use of defficient information and/or inadequate data would not only make the work statisfically impotent, but may also furnish the academic image of the author as it may be one of the documents to be used by readers in judging his ability to collect, analyse and present "satisfactory" data. On the other hand, superflow information and data may not only cause unnecessary repetitions and enlongation of findings; but may also make understanding of the work very difficult.

Yet, what amount of data is satisfactory for a particular thesis depends on the judgement of the author and the subsequent readers. But, for this work, a lot of data was collected from the three States on schools, houses and hospitals; from which more relevant ones for the work are selected and compiled in tables as shown in the next section of this Chapter. Thus, from over one hundred executed contracts collected, only 25 were selected and used for the work. The selection was based on the requirement that the data used should have some common basis of comparison. For example, only contracts executed between 1977 and 1982 were considered. Similarly, only contracts on which claims amounted to more than one percent of the original estimates were used, and only data on contracts for simple buildings such as schools, houses and hospitals were used.

## 5.3 THE PRESENTATION OF RAW DATA

The presentation of data can take several forms, and the selection of any particular form may depend on the ease with which it allows the inclusion of most information about the data as well as the author's discretion. In this work, tabulation has been used in the presentation of the raw data as shown in table 5.1 on pages 75 - 77. For convenience, the raw data has been presented in the order of States according to alphabetical arrangement; and under each and every State, in the order of hospitals, houses and schools. It has also been arranged in such a way that descriptive information appear on the left hand side while figures appear on the right of the table. Such actions are meant for clarity and neat appearance of the tables at the expense of logical sequences.

Table 5.1
Raw Data

Collected from Borno State

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Type of Building | Location | Contractor | Type of Contract Conditions used | Basis for Claims | Sum (₦) of | | | Year of | |
| | | | | | | Orignial Contract | Claims | Revised Contract | Starting | C |
| A | 1 No. 3BR SS Qtr. | Gombole Maiduguri | Alh. A Girgin | GCOC | Fluctuation (F) | 45,000.00 | 6,750.00 | 51,750.00 | 1979 | |
| B | 1 No.2BR Duplex Low Cost House | -ditto- | Alh. Adamu Bukar | GCOC | Fluctuation (F) | 38,000.00 | 5,400.00 | 43,400.00 | 1979 | |
| C | 1 No.3BR SS Qtr. | Dama Rd. Maiduguri | Alh. Bukar Abba | ditto | Fluctuation & Variation | 50,358.00 | 14,053.70 | 64,411.70 | 1981 | |
| D | 1 No.4BR SS Qtr | Old GRA Maiduguri | Alh. Madu Maina | ditto | Fluctuation & Variation | 54,000.00 | 15,215.00 | 69,215.00 | 1980 | |
| E | Ditto | Potiskum | Alh. Moh. Gurara | ditto | Fluctuation Location & Variation | 54,000.00 | 19,880.00 | 73,880.00 | 1981 | |
| F | 1 No.3BR SS Qtr. | Gwoza | Alh. Shettima M. | ditto | Fluctuation & Location | 50,358.00 | 12,589.50 | 62,947.50 | 1981 | |
| G | 1 No./BR Ward House | Maiduguri | Alh. A. Laminu | ditto | Variation (V) | 85,000.00 | 9,083.73 | 94,083.73 | 1980 | |

Contd.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| I | ditto | ditto | Alh. B. Goroma | ditto | Variation | 80,000.00 | 7,056.88 | 87,056.88 | 1980 |
| J | G. S. S. | Miringa | Alh. M. Umar | ditto | Variation | 1,394,271.19 | 84,500.50 | 1,478,771.69 | 1980 |
| K | G.S.T.S. | Ngala | Alh. U. Tela | ditto | Locati n & Va iati n | 125,558.81 | 29,028.40 | 155,597.40 | 1980 |
| L | G.S.T.S. | Konduga | Alh. W. Bunu | ditto | Variations | 92,237.37 | 21,421.00 | 113,658.37 | 1980 |
| M | G.S.T.S. | Damagum | Alh. M. Gurara | ditto | Variations | 66,261.07 | 9,886.00 | 76,147.07 | 1980 |
| N | T. C | Yunusari | Alh. A. Laminu | ditto | Variations | 882,480.23 | 67,641.80 | 950,122.03 | 1980 |
| | | | | | Collected from Kaduna State | | | | |
| O | Hospital | Kaduna Township | " | JCT | Fluctuation Legislation & Variations | 3,400,000.00 | 201,628.00 | 3,601,628.00 | 1976 |
| P | 1 No.3BR S Qtr. | Kad. Poly. | " | JCT | Fluctuation & Legislation | 29,000.00 | 18,000.00 | 47,000.00 | 1980 |
| Q | 105 Nos B/galows & 20 No. P. House | A. B. U. Zaria | Belga Constr. Engineers Ltd. | ditto | Fluctuation Legislation & Variations | 5,994,212.00 | 997,904.98 | 6,972,116.98 | " |
| R | Selsmolo-gical Obser-vatory | A.B.U Zaria | A.G. Ferrero & Co. Ltd. | ditto | Legislation & Variations | 76,300.00 | 13,745.00 | 90,045.00 | " |

..CONT...

Collected from Kano State

| S | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| S | Extension to Nassarawa Hospital | Kano | Bayyajida Engineers Ltd. | JCT | Fluctuation & Variations | 2,911,900.70 | 3,476,362.50 | 6,388,532.20 | 1976 | 1982 |
| T | Imman's House | Kano | Alh. B. Usman | GCOC | Variations | 52,110.36 | 38,245.25 | 90,355.61 | 1981 | 1982 |
| U | Fencing Emir's House. | Hadeja | Alh. M. Kubura | GOC | Variations | 55,057.97 | 44,533.91 | 99,611.88 | 1981 | 1982 |
| V | Fencing Emir's Palace | Kano | Alh. B. Usman | GOC | Variations | 363,000.00 | 141,481.23 | 504,481.23 | 1980 | 1982 |
| W | G.S.S. | Garko | * | JCT | Fluctuation & Variations | 3,206,664.00 | 709,590.00 | 3,916,614.00 | 1978 | 1982 |
| X | G.S.S. | KWA | McNel Eng. Ltd. | JCT | Fluctuation & Variations | 3,263,325.30 | 233,486.40 | 3,496,763.70 | 1978 | 1982 |
| Y | Murtala Library Complex | Kano | * | ditto | Fluctuation & Variations | 4,214,343.32 | 3,121,345.50 | 7,335,688.84 | 1976 | 1982 |
| Z | Driving School | Kano | Ado Yau & Co Ltd | ditto | Variations | 463,000.00 | 55,394.50 | 518,394.50 | ___ | 1982 |

* ____ Respondent did not respond.

But just like all other facets of human endeavour, the tabulation of the data are not without limitations. It is subject to the limitations of the author's imagination, facts at hand, and the aims of the work. Further, certain facts, though vital to the full apprehension of the data, cannot be possibly shown in form of a table. For example, the literature about the causes, evaluation and settlement of the claims collected cannot easily be detailed out in the table used for the data. Instead, short terminologies of explanation such as "variations" "fluctions", "locations" etc are used. Where necessary, such matters would be treated in the next Chapter - Analysis of the presented data. However, it is necessary to state here that clients (employers) for the projects have been ommitted from the table in order to avoid undesirable repetition. In any case, clients for the whole data projects collected from the three states are Ministries (Ministries of Education, Health and Works) of the respective State Governments; except in Kaduna State alone where three out of the four projects collected belong to Institutions (one for Kaduna Polytechnic and two for Ahmadu Bello University, Zaria).

## 5.4 THE PROBLEMS OF DATA COLLECTION

In the process of the data collection, three major problems were encountered.

First of all, there was the problem of extracting information and data from relevant respondents. In addition to the feeling of most respondents in government offices that, most of the information and data on the subject of claims are classified documents and should not be publicized, respondents in private offices feared loss of face, and even legal action when it is discovered that the information and

data about particular claims have been supplied by them. For this reason the author was deprived of vital information and data on certain claims. Even on some of those collected and compiled, some information were deliberately left out by the respondents as evidenced by the asterisks in table **5.1.** Secondly, there was the problem of restriction. Because of the specialist nature of the work the knowledge of claims was not known by everybody connected with the building industry. Thus, the writer was restricted to some very few members of the building industry in the cause of collecting the information and data; because of their involvement, knowledge, experience, or all; in the field of contractual claims.

Thirdly, there was the problem of general scarcity of information and data. Perhaps, because of lack of keen interest about the subject of claims coupled with the negligent attitude of parties to building contracts, few claims usually documented. Further more, because they were not often required, even the documented claims were dispersed. Thus, a lot of time was spent in assembling the data together.

# CHAPTER SIX

# ANALYSIS OF THE PRESENTED DATA

## 6.1 GENERALLY

It is sometimes necessary to describe details of individual datum obtained and used for work of this type in order to promote faster and better apprehension of further analysis on it both individually and in association with others. Take for example the data shown in Table 5.1 of Chapter Five. Project 'J' may be described as follows: It is a single educational contract awarded by Borno State Ministry of Education to Alhaji Madu Umar on 10 November, 1980; for the "erection and completion" of 10 Nos. 3-Bedroom Senior Staff Quarters, 10 Nos. 2-Bedroom Boys' Quarters, 17 Nos. 2-Bedroom duplex low-cost houses, and 6 Nos. 2-Bedroom Junior Staff Quarters" at Government Secondary School, Mirnga-Biu, at the original contract sum (without the attendent 5% for preliminaries and 2½% for contingencies) of ₦1,394,271.19. The contract was completed in September, 1981; but by 6 June, 1981,(before completion and final accounts statements), the original contract sum had risen to the tune of ₦1,478,771.69 due to claims under two separate variation orders which amounted to ₦84,500.50. The variations were caused by sloping sites that affected 8 Nos. of the 2-Bedroom duplex low-cost houses, and complete change in the design of all the 3-Bedroom Senior Staff Quarters to reflect culture (It was changed to another type called "Muslim type"). The contract was of lumpsum type and the type of contract conditions used was that of Government agreement and schedule of conditions of building contract.

Similarly, all the data shown in the same table could be described.

Yet, in this work, such descriptions have been ommitted for two main reasons. Because of the relative size of the data, description of each and every member of it may make the work unnecessarily bulky and shadowy. Secondly, it is the opinion of the author that even without the complete literature of each member of the data both in isolation and in group, the aims of the work could be clearly understood through the proper analysis of the relevantly abstracted infor information on each member of the data as done in this thesis; because the work is more particularly on the contract conditions used on each project with the view to determin g all the items of the contract conditions, the operation of which supported or gave rise to the claims on the projects as shown in the relevant tables. Th..., although all aspects of each of the projects may be of increased help to this work in one form or another, the information tabulated is enough.

Rather, the analysis of the presented data is intended to focus on both the tangible and intangible aspects of the projects. On the tangible aspects, analysis will pay particular attention to the comparisons of the projects themselves and of their geographical sources. There will also be some analysis of the contract conditions that directly or indirectly form the basis for the claims. On the other hand, the analysis of the intangible aspects will be based on the following:

(a) Contractual or legal aspects (c) Technological aspects.

(b) Economic aspects and

## 6.2 COMPARATIVE ANALYSIS OF THE TANGIBLE ASPECTS OF THE DATA

Comparative analysis here connotes the analytic comparisons of parameters of the projects that form data for this thesis in an attempt to ease comprehension of the data and hence, its purpose. And for convenience, it is better to divide the section into three sub-headings such as:

(a) Comparative analysis of the projects

(b) Comparative analysis of the sources of data.

(c) Analysis of the contract conditions that directly or indirectly form the basis for the claims.

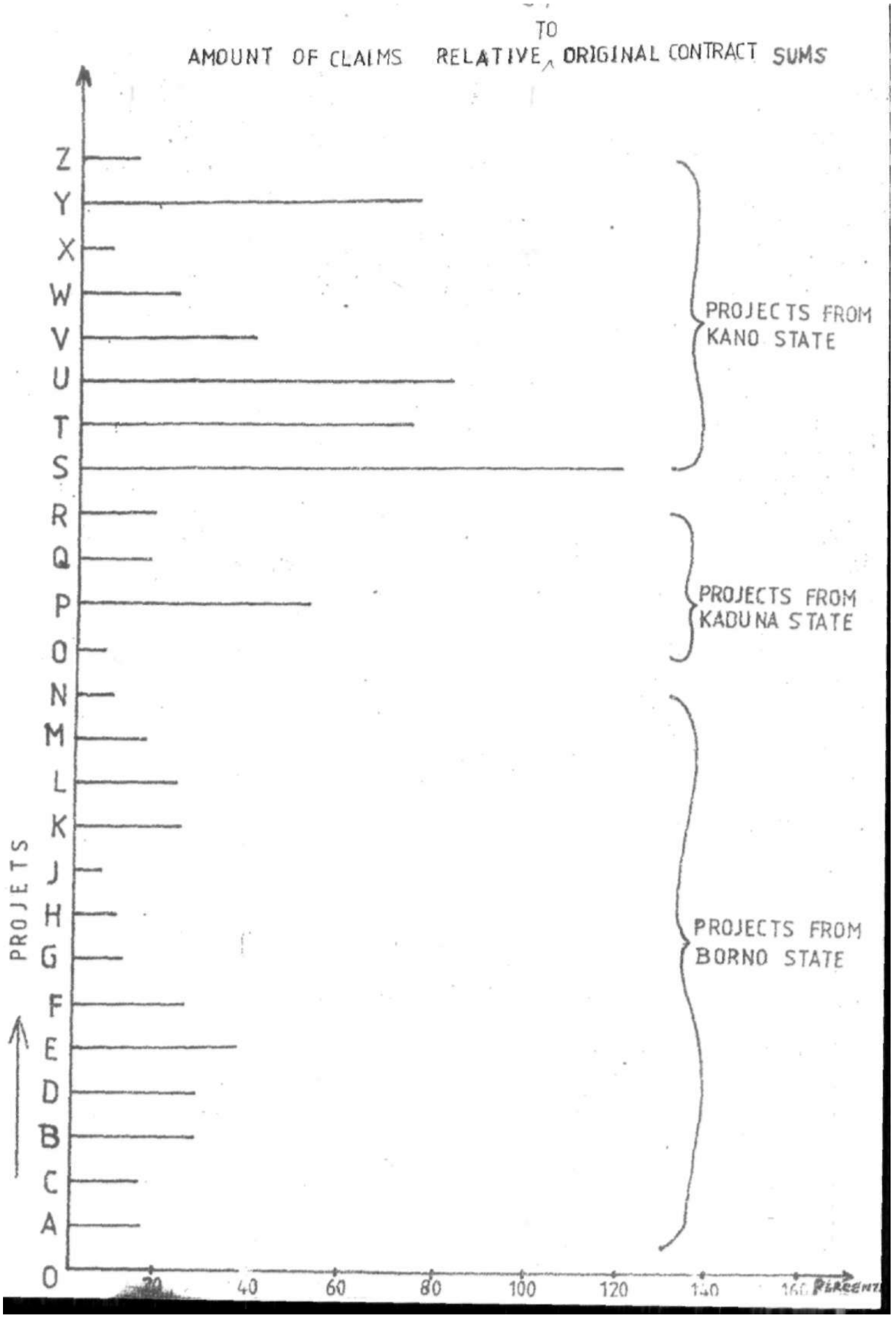
### (a) COMPARATIVE ANALYSIS OF THE PROJECTS

Obviously, the costs of the projects as carried in the tables vary, and one can reasonably infer that their sizes too differ. Further, causes of claims are aggregately the same for some and different for others. Thus, it is difficult to say whether or not claims on them follow definite pattern of proportionality. It is mathematically wrong to say that claims are made more on the projects with higher costs than those with low costs. For example, in terms of magnitude. it is not proper to argue that claims of ₦233,438.40 on project 'X' (See table 5.1) with original contract sum of ₦3,263,325.86 is more pronounced than claim of ₦18,000.00 on project 'P' with original contract sum of ₦29,000.00 simply because ₦233, 438.40 is greater than ₦18,000.00. In terms of naira value, the arguement is correct. But, in terms of their relative sizes to their respective original contract sums, the latter is more grevious than the former because claims on project 'X' constitute only 7% of the original contract sum, while claims on project 'P' constitute 62% of the original

original contract sum. So, in order to see the magnitude of the claims relative to their respective original contract sums, it is necessary to refer to table 6.4 on page where there is tabulation of this nature dealt with under economic analysis. Now, drawing a graph having percentage of claims as abcista and the projects as ordinate, the picture will come out vividly. Such a graph is provided in figure 6.1 on page 84. The graph is self-explanatory. Given same circumstances, and keeping causes for claims constant, one can say project 'S' witnessed the most serious claims, and projects 'O' and 'J' witnessed the least while the rest of the projects spread within the two extreme cases.

(a) COMPARATIVE ANALYSIS OF SOURCES OF DATA

As mentioned earlier, sources here refer to geographical sources as opposed to human sources of data. Recalling relevant Chapters, repeated mention had made about three States namely: Borno, Kano and Kaduna States respectively as being the source States of data of the thesis. Now, looking at the relevant tables, one can clearly see that projects 'A' to 'N' belong to data collected from Borno State, 'O' to 'R' belong to dated collected from Kaduna State while the last eight ('S' to 'Z') belong to the data collected from Kano State. The amount of data collected from each State and used for this work differ to the extent that they would not correctly be comparable in so many aspects. Yet, from the available information about the projects collected in each State, coupled with figure 6.1 reasonable comparative analysis can be made. Such analysis may be as follows:


AMOUNT OF CLAIMS RELATIVE TO ORIGINAL CONTRACT SUMS
PROJETS
Z
Y
X
W
V
U
T
S
R
Q
P
O
N
M
L
K
J
H
G
F
E
D
B
C
A
O
40
60
80
100
120
PROJECTS FROM KANO STATE
PROJECTS FROM KADUNA STATE
PROJECTS FROM BORNO STATE

(i) 13 out of the 25 claims cases made on projects executed in Borno, Kano and Kaduna States between 1976 and 1982 are made o are made on projects in Borno State alone, but the m magnitude of the claims on either of the 13 projects does not exceed 40% of the respective original contract sums.

(ii) Only about one-third (8 out of 25) of the claims mentioned above occurred in Kano State, but the magnitude of the claims is most felt here since there is a particular case where the claim amounted to 119% of original contract sum of the project.

(iii) Kaduna State recorded the least amount of claims during the period, even though it places second in terms of the magnitude of claims. One can therefore say that while in Borno State claims occurred on most contracts, the amount of the claims relative to their original contract sums were not so grevious when compared to the amount of claims recorded in Kano and Kaduna States during the same period as evidenced by the data. In these two States, claims occurred in few cases, but the amount of the claims relative to their respective original contract sums are unpardonable. Similarly, claims occurred more in Kano State during the period than in Kaduna State, and the magnitudes of the claims are also comparatively higher than those recorded in Kaduna State.

(c) ANALYSIS OF THE BASIS FOR THE CLAIMS

Basis for claims may sound abstract. But, for the purpose of this work, it simply means the root cause of the claims or the reasons that directly or indirectly supported the claims.

As can be seen from relevant tables, the reasons advanced for the claims are four, namely: variations, fluctuations, location and legislation. But, projects are executed within the operational framework of their respective contract conditions; and the projects that form data for this thesis are no exceptions. So, these reasons in return must have roots or at least, are supposed to have roots in the contract conditions of each respective projects. That is why in section 6.3 of this Chapter, not only are the provisions of the contract conditions of the data projects that directly or indirectly supported claims were abstracted as shown in table 6.3 on pages 102 and 103 but synchronisation of the reasons advanced for the claims with relevant clauses of the projects respective contract conditions are also made; and which are reproduced, even though without complete consideration to the legal interpretations of the exercise, as follows:

TABLE 6.1

SYNCHRONISATION OF CLAUSES IN THE CONTRACT CONDITIONS WITH THE FACTORS RESPONSIBLE FOR CLAIMS ON THE DATA PROJECTS

| | BASIS FOR CLAIMS | ROOT IN THE CONTRACT CONDITIONS | |
|---|---|---|---|
| | | 'JCT' | GOVERNMENT CONDITIONS OF CONTRACT |
| 1. | Variations | Clause [illegible] | Clauses 11(1), 12 |
| 2. | Fluctuations | Clause 31(q - e) | Clause 28 |
| 3. | Legislation | Clause 4 (1) | Clauses 5, 32 |
| 4. | Location | ? | ? |

What do these clauses say? In order to save time, they have been photostated from the original documents that form the respective contract conditions for the projects and included in the text as exhibits on pages 88 - 96 for any one to read and understand. It is important to know too that, included in the scanned exhibits are the attendent clauses that explain the procedure of carrying out the prime clauses. Of ambiguity is location as a basis for claims on some of the data projects. It does not, under usual circumstances, form part of the contract conditions; and if there is the need to mention it, it may come under 'instructions to persons tendering'. Although there was no specific mention of it on all the data projects.

Now, let analysis be made of these clauses of the contract conditions for the projects in terms of:

(i) Frequency of the claims.

(ii) Magnitude of the claims.

Variations, provisional and prime cost sums

11 (1) The Architect may issue instructions requiring a variation and he may sanction in writing any variation made by the Contractor otherwise than pursuant to an instruction of the Architect. No variation required by the Architect or subsequently sanctioned by him shall vitiate this Contract.

(2) The term 'variation' as used in these Conditions means the alteration or modification of the design, quality or quantity of the Works as shown upon the Contract Drawings and described by or referred to in the Contract Bills, and includes the addition, omission or substitution of any work, the alteration of the kind

Variations, provisional and prime cost sums (contd.)

standard of any of the materials or goods to be used in the Works, and the removal from the site of any work, materials or goods executed or brought thereon by the Contractor for the purposes of the Works other than work materials or goods which are not in accordance with this Contract.

(3) The Architect shall issue instructions in regard to the expenditure of prime cost* and provisional sums included in the Contract Bills or prime cost sums which arise as a result of instructions issued in regard to the expenditure or provisional sums.

(4) All variations required by the Architect or subsequently sanctioned by him in writing and all work executed by the Contractor for which provisional sums are included in the Contract Bills (other than work for which a tender made under clause 27 (g) of these Conditions has been accepted) shall be measured and valued by the Quantity Surveyor who shall give to the Contractor an opportunity of being present at the time of such measurement and of taking such notes and measurements as the Contractor may require. The valuation of variation and of work executed by the Contractor for which a provisional sum is included in the Contract Bills (other than work for which a tender has been accepted as aforesaid) unless otherwise agreed shall be made in accordance with the following rules:-

(a) The prices in Contract Bills shall determine the valuation of work of similar character executed under similar conditions as work priced therein;

(b) The said prices, where work is not of a similar character or executed under similar conditions as aforesaid, shall be the basis of prices for the far as may be reasonable, failing which a fair valuation thereof shall be made;

(c) Where work cannot be properly measured and valued, the Contractor shall be allowed Daywork prices as laid down in the Schedule of Dayworks included in the Contract Bills.

No Daywork shall be undertaken without the prior sanction of the Architect who shall, if permission be granted, define in writing the exact extent of the Contract to which such dayworks shall apply.

Provided that in any case vouchers specifying the time daily spent upon the work (and if required by

Variations provisional and prime cost sums (contd.)

the Architect, the workmen's names) and the materials employed shall be delivered for verification to the Architect or his authorised representative not later than the end of the week following that in which the work has been executed.

(d) The prices in the Contract Bills shall determine the valuation of items omitted, provided that if omissions substantitally vary the conditions under which any remaining items of work are carried out the prices for such remaining items shall be valued under rule (b) of this sub-clause.

(5) Effect shall be given to the measurement and valuation of variations under sub-clause (4) of this Condition in Interim Certificates and by adjustment of the Contract Sum; and effect shall be given to the measurement and valuation of work for which a provisional sum is included in the Contract Bills under the said sub-clause in Interim Certificates and by adjustment of the Contract Sum in accordance with Clause 30 (5) (c) of these Conditions.

(6) If upon written application being made to him by the Contractor, the Architect is of the opinion that a variation or the execution by the Contractor of work for which a provisional sum is included in the Contract Bills (other than work for which a tender made under clause 27 (g) of these Conditions has been accepted) has involved the Contractor in direct loss and/or expense for which he would not be reimbursed by payment in respect of a valuation made in accordance with the rules contained in sub-clause (4) of this Condition and if the said application is made within a reasonable time of the loss or expense having been incurred then the Architect shall either himself ascertain or shall instruct the Quantity Surveyor to ascertain the amount of such loss or expense. Any amount from time to time so ascertained shall be added to the Contract Sum, and if an Interim Certificate is issued after the date of ascertainment any such amount shall be added to the amount which would otherwise be stated as due in such Certificate.

EXHIBIT 16

Ascertainment of prices for variations.

11. (1) No variation shall vitiate this contract. All variations authorised by the Architect or subsequently santioned by him in writing shall be measured and valued by the Surveyor (or if none then by the Architect or the Architect's Representative) who shall give to the Contractor an opportunity of being present at the time of such measurement and valuation and of taking such notes as the Contractor may require. The Contractor shall be supplied with a copy of the priced Bills of Variations showing the sums due to him under the Contract not later than the end of the Period of Final Measurement and before the date of the Architect's certificate in respect of such variations, and the valuation thereof unless previously or otherwise agreed shall be made in accordance with the following rules:—

(*a*) The prices in the Bills of Quantities mentioned in clause 4 of these Conditions shall determine the valuation of extra work of similar character executed under similar conditions as work priced therein;

(*b*) The said prices, where extra work is not of a similar character or executed under similar conditions as aforesaid, shall be the basis of prices for the same so far as may be reasonable, failing which a fair valuation thereof shall be made;

(*c*) Where extra work cannot be valued in accordance with Sub-Clause (*a*) or (*b*) the Contractor shall be allowed day-work prices at the rates, stated in the Form of Tender:

Provided that in any case vouchers specifying the time daily spent upon the work (and if required by the Architect the workmen's names) and the materials employed shall be delivered for verification to the Architect or the Architect's Representative not later than the end of the week following that in which the work has been executed;

(*d*) The prices in the above-mentioned Bills of Quantities shall determine the valuation of items omitted: Provided that if omissions substantially vary the conditions under which any remaining items of work are carried out the prices for such remaining items shall be valued under rule (*b*) of this clause.

(2) The measurement and valuation of the works shall be completed within the Period of Final Measurement and effect shall be given to the valuation of variations by adjustment of the Contract Sum.

Quality and quantity of works.

12. (1) The quality and quantity of the work included in the Contract Sum shall be deemed to be that which is set out in the Bills of Quantities mentioned in Clause 4 of these Conditions but save as aforesaid nothing contained in the said Bills of Quantities shall override, modify or affect in any way whatsoever the application or interpretation of that which is contained in these Conditions.

(2) Any error in description or in quantity in or omission of items from the Bills of Quantities shall not vitiate this Contract but shall be rectified and treated as a Variation.

Statutory Obligations notices fees and charges

4. (1) The Contractor shall comply with and give all notices required by any Act of Parliament, any instrument, rule or order made under any Act of Parliament, or any regulations or byelaw of any local authority or of any statutory undertaker which has any jurisdiction with regard to the Works or with whose systems the same are or will be connected. The Contractor before making any variation from the Contract Drawings or the Contract Bills necessitated by such compliance shall give to the Architect a written notice specifying and giving the reason for such variation and the Architect may issue instructions in regard thereto. If within seven days of having given the said written notice the Contractor does not receive any instructions in regard to the matters therein specified, he shall proceed with the work conforming to the Act of Parliament, instrument, rule, order, regulation or byelaw in question and any variation thereby necessitated shall be deemed to be a variation required by the Architect.

(2) The Contractor shall pay and indemnify the Employer against liability in respect of any fees or charges (including any rates or taxes) legally demandable under any Act of Parliament, any instrument, rule, or order made under any Act of Parliament, or any regulation or byelaw of any local authority or of any statutory undertaker in respect of the Works. Provided that the amount of any such fees or charges (including any rates or taxes) shall be added to the Contract Sum unless they

(a) arise in respect of work executed or materials or goods supplied by a local authority or statutory undertaker for which a prime cost sum is included in the Contract Bills or for which a prime cost sum has arisen as a result of the Architect's instructions given under clause 11 (3) of these Conditions, or

(b) are priced or stated by way of a provisional sum in the Contract Bills.

Statutory Obligations notices, fees, and charges (contd.)

Notices

5. The Contractor shall carry out the Works in accordance with any applicable laws, regulations, rules, orders, ordinances, acts, statutes or other enactments, whether Federal, State or local, and including those of any public service company or authority who have any jurisdiction with regard to the Works or with whose systems the same are or will be connected, and the Contractor shall give all requisite notices, obtain licences and pay all fees or charges required thereby.

Fair wages Clause.

**32. (1) The Contractor shall pay rates of wages not less favourable than those approved for comparable works by the Kano State of Nigeria Government in the area where work is being carried out.**

**(2) The Contractor shall ensure to the workers concerned hours of work and other conditions of labour which are not less favourable than the general level observed in the trade or industry in which the Contractor is engaged by employers whose general circumstances are similar.**

**(3) The Contractor shall in respect of all persons employed by him (whether in the execution of the Contract or otherwise) in every factory, workshop or place used by him for the execution of the Contract comply with the general conditions of this Clause and if required by the Employer shall before entering into the Contract certify that to the best of his knowledge and belief he has complied with such general conditions for three months immediately preceding the date of submission of the Contractor's tender.**

**(4) The Contractor shall keep proper wages books and time sheets showing the wages paid to and time worked by the workmen in the execution of the Contract, and he shall be bound, whenever required, to produce such wages books and time sheets for the inspection of an authorised officer of the Employer or of any authorised officer of the Federal Ministry of Labour.**

**(5) The Contractor shall be responsible for the observance of the provisions of this Clause by sub-contractors employed by him in the execution of the Contract.**

**(6) No portion of the work to be performed on this Contract shall be done at the homes of the work-people, except in so far as work is so performed by practice or custom.**

**(7) The Contractor or a Sub-Contractor shall recognize the freedom of his work-people to be members of registered trade unions.**

**(8) The Contractor shall not be entitled to payment of any money which would otherwise be payable under the terms of the Contract in respect of the work and labour performed in the execution of the Contract unless and until he shall have filed together with his claim for payment a certificate showing:—**

**(*a*) the rates of wages and hours of labour of the various classes of workmen employed in the execution of the Contract,**

Fair wages Clause —*continued.*

**(*b*) whether any wages in respect of the said work and labour remain in arrears; and**

**(*c*) that all the labour conditions of the Contract have been duly complied with.**

**(9) The Contractor shall also from time to time furnish to the Principal Labour Officer of the Federal Ministry of Labour resident in Kano such further detailed information and evidence as the Principal Labour Officer may deem necessary in order to satisfy him that the conditions of this Clause have been complied with.**

**(10) In the event of default being made in payment of any money in respect of wages of any workman employed on the Contract and if a claim thereafter is filed with the Employer the Employer may, failing payment by the Contractor, arrange the payment of such claim out of the monies at any time payable under the Contract and the amount so paid shall be deemed payments to the Contractor under the Contract.**

**(11) Should the Contractor or any Sub-Contractor be found to be in breach of this Clause, the Employer may remove his name from the list of approved Contractors.**

EXHIBIT 3a



Fluctuations

31. The Contract Sum shall be deemed to have been calculated in the manner set out below and shall be subject to variation in the events specified hereunder:-

(1) (a) The prices contained in the Contract Bills are based upon the rates of wages and other emoluments and expenses (including the cost of Employer's liability insurance and Third Party Insurance) payable by the

Limitations (contd.)

Contractor to workpeople engaged upon or in connection with the Works in accordance with the rates of wages fixed by the Federation of Building and Civil Engineering Contractors, current at the date of tender and applicable to the area concerned.

(b) If the said rates of wages and other emoluments and expenses (including the cost of Employer's liability insurance and Third Party Insurance) shall be increased or decreased after the said date of signing of the Contract, the net increase or decrease of such wages and other emoluments and expenses shall be an addition to or a deduction from the Contract Sum as the case may be and be paid to or allowed by the Contractor accordingly.

(c) The prices contained in the Contract Bills are based on the market prices of materials including purchase tax and import duty (if any) current at the date of tender.

(d) If during the progress of the Works the market price of materials used in the Works is affected by legislation or other Government measure causing changes in the rates of purchase tax or import duty or the like, then the net direct difference in price thus arising shall be paid to or allowed by the Contractor.

(2) (a) If the Contractor shall decide subject to clause 17 of these Conditions to sub-let any portion of the Works he shall incorporate in the sub-contract, provisions to the like effect as those contained in sub-clause (1) of this Condition.

(b) If the price payable under such a sub-contract so sub-let as aforesaid is decreased below or increased above the prices in such sub-contract by reason of the operation of any of the foregoing provisions of this clause, then the net amount of such decrease or increase shall accordingly be deducted from or added to the Contract Sum and allowed by or paid to the Contractor as the case may be.

The Contractor shall within a reasonable time give written notice to the Architect of the happening of any of the events referred to in paragraph (b) of sub-clause (1) of this Condition, and of any reduction or increase in sub-contract prices for any portion of the Works sub-let.

No addition to or deduction from the Contract Sum made by virtue of this clause shall alter in any way the amount of profit of the Contractor included in the Contract Sum.

Fluctuations (contd.)

(3) The expression 'the date of tender' as used in this Condition means the date 10 days before the date fixed for the receipt of tenders by the Employer.

EXHIBIT 3b



Fluctuations.

28. (1) The Contract Sum shall be deemed to have been calculated in the manner set out below and shall be subject to variation in the events specified hereunder:—

(*a*) The prices contained in the priced Bills of Quantities shall be deemed to include the net cost of labour and of materials and goods current at the date stated on the form of Tender and the Contractor's office overheads and other establishment charges and the Contractor's profit. The Contractor shall, if required in writing, substantiate the net costs prior to signing the Contract.

(*b*) If the net cost of labour or the net cost of materials shall be increased or decreased after the aforesaid date the resulting net increase or decrease shall be an addition to or a deduction from the Contract Sum and shall be paid to or allowed by the Contractor accordingly: Provided that no adjustment shall be made by virtue of this Clause in respect of:—

(*i*) any increase of the said basic rates of wages which is not accompanied by or exceeds a comparable increase awarded to Kano State Government employees engaged in similar work under similar conditions and in the same area as the Works and as published in the Kano State of Nigeria Gazette;

(*ii*) materials or goods other than materials or goods imported into Nigeria: Provided that where the cost of materials or goods produced in Nigeria is increased or decreased because of the increase or decrease in the rates of wages paid to the manufacturer's employees, then, if Kano State Government employees engaged in similar work have received a comparable increase or decrease, the resulting net increase or decrease shall be paid to or allowed by the Contractor accordingly;

(*iii*) materials and goods for Contracts where the Contract Sum is less than £100,000-0s-0*d*.

(2) The Contractor shall incorporate the provisions of this Clause 28 in any sub-contract for portions of the work sublet in accordance with these Conditions. Any fluctuations in price in respect of the Works so sublet shall be paid to or allowed by the Contractor accordingly.

(3) The Contractor shall within a reasonable time give written notice to the Architect or the Architect's Representative of any increase or decrease in the net rates of wages or in the net price of any of the materials or goods of any increase or decrease in the net sub-contract prices for any portion of the Works sublet.

(4) No addition to or deduction from the Contract Sum made by virtue of this Clause shall alter in any way the amount of profit of the Contractor included in the Contract Sum.

(i) FREQUENCY OF CLAIMS

This is illustrated by the data in table 6.2. It shows that claims on most of the projects occurred because of a combination of reasons. Locational factor is not represented by a clause in the table, and so it is not easy to include it in this analysis. A breakdown shows that:

Claims on projects G, H, J, K, L, M, N, T, U, and Z occurred due to variations in the original contract documents. Claims on projects A, B, and F occurred due to fluctuations in prices of labour materials and plants. Claims on projects C, D, E, S, W, X, and Y occurred due to both flucatuational and variational factors. Claims on projects 'V' and 'R' occurred due to both variational and legislative factors. And finally, claims on project 'P' occurred due to fluctuational and legislative factors; while claims on projects 'O' and 'Q' occurred due to a combination of all the three factors.

Individually, variational factors can be seen to have accounted for claims on the projects more than any other factor. It has accounted for the claims on 10 out of the projects. Fluctuational factors have accounted for claims on only three out of t the 25 projects; while legislative claim has not accounted fo ny claim in isolation. In combination of factors, variation has accounted for claims on eleven projects. Thus, individually or in combination with others, variational factors have accounted for claims on 21 out of the 25 projects that form data for this thesis.

The picture is more illustrated by figure 6.2 ( occurrence of the clauses that supported claims on the projects) as shown page 99

Fluctuational factors place second, accounting for claims both individually and in combination, on 13 out of the 25 projects; and legislative factors place third, accounting for claims, in similar manner, on 5 out of the 25 projects.

(ii) MAGNITUDE OF THE CLAIMS

This pertains to analysis of the amount of claims in relation to their respective original contract sums, and relating to the results to the relevant clauses in the contract conditions that supported them. Percentage analysis is one of the best ways of weighing the magnitude of the claims in relation to their respective original contract sums; and this has been done in table 6.4 ( ) page 106 The clauses in the contract conditions that either individually or in combination with each other gave grounds for the claims, are also shown on table 6.3 on pages 102&.103. Thus, combining the two tables; and paying attention to only relevant data, another table be produced as shown on page 99. . Looking at this new table, it can be found that there is no definite pattern of analysing the figures. This is because, the sources of data discussed earlier for example, also plays an important role. However, critical study of the table will reveal the fact that most serious claims in terms of magnitude, occurred on projects where both fluctuations in prices and variations in contract documents took place, with the noteable exception of project 'P' which recorded high amount of claims in relation to the

FIGURE 6.2

OCCURRENCE OF THE CLAUSES THAT SUPPORTED CLAUSE IN RELATION TO THE PROJECTS

| PROJECTS | 4(1) JCT 5 & 32 GCOC | 11(1) JCT 11(1)& 12 GCOC | 31(A-E)JCT 28 GCOC |
|---|---|---|---|
| Z | 2 | v | |
| Y | | fv | fv |
| X | | fv | fv |
| W | | fv | fv |
| V | lv | fv | |
| U | | v | |
| T | | v | |
| S | | fv | fv |
| R | lv | lv | |
| Q | flv | flv | flv |
| P | fl | | fl |
| O | flv | flv | flv |
| N | | v | |
| M | | v | |
| L | | v | |
| K | | v | |
| J | | v | |
| H | | v | |
| G | | v | |
| F | | | f |
| E | | fv | fv |
| D | | fv | fv |
| C | | fv | fv |
| B | | | f |
| A | | | f |

→ Clauses

f = fluctuation

l = legislation

v = variation

fv = combination of fluctuational and variational factors.

NOTE:

TABLE 6.2

MAGNITUDE (SIZE) OF CLAIMS RELATED TO SUPPORTING CLAUSES

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| PROJECT | SIZE OF CLAIM (%) | SUPPORTING CLAUSES | | |
| | | 4(1) JCT<br>5 & 32 GCOC | 11(1),(2) JCT<br>11(1),&12 GCOC | 31(A-E)JCT<br>28 GCOC |
| A | 15 | | | F |
| B | 15 | | | F |
| C | 28 | | V | F |
| D | 28 | | V | F |
| E | 37 | | V | F |
| F | 25 | | V | F |
| G | 11 | | V | |
| H | 9 | | V | |
| J | 6 | | V | |
| K | 24 | | V | |
| L | 23 | | V | |
| M | 15 | | V | |
| N | 8 | | V | |
| O | 6 | L | V | F |
| P | 62 | L | | F |
| Q | 16 | L | V | F |
| R | 18 | L | V | |
| S | 119 | | V | F |
| T | 73 | | V | |
| U | 81 | | V | |
| V | 39 | L | V | |
| W | 22 | | V | F |
| X | 7 | | V | F |
| Y | 74 | | V | F |
| Z | 12 | | V | |

NOTE: (1) PERCENTAGE SIZE ROUNDED TO THE NEAREST WHOLE NUMBER

(2) F = Fluctuation
(3) L = Legislation
(4) V = Variation

TABLE 6.2

MAGNITUDE (SIZE) OF CLAIMS RELATED TO SUPPORTING CLAUSES

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| PROJECT | SIZE OF CLAIM (%) | SUPPORTING CLAUSES | | |
| | | 4(1) JCT<br>5 & 32 GCOC | 11(1),(2) JCT<br>11(1),&12 GCOC | 31(A-E)JCT<br>28 GCOC |
| A | 15 | | | F |
| B | 15 | | | F |
| C | 28 | | V | F |
| D | 28 | | V | F |
| E | 37 | | V | F |
| F | 25 | | V | F |
| G | 11 | | V | |
| H | 9 | | V | |
| J | 6 | | V | |
| K | 24 | | V | |
| L | 23 | | V | |
| M | 15 | | V | |
| N | 8 | | V | |
| O | 6 | L | V | F |
| P | 62 | L | | F |
| Q | 16 | L | V | F |
| R | 18 | L | V | |
| S | 119 | | V | F |
| T | 73 | | V | |
| U | 81 | | V | |
| V | 39 | L | V | |
| W | 22 | | V | F |
| X | 7 | | V | F |
| Y | 74 | | V | F |
| Z | 12 | | V | |

NOTE: (1) PERCENTAGE SIZE ROUNDED TO THE NEAREST WHOLE NUMBER

(2) F = Fluctuation
(3) L = Legislation
(4) V = Variation

original contract sum due to fluctuational and legislative factors. Individually, variations in contract documents caused more serious claims than any other factor, as evidenced by project 'U' on which claims amounted to 81% of the original contract sum.

## 6.3 ANALYSIS OF THE INTANGIBLE ASPECTS OF THE DATA

As mentioned under section 6.1, the intangible aspects of the data projects comprise the contractual (legal), economic and technological consideration on the data; and thus, the analysis follows that order.

### (a) CONTRACTUAL (LEGAL) ANALYSIS

This immediately recalls the building contracting, and conditions of contract discussed in Chapters two and three of part one. For all the projects that form the data for this thesis, the condition of contract used were either those of the Joint Contracts Tribunal Standard form of conditions of building contract for use with quantities (private edition, 1963) or the government agreement and schedule of conditions of building contract for use with quantities as earlier described, and shown on the data tables. So, it is important that items of these two types of contract conditions that are or may be related to claims are abstracted and explained as shown on pages 102 and 103 before further analysis are made.

Now, from a study of both the tables of the data shown in Chapter Five, and the abstracted contract conditions mentioned above, the following observations can be made:

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TABLE 5.3

ABSTRACTED 'JCT' AND GOVT. 'COC' STANDARD FORMS OF CONDITIONS OF BUILDING CONTRACT THAT RELATE TO CLAIMS

| S/NO | CLAUSES OF: | | EXPLANATIONS |
|---|---|---|---|
| | JCT | GOVT. COC | |
| 1. | 1(2) | - 0 - | Discrepancies in contract documents |
| 2. | 4(1) | 5, 32 | Compliance with acts of parliament, by-laws, and other regulations. |
| 3. | 5 | 6 | Instructions regarding levels and setting-out. |
| 4. | 6(3) | - 0 - | Opening up for Inspection. |
| 5. | 6(4) | 7 | Removal of works, materials, or goods not complying with the con contract. |
| 6. | 11(1)(2) | 11(1),12 | Instruction involving variations in the design, quality, or quantity of work. |
| 7. | 11(3) | 1(t,w) | Expenditure of prime cost and provisional sums. |
| 8. | 15(3) | 14 | Making good defects. |
| 9. | 19 | 2,16 | Protection against injury to persons and property as well as individual liability. |
| 10. | 20 | 17 | Insurance of work against damages caused by stipulated factors. |
| 11. | 21(2) | - 0 - | Postponement of the execution of any work. |
| 12. | 22 | 19 | Deals with damages in event f non-completion of work within agreed time. |
| 13. | 23 | 20 | Dealing with entitlement of the contractor to extension of time. |

| | | | |
|---|---|---|---|
| 14. | 24 | - 0 - | Deals with the entitlement of the contractor to claim for loss and expense. It is closely linked with clause 23 JCT. |
| 15. | 27 | 23 | Instruction regarding nominated sub-contractor's work. |
| 16. | 28 | 24 | Instruction regarding nominated spp supplier's work. |
| 17 | 31(a-e) | 28 | Relates to payment to the contractor of additional costs resulting out of fluctuations in the prices of labour, materials, and plants. |
| 18. | 32(2) | 29 | Protection of the work in the event of war. |
| 19. | 33 | 30 | Relates to action in the event of war. |
| 20. | 34(2) | - 0 - | Instruction regarding antiquit found in the exectution of the ork. |
| 21. | 34(3) | - 0 - | Relates to loss and expense caused by the operation of the antiquities clause. |

1. All variations included in the tables of data as basis for the claims are the type of variations carried in clause 11(1) of "JCT" or clauses 11(1) and 12 of the Government "COC".

2. All the fluctuations included in the tables of data as basis for the claims are same or similar with the fluctuations carried in clause 31 (a - e) of "JCT", and clause 28 of the Government "COC".

3. The legislation included in the tables of data as basis for the claims is that covered by clause 4(1) of "JCT" and clauses 5 and 32 of the government "COC".

4. The location included in the tables of data as basis for the claims has no 'Locus standi' in either of the two types of contract conditions. Further observation can be seen in terms of the over-lapping of the aforementioned clauses on the claims of a particular contract. For example, claims for project "Q" were based on variations, fluctuations are legislation which could be 'equated to clauses 11(1), 31(a-d), and 4(1) of 'JCT' respectively; or clauses 11(1) & 12, 28, and 5 & 32 of the government 'COC' respectively.

It is also important to know that, on the projects forming the data for the work, no formal procedure was persistently observed during the notification (clause 2 of "JCT"), evaluation (clause 11(4) of "JCT" and 11(2) of Government conditions of contract, and settlement of the claims; as described in Chapter four; except projects "O", Q, and R.

Yet, all the claims had been made within the operative framework of the provisions of their respective contract conditions, even though so many of them have no actual roots in the contract conditions. Thus, it is correct to say that many of the claims entertained on most of the projects forming data for this thesis had been made either in ignorance or in deviance of the provisions of the relevant sections of their respective contract conditions.

(b) ECONOMIC ANALYSIS

Looking at the data tabulated in Chapter Five, many economic observations can be made. If, for example, the data are re-arranged as shown in table 6.4 on page 106 , the percentage size of the claims relative to their respective original contract sums can be ascertained. For the whole data used for this thesis, the smallest size of claim relative to its original contract sum is 6% (project 'O'), while the largest is 119% (project 'S'). Indeed, only five out of the twenty-five projects used, have claims of sizes less than 10% of their respective original sums. This is an unfortunate situation, because under normal conditions; and strictly baring special occurences, properly pre-planned project should not increase more than 5% of its original price due to, especially such reasons as advanced for the data projects. Take for example, project 'S' which increased, by 119% of its original contract sum. It is known that, this is a hospital project which has scaled through five years (one of the longest duration in the data) of turbulent economy; and hospital projects are usually expensive. Furthermore, it is of relatively large size in terms of naira value. Could these be reasons for the more than 100% claims?

TABLE 6.4

SIZE OF CLAIMS RELATIVE TO ORIGINAL CONTRACT SUMS.

| 0 | 1 | 2 | 2:1 |
|---|---|---|---|
| | ORIGINAL CONTRACT SUMS (N) | CLAIMS ( N ) | PERCENTAGE (%) CLAIMS |
| A | 45,000.00 | 6,750.00 | 15* |
| B | 38,000.00 | 5,400.00 | 15 |
| C | 50,000.00 | 14,053.70 | 28 |
| D | 54,000.00 | 15,215.00 | 28 |
| E | 54,000.00 | 19,880.00 | 37 |
| F | 50,358.00 | 12,589.50 | 25 |
| G | 85,000.00 | 9,083.73 | 11 |
| H | 80,000.00 | 7,086.88 | 9 |
| J | 1,394,271.19 | 84,500.00 | 6 |
| K | 125,558.81 | 30,028.40 | 24 |
| L | 92,237.37 | 21,421.00 | 23 |
| M | 66,261.07 | 9,886.00 | 15 |
| N | 882,480.23 | 67,641.80 | 8 |
| O | 3,400,000.00 | 201,628.00 | 6 |
| P | 29,000.00 | 18,000.00 | 62 |
| Q | 5,994,212.00 | 977,904.98 | 16 |
| R | 76,300.00 | 13,745.00 | 18 |
| S | 2,911,900.70 | 3,476,361.50 | 119 |
| T | 52,110.36 | 38,245.25 | 73 |
| U | 55,057.97 | 44,553.91 | 81 |
| V | 363,000.00 | 141,481.23 | 39 |
| W | 3,208,864.80 | 709,950.00 | 22 |
| X | 3,263,325.36 | 233,438.40 | 7 |
| Y | 4,214,343.32 | 3,121,345.50 | 74 |
| Z | 463,000.00 | 55,394.50 | 12 |

*ALL PERCENTAGE FIGURES HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBERS.

If that is the case, why did similar thing not happen to project 'O' which is also a hospital project of same duration, similar character, comparatively bigger or more expensive in terms of naira value; moreso, that there were no special occurrences obtained from either of them? Perhaps, it would not be, among other things, unconnected with the procedure of processing the claims. In any case, the twenty-five data used have shown to us that most building projects undesirably over-run their original estimates by unpardonable margin. Perhaps, that is one of the reasons why individuals scarcely go in for gigantic buildings, because it would be near impossible for an individual to raise an extra amount of ₦3,476,361.50 within a period of only five years in order to pay as claims on an initially planned private clinic costing ₦2,911,900.70.

(c) TECHNOLOGICAL ANALYSIS

To remove ambiguity, it is important to know that the technological analysis referred to here, is not going to include the treatment of such areas as the component parts of the structures and their performance. Rather, reasons for contractual claims caused by technological deficiencies based on the data presented, and information obtained; will be sought and analysed.

All contractual claims on the projects that form the data for this thesis are caused either by variations in the original documents, fluctuations in prices (of materials plants and labour), legislation on wages, locational factors, or a combination of or some of them as evidenced by table 5.1.

All of the above factors, except legislation, can be controlled to a great extent by deep technological consideration during the pre-contract processes of any project. Fluctuations in prices of materials, plants and labour for instance; can reasonably be foreseen given such a short life-span of a project like those in question, and knowledgeably efficient technological crew through the documentation of the cost data and information of past completed projects, and with the carrying-out and maintenance of periodic market analysis. Locational factors are usually taken into consideration during the pricing of the bills of quantities before tendering, and therefore do not normally form part of the conditions of contract. Variations on the other hand, can be reduced by intensive feasibility studies of projects by competent personnel to ascertain their requirements and viabilities before they are embarked upon.

From the information obtained on these projects little or no room was given for technological considerations on most of them. This is because some of these projects had been initiated for political reasons; the completion of which was considered more important than their future performances as long as they have he helped in "scoring the point". Some of them had been initiated on welfare grounds; and because of prevailing pressure of welfare problems and perhaps, the successive change in governments, they were lots of "pushing and pulling" about them which made the claims inevitable.

Some of them however, had been based on imported technology (e.g project 'Y'), the adaptation of which to suit Nigerian conditions necessitated changes. Thus, while building construction team can be blamed for general lack of attention to details especially during the pre-contract stages of most projects, the initiators (owners) carry part of the blame; because most of the time the construction team operate within a laid-down policy that at times inhibit the display of technological know-how. Projects are sometimes undertaken without having secured the money for them or without knowing exactly how they are going to be financed. Additions are sometimes made to existing contracts without caring to evaluate their implications. All these and a host of others combine to make claims possible even on matters that can hardly be traceable to the contract conditions.

# CHAPTER SEVEN

## 7.1 GENERALLY

"An investigation into the conditions of contract with regards to claims in some selected building projects" is a title of M.Sc. thesis, carried out with the aim of determing causes and legality of claims on the selected building projects through some study of the operational contract conditions of the respective projects with the view to using the results obtained in exploring possible ways of minimizing both the number and amount of claims on future building projects.

In addition to the introductory Chapter which deals with such things as need for the research, scope of work, method of simplification, and special characteristics of the work, this thesis is divided into two major parts; each of which is further sub-divided into Chapters. Ideas and opinions (both subjective and objective) on the work are covered in part one under three distinct Chapters namely, building contracts, the conditions of contract, and contractual claims. Under the Chapter, building contracts, discussions are made on the differences between building contracting and other contracting methods. Explanations are also made on parties to building contracts, legal aspects of building contracting, documents for building contracts, and the general procedure for contracting building projects, covering both the pre-contract and post-contract stages.

In presummed logical sequence, contract conditions which is one of the building contracting documents highlighted in the first Chapter follows as the second Chapter; dealing principally with the types of contract conditions, the relationship of the conditions of contract to other contract documents, and items (clauses) of the conditions of contract that relate to claims. In similar manner, contractual claims constitutes the third and last Chapters of part one; treating some important issues about the rational and basis for claims, types of claims, and the whole procedure for the notification, evaluation, and settlement of the claims as well as redocumentary discussions on the prevention of the claims. With the basic knowledge about building projects acquired from this part of the thesis therefore, the work moves into its second part; part two of the thesis which concentrates on the investigation and which has also been treated under three distinct Chapters. The first Chapter in this part deals with the collection and presentation of facts relating to some selected building projects in terms of the method adopted for the findings, and the problems - encountered in the course of collecting the data; while the second Chapter concerns itself with the analysis of the data collected. Here, in addition to the contractual, economic and technological analysis of the data collected, comparative analysis of the projects themselves, their geographical source and of the operational clauses in their respective contract conditions which supported claims on them, was also carried out with the view to determining, among other things, the magnitude and frequency of claims in each particular case.

The third and concluding Chapter of this part identifies and treats the summary of both parts together with their analysis. There is also some discussions under this Chapter about the observations made on the whole work; conclusions and recommendations based on both parts.

## 6.2 OBSERVATIONS

From the general procedures outlined in part one of the thesis and the investigations analysed in part two, certain observations may be made as follows:

(a) There ~~was~~ is a general disregard to the procedures stipulated in the relevant contract conditions regarding claims as outlined in part one of the thesis, for the claims made on the data projects. For example, information available shows that the claims made on all the projects ~~were~~ are settled and collected before the completion of the projects.

(b) For all the claims made on the 25 projects, there was no single case in which the claim was instituted by the employer against the contractor. Rather, all the claims made on the 25 projects were in favour of the contractor.

(c) Reasons traceable in the respective contract conditions that supported the claims made on the 25 data projects are few. These are either variational, fluctuational, legislative, or a combination of the three.

(d) No significant modification was made to any of the relevant clauses representing the reasons advanced for the claims made on the 25 projects in the contract conditions to suit certain requirements.

(e) Claims made on each of the 25 projects were excessive compared to the general allowable limits of 0-5% on properly planned projects depending on the circumstances prevailing at the time.

(f) Different geographical areas experienced different amount and number of claims on similar projects executed under similar conditions.

(g) Of the three reasons responsible for the claims made on the 25 projects, variational reason accounts for the lion share.

(h) Information available shows that limited time was given for adequate pre-contract preparations (especially in the field of feasibility studies) on most of the projects.

(j) Most of the data projects were not initiated out of necessity. Rather, they were initiated in order to fulfill certain unviable motives.

(k) Most of the fluctuational claims arose due to lack of honouring payments in time by employers as they become due.

## 6.3 CONCLUSIONS

It has been seen from the first part of this work that time-tested practice and procedures backed by obligatory conditions if judiciously observed can yield fair and formidable results to all parties of a building contract. That is to say, the employer will get good value (standard structure) for his money at the required time; and the contractor will get fair price for his job (construction of the structure to required standard and in time too). The two parties will also be mutually happy with each other if there is no hitch during the process of executing the contract. The timely completion of the contract will permit the employer to plan the intended use of his structure in good time; while the contractor can release his resources onto other jobs for similar objective.

Yet the facts provided in this part may be considered theoretical. So, in order to see how they can be applied in the practical world, an investigation of the contract conditions with regards to claims of some selected (25) building projects was carried out. The investigation was however, limited to financial claims only on simple building projects such as houses, schools, and hospitals. Other limitations included the investigation into only building projects on which either 'JCT' standard form of conditions of building contract or the government agreement and schedule of conditions of building contracts was used as the operational contract conditions; and the coverage of only three states.

In any case, enough facts were collected on the mentioned 25 projects and analysed in accordance with the limitations, as carried in the second part of this thesis.

Information and results obtained show that all the claims on the 25 data projects were made in favour of the contractors; and of the 21 clauses in the 'JCT' standard form of building contract and the 18 clauses in the "government agreement and schedule of donditions of building contracts listed and explained in Chapter Six of this work as being directly or indirectly related to claims, only three of the 'JCT' and five of the "government COC" directly apply to the claims made on the data projects. And in either of the standard forms of the contract conditions used, the applicable clauses relate either to variations in original contract documents, legislative acts, fluctuations in prices of construction resources, or a combination of two or all of the three. Also, of the applicable clauses that relate to the claims made on the data projects, variation clauses account for more claims both in terms of frequency (number of occurence of the claims) and magnitude (amount relative to original contract sum). Claims relating to fluctuation clauses are also numerous and great.

Thus, keeping strictly within the bounds of the scope of this thesis, it is found that certain clauses of the contract conditions used for the execution of the 25 data projects relate to claims, even though only few of them directly apply to the claims made on these projects.

And of those that apply to the claims made, variation clauses account for more in terms of frequency and magnitude.

## 6.4 RECOMMENDATIONS

Recommendations on legal matters are not always easy, more especially when one is not an authority at law. This is because there may be interpretational implications associated with the wordings of the work which may render the recommendations even more disastrous than what they intend to ameliorate. In view of this therefore, the recommendations will only be in form of 'open' suggestions' devoid of the intention to legalize them; the legal transformation of which, if accepted, is the work of legal draughtmen. Further, it is also important to bear in mind that, the contract conditions investigated, apart from being legal document, have undergone the test of time by way of long-time use. So, it may totally be impossible to recommend what has never been experienced on building construction projects. Rather, like the 'JCT' 1980 edition, the recommendations may take the form of suggestive modifications to substitution for, extension to, elaboration of the existing relevant contract conditions and their operational applications that may suit the Nigerian construction environments.

So, with articulate understanding of the whole thesis spanning from the theoretical ideas to the consequently analysed investigations made on the 25 projects as well as the attendent observations made on the results, certain recommendations may be made as follows:

(a) Without prejudice to the operation of the 'determination by contractor' clauses (clauses 26 of JCT and clause 22 of Government COC) contained in the contract conditions, there should be another provision which would permit contractor, if agreed as part of conditions of contract for the execution of a building project, and upon non-payment of certified periodic amount of money due to him on time by the employer, to raise loan up to the same amount; the interest and other overheads incurred on which to be borne by the employer when he becomes credit-worthy to honour the certificate. This action is intended to eliminate disruption in the steady progress of works, and to avoid unnecessary fluctuational claims and other claims for loss and expense (which may be greater than the interest method) caused by the idle time instituted by lack of prompt honour of certificates by the employer as they become due to the contractor. The determination clause in this case will have to be modified. If carried out, it will reflect the hard-to-change practice in Nigeria where gigantic building contracts are usually initiated (usually by the government) without the money or having the money allocated for them diverted to other uses even when the projects are not completed.

(b) Variation clauses are adequately covered in the standard forms of conditions of building contract. Yet, huge claims are made on building projects due to variations at later stages of projects.

This may be due to either later requirements of the employers or designers' fault caused by lack of enough time or their lust for beauty without necessarily knowing the logistics of construction. So, there should be a procedure whereby consultancy service of an experienced contractor is obtained on a big building project who would advice on the construction constraints at the time the projects are being developed.

(c) The practice of awarding contracts when designs are not fully developed for whatever reason should be discouraged except when such contracts specifically call for it. Projects should be properly fore-planned, and fully developed before they are awarded.

(d) Contractors sometimes forego what otherwise would be legitimate claims on contracts for fear of being black-listed against future projects, while claims that otherwise would not be entertained for lack of concrete supporting evidences are being honoured by employers for certain ulterior motives (e.g for being friendly with the contractor). Because of human complexity, such actions may not be totally stamped out, but should be discouraged from being rampant practice, so as to protect and encourage the enforcement of the standard forms of contract conditions on future contracts.

There may not be an easily official way of dealing with this kind of problem as pertains to human behaviour. But an intensive and exampulary orientation towards patriotism and self-discipline by the building projects employers (especially the government) may help in eradicating the practice.

## CHAPTER EIGHT

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