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CONSTRUCTION, CONFLICT, CLAIM, AND COMPENSATION (4C) CASE STUDY – FAIZABAD HIGHWAY INTERCHANGE PROJECT ISLAMABAD, PAKISTAN

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Abstract- Each individual case of construction industry dispute between the contractor and the employer is unique in its nature, but the dilemma of delays, additional costs, and claims for compensation by the contractor and disputes between the parties have been persistently perpetual, leading to further numerous, administrative, financial, contractual, technical, and contractual issues. The common factors may be aggregated under three (3) groups, namely, group-a: faulty contract documents; group-b: contractor's deficiency and failure; and group-c: beyond the control of parties (force majeure, employer's risk). reasons/common factors under group-a are attributable to the employer/client and can be mitigated at the onset of projects, the author takes the opportunity to address them briefly through the case study of one of the projects, highlighting the salient features, in a humble attempt if it could be more wisely handled by the stakeholders and beneficiaries of the construction project. A construction project of Faizabad Interchange between Islamabad and Rawalpindi has been taken up as a case study to highlight the construction industry disputes and challenges both for the contractor, client, and consultant resulting in delay, and heavy financial compensation.

Keywords- Arbitration, construction management, compensation disputes, delay, technical and contractual issues.

1. Introduction

Project Management in civil engineering projects in general and in the construction, industry has been a perpetual matter of concern for the stakeholders of the project because as defined in research and books project management is the application of information, knowledge, skills, tools, and techniques project activities to fulfill the project requirements [1-3]. However, the nature of projects is always dynamic, uncertain, unique features, elements, constraints and are different from each other [4-6].

Construction management is as plenty a count of overcoming problems as it is far from attaining effects. Such kinds of troubles include certain kinds of risks that could happen and not be foreseen by any judgmental person. The risks resulting from projects being at risk of a ramification of factors that cause value escalation and schedule overruns that have an effect on their completion. Because any risk can end up a reality, one party to a contract should go through financial and/or time losses for which they may demand remedies [7-8]. The need for remedies is what constitutes claims [9].

A claim is described as a demand for something to which a party contends, wrongly or rightly being entitled but according to which contract has not been finalized [10-11]. Researchers believe in the construction industry that states are a major source of conflict [8,11]. They are able to divert substantial methods from ongoing construction actions, yet there is an overall lack of knowledge about what states are, how they occur, and how to deal with them successfully, expeditiously, and reasonably. Because of situations and variations over claims, the construction industry is affected by an adversarial environment between contractors and clients [12]. A fruitful construction task is one that is accomplished on time, within budget, to given quality, and achieved with minimum disruption to the parties' regular operations [13-14]. To accomplish

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Department of Civil Engineering Capital University of Science and Technology, Islamabad Pakistan



this, allocate rights and contracts prescribed, liabilities, and duties to contracting parties in certain situations withstood during the process of construction. Disappointment in executing the allocated responsibilities can increase the likelihood of states and disputes arising [15]. It is the knowledge sufficiency and the method of harnessing the abilities of the construction group that eventually plays a role in the achievement or failure of a task [16]. To reduce claims and their rejection, parties must know the particular for declaring under each contract [17]. The fantastic principle is to review each agreement and explore evidence that the claimant should supply their claim and the procedures for completion [18]. Understanding work facets giving rise to claims is truly a skill that is to be specially acquired [19-20].

Information about the agreement terms and record keeping are fundamental for laying out authentic and genuine legitimization of guaranteed entries. Parties lawfully will undoubtedly get what they go into, and it would not be a decent guard, in the event of a case, to say they did not figure out the details of the agreement [21]. Contracting parties ought to know precisely what is required from them under an agreement prior to marking it [22]. They need to continue to review their obligations under agreements and be aware of activities that change their commitments [23]. To make a successful claim, keeping records is fundamental [24]. Regular reasons for claims include the collected effect of a progression of changes, every one of which might seem minor, yet in total affects the advancement of the works. Frequently, these impact effects are hard to decide until after a time span has passed. To capture the outcomes of a chain of occasions, great record-keeping is required [19, 20,22].

The construction industry is the mother of all industries. The economy of a country like Pakistan is significantly dependent on construction. Nevertheless, the nature of projects is always dynamic, the construction industry involves disputes resulting from changes, variations, alterations, addition, deletion, delays, suspension, differing site conditions (unforeseen conditions), unjust enrichment by owners, etc. The main objective of this paper is to list down common factors and reasons that give rise to disputes which cause delays in the completion of the project so that may be avoided during construction. But because of the dynamic of the construction project, it is very intractable to list down all the factors preceding disputes however, some common factors and reasons that give rise to disputes may be aggregated into three groups, as elaborated below to achieve the goal of the study:

I) Group-A Faulty Contract Documents

- i) Faulty, ambiguous, incomplete, and unbalanced contract documents prepared in a hurry by inexperienced authors.
- ii) incomplete design/drawings and specifications.
- iii) Anomaly among drawings, items of bill of quantities, and specifications.
- iv) Delays in fulfilling the obligation of the employer/client with respect to giving possession of the site free from encumbrance, payment to the contractor, and administrative decisions.
- v) Removal and relocation of services and utilities belonging to other government or private agencies.
- vi) Subsequent significant changes in the scope of work and design/drawings.
- vii) Delays and indecision in processing the variation/change orders and rates for additional/extra items of work, by the consultant/project manager/the engineer.
- viii) Wrong selection of contractor on the basis of the lowest and unworkable bid price.

II) Group-B Contractor's Deficiency and Failure

- i) Contractor's in-house incapability with respect to project management and planning for execution of work.
- ii) Contractor's cash flow problems.
- iii) Over-commitment by contractors beyond capacity.
- iv) Lack of properly qualified and experienced personnel of contractor.
- v) Unbalanced rates.
- vi) Unpragmatic and misinterpretation of conditions of contract by an inexperienced person.

III) Group-C Beyond The control of Parties (Force Majeure, Employer's Risk)

These events beyond the control of parties such as:

- i) Commotion, riots, strikes, law and order situations
- ii) Unforeseeable physical condition and obstruction



Department of Civil Engineering Capital University of Science and Technology, Islamabad Pakistan



- iii) Subsequent legal impediments by court orders
- iv) Exceptional adverse climatic conditions

2. Case Study – Highway Interchange Project

This is related to a roadway interchange. The construction contract period was 18 months, and the contract price was about Rs.80 million (US\$ 2 million) in the 1990s with a present-day valuation of approximately Rs. 650 million. The employer suffered from a financial loss of about more than 50% of the contract price by paying compensation against the claim.

The conditions of the contract were based on FIDIC Fourth Edition 1987 reprinted subsequently with amendments.

I) Dispute and its Compensation

The employer/client desired that the project must be completed within the specified time period of 18 months. The whole burden for completion of work was put on the contractor and accordingly stringent and unbalanced conditions in the contract for the contractor for compliance but the employer/client lost foresight for the fulfillment of its own obligations under the contract.

The project area was infested with a large number of Services and Utilities such as gas lines, overhead power transmission lines, optic fiber lines, trees, shops, mosques, post offices, police kiosks and etc., belonging to various other government departments and private agencies.

Time was of the essence under the contract and the employer was under obligation for the removal and relocation of all the services and utilities.

Besides liquidated damages, additional punitive conditions were put in the condition for a penalty of Rs. 25,000 or US\$ 650 per day (present-day valuation of approximately Rs. 0.2 million per day) for the delay in the completion of the diversion.

But after the award of the Contract, it was found that none of the physical impediments, services/utilities were removed and relocated. During the course of construction, the design kept changing and modified perpetually for a long time, causing inordinate delays in execution. The employer/client lost about Rs.45 million (*US\$ 1.25 million*) as additional cost over a Contract Price of Rs.78 million.



Figure 1: Arial view of Faizabad Interchange showing the clover leaf, the overhead, and the underpass.

Department of Civil Engineering Capital University of Science and Technology, Islamabad Pakistan



II) Details

The contractual date of commencement of the project was 1st February 1993 stipulated to be completed in 18 months on 31st July 1994 and was completed in May 1996.

After the award of work, it was found that the project area was infested with the following:

- i) Trees requiring legal permission from the Forest department for their cutting and removal.
- ii) Overhead power HT/LT transmission lines with poles belonging to some other government authority.
- iii) Optic fiber lines.
- iv) A large number of small public-related buildings and some other private property.
- v) Gas lines and telephone lines.

The conditions of the contract provided for the relocation of services and giving possession of the site free from all encumbrance and impediments. The physical impediments and obstructions were removed, and services were relocated, several months later after awarding of the contract as can be visualized from the tabulated information given below:

Table 1: List of physical impediments and stipulated time for their removal

S.no	Physical impediments	Time for removal and relocations
1.	Gas substation	20 months
2.	Shops	20 months
3.	Mosques	40 months
4.	Post office	28 months
5.	Police kiosks	36 months
6.	Trees	35 months
7.	Power overhead LT/HT cable	40 months
8.	Poles, telephone lines	38 months

The fallacy of affairs, unbalanced and un-pragmatic conditions of the contract were amazing, as can be seen from the following: The employer through a clause of the contract committed that all the existing structures within the contract limit shall get demolished by the employer. Through another clause of conditions of contract part-II, the employer was under obligation for relocation of Services through respective agencies being the owner of the services and utilities, and as such no extension of time was admissible to the contractor on this account.

Time was the essence of the contract and a penalty of Rs. 25,000 per day was stipulated for any delay by the contractor in the construction of the service road of the interchange. This penalty was beside the normal provision for imposing liquidated damages for overall delays. The physical obstruction and impediments lead to the employer's failure to give possession of the site free from encumbrance. Consequently, an extension of time was given.

The financial management and program of work by the contractor for a construction project with a defined period of completion attached with the penalty for delays are normally based on the stipulated period of time with some minor unforeseeable contingencies. These include inter-alia the following:

- i) Deployment of Head Office and Field Office, overhead expenses, supervisory and administrative Staff for the stipulated period.
- ii) Bank charges for various guarantees and insurance premiums for the stipulated period.
- Planning the expenditure for execution and maintenance of the project for the **stipulated period** which includes the following:
 - a) Operation and maintenance of equipment and machinery for the execution of work.
 - b) Operation and maintenance of field laboratory for material testing and quality control.

Department of Civil Engineering Capital University of Science and Technology, Islamabad Pakistan



- c) Deployment of formwork and scaffolding.
- d) Operation and maintenance of Consultant's Project Manager's Field Office and transport.

The bid price was given with the aim and intention of earning a certain amount of profit within the stipulated period, because if the amount of profit is attributed to a long period of time beyond a reasonable limit the purpose of business is affected. There exist in every contract certain terms and conditions of contract for the parties to comply with, but it is usual that the employer being the dominant party, while taking decisions/actions does not revisit and/or consult the provisions of the contract document, exercise administrative excesses and denial of the contractor's contractual rights, and committing departure from the contract giving rise to the dispute, consequently facing a loss

Arbitration.

The following factors of Bid Price were the inter-alia the following clauses:

GCC-I Clause 12.2	encountering adverse physical obstruction or condition and unforeseeable circumstances.
GCC-I Clause 26.1	obligation to comply with statutes and regulations.
GCC-I Clause 31.1	opportunity for other contractors to work
GCC-I Clause 42.1	possession of the site and access thereto free from all encumbrances
GCC-II Clause 73.9	Employer's obligation for relocation of Services and Utilities
GCC-II Clause 73.10	Diversion plan
GCC-II Clause 73.11	Employer's obligation for demolition of existing structures and buildings

Frequent changes in the design of Bridges and roads continued till October 1995 for 33 months against the stipulated original period of 18 months.

III) Admissibility of Claim for Compensation as Additional Cost & Extension of Time

The following clauses provide the admissibility of the claim for **additional cost** and extension of time due to numerous departures from the conditions of the contract by the employer.

Clause 6.4	Delay	ın ıssuıng	construction	drawings
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Clause 12.2 Adverse physical obstructions

Clause 42.2 Possession of Site free from all encumbrances as per the program of work

The contractor raised an initial claim for a total amount of about **Rs. 80 million on account** of the following including general inflation.

7.2.1	Hire/Rental	cost of '	'Essential	plants	and e	equipment"

- 7.2.2 Loss of profit due to insufficient cash turnover
- 7.2.4(a) Operation field laboratory
- 7.2.4(b) Monthly maintenance expenses of engineer's/employer's Office
- 7.2.5 Overhead expenses due to reduced turnover and transport
- 7.2.6 Increase in cost due to **general inflation**

Each of the clauses of the Contract prescribed the provision for:

Additional cost

Department of Civil Engineering Capital University of Science and Technology, Islamabad Pakistan



ii) Extension of time

The Engineer determined an amount of **Rs. 45 million (US\$ 1.2 million)** out of the Rs. 45 million, **Rs. 15 million** was paid immediately by the employer while the remaining **Rs. 30 million** was denied by the changed administration of the employer, but the honorable court order facilitated the payment.

3 Conclusions and Recommendations

It is advisable that the employer/owner of a Project while finalizing the conditions of the contract may be required to evaluate inter-alia the following:

- i) Availability of land free from all encumbrances.
- ii) Availability of final construction drawings for issuance after award of contract.
- iii) Availability of funds.
- iv) Timely appointment of the engineer/project manager.
- v) The degree of accuracy of quantities of items of works in the bill of quantity.
- vi) Extension of any Services anomaly among items of BOQ, drawings, and specifications.
- vii) Balanced conditions of contract with equity of justice.

Its highly recommended that the employer/owner of a project must take construction management and project management seriously and abide by the conditions of the contract because the same contractual and management mistakes are being repeated in almost every project in Pakistan and almost the same disputes are being observed **Islamabad Murree Dual Carriageway (IMDC)** is in arbitration, orange line of Lahore is going for arbitration with millions of extra claims and delays. Lessons learned like the timely appointment of the engineer/project manager, issuance of final construction drawings, availability of funds, etc. in the case study should be implemented on other projects to avoid dispute and delay.

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